Usenet Newsgroup Archive: rec.radio.amateur.antenna

2005-01 - 2005-03

These Usenet messages were preserved as a plain-text archive. This PDF was generated by Digital Library of Amateur Radio & Communications from the source text file in 2026.

Date span: 2005-01-01 through 2005-03-31

Source text: rec.radio.amateur.antenna.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 4,620

Message records with no readable body available in the source text: 1

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. Re: Antenna impedance analyzer comparison

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 00:08:14 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10tbqegibpf6rff@corp.supernews.com>
Source record: 84440

Dear Kristinn:
I have used the AEA CIA for several years. It has worked well for me.
It is normally used as a swept frequency instrument so one may see SWR (or
other things) vs. frequency on its screen. I think that the other units
display information for one frequency at a time.

I work with antennas and networks where it is important to be able to
see the whole picture. You may not need that capability. Some people have
found the ability to record an antenna's swr vs. frequency to be valuable.

It gets cold in Michigan and in your country. You may wish to ask if
any of the units you list have problems when it is cold.

Let us all know what you decided.
73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net

"Kristinn Andersen, TF3KX" <tf3kx@simnet.is> wrote in message
news:cc4f4620.0412301946.274e77dc@posting.google.com...
> Hi - I am looking for an impedance analyzer. Primarily for antenna
> measurements (only 1,8-30 MHz) and secondarily for misc. lab
> measurements (L,C,Q measurements, signal generation, etc.). The
> possibilities I have been looking at are (in no particular order,
> prices approximate):
>
> a) MFJ-259B ($300)
> b) MFJ-269 ($220)
> c) AEA VIA ($600)
> d) Autek VA1 ($200)
> d) Micro908 kit from AmQRP ($210)
> e) N2PK Vector Network Analyzer project ($150)
>
> At first glance I have the following points/questions:
>
> - Does MFJ-269 offer anything over 259B in addition to VHF/UHF?
> - W8WWV tests (web) don't indicate that AEA VIA performs better than
> the MFJs.
> - Micro908 is new. Any experiences, comments on impedance accuracy?
> - N2PK may be the most accurate(?) but needs a PC and involved
> construction.
> - Any comments on the Autek?
>
> All suggestions are appreciated, based on experience and technical

> quality.
>
> 73s de Kristinn, TF3KX

2. Re: AM/FM outside antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 00:14:50 UTC
From: seabat <seabat@boardermail.com>
Message-ID: <ehqbt0te951kv6cnlvqjsivu7a9pndvtb3@4ax.com>
Source record: 84441

On Wed, 29 Dec 2004 09:46:57 -0600, richardharrison@webtv.net (Richard Harrison) wrote:

>>>The designer likely assumed the loop and the wire would be immersed in
>>>AM and FM fields adequate for satisfactory reception.
>>>
>>>The AM loop may not have enough signal because you`ve put it under a
>>>metal roof. The FM wire may not have enough signal because its elevation
>>>is too low at your site. You`re down in the Rio Grande valley.

So, if I took the 'rinky-dink' plastic loop antenna outside and placed it above the roof, it would work? Do I have to have a pair of wires for a lead-in or would just one do?

>>>The FM wire is likely about 2.5 feet long, or about 1/4-wavelength. Its
>>>impedance would be about 30 ohms near resonance.
>>>
>>>The loop is likely part of the AM tuned input circuit with an impedance
>>>of about 1000 ohms.
>>>
>>>For FM, you need to get the antenna up high. A ground-plane antenna is
>>>simple and works well. Vertical and radial parts can all be about 2.5
>>>ft. long. It can be connected to your radio with 50-ohm coax. The
>>>existing wire is your FM input.

I suppose an old car antenna would work for the FM if I placed it up high, also?

>>>Ground to the radio is probably one of
>>>the "rinky-dinky loop" wires.

I don't see any place to connect a ground.

>>>If not, capacitive coupling via aluminum
>>>foil or the like will likely do.

This I don't understand.

--
The Seabat

3. Re: PL-259 vs BNC vs. RCA?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 00:30:49 UTC
From: AF4B <af4b@charter.net>
Message-ID: <jhmBd.7668$Ue.4431@fe07.lga>
Source record: 84442

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:5YiBd.11435$hc7.1718@trnddc06...
>
> > The RCA connector has been demonstrated to show a flat response from DC
> > to Light. The only problem with this connector is that it is hard solder
> > coax to the blasted thing.
> >
> > Dave WD9BDZ
>
> Can you direct me to the data that verifies this?
>
> Dale W4OP
>
>

Take a look at http://www.nwham.net/w7zoi/rca_plugs.html for an example of
using RCA connectors at VHF.

Bill AF4B

4. Re: 30 + J200, 25 - J350 etc Refresher Course ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 00:45:51 UTC
From: W9DMK <w9dmk@crosslink.net>
Message-ID: <41d5eeb5.29385874@news.crosslink.net>
Source record: 84443

On Fri, 31 Dec 2004 18:41:48 -0500, nospam@nospam.com wrote:

>I'm basically a lurker in the newsgroup but I've forgotten what the
>term as used with an antenna impedance like 30 +J200 or 25 -J150 etc
>means. I remember studying it about 10 years ago when I took my extra
>test and I had it in tech school at about the same time from a Jr.
>College during one 4 credit hour "communications" course that covered
>everything from TV's to SSB and FM. I believe it's one way of
>expressing an impedance with some reactance thrown in and I recall
>converting between polar and rectangular methods of expressing the
>same term (I would really need the book for that now !) But I don't
>think I have the books from the school days around anymore. Any one
>care to give me a short refresher course or post a URL ? I've got a
>bad case of CRS (Can't Remeber Stuff ;-))
>
>Happy New Year !
>
>
Dear Sir,

Try the program "Vectors" at either of the following Web sites. By
plugging a few examples into the program, you will again understand
complex arithmetic.
http://zaffora.f2o.org/W9DMK/W9dmk.html
http://www.qsl.net/w9dmk/

The program does not run under an NT based system, such as Windows XP
or Windows 2000 but it will run fine in DOS under Windows 9x or
Windows ME.

Here is the short tutorial on complex arithmetic:

a1 + jb1 + a2 + jb2 = (a1 + a2) + j(b1 + b2)
The rule for subtraction follows the obvious complement to the above
example of addition.

In order to do complex multiplication and division it is easier to
convert first to polar form, as follows:

Magnitude of a + jb is sqrt(a^2 + b^2) and the Angle is arctan(b/a)

In Polar form the product of two vectors is the product of their
magnitues and the angle on the product is the arithmetic sum of the
two angles.

In Polar form the quotient of two vectors is the quotient of their
magnitudes with an angle that is the difference between the

numerator's angle and divisor's angle.

Example: 5@35 * 6@40 = 30@75

5@35 / 6@40 = 0.8333@-40
where @ means "at an angle of"

Bob, W9DMK, Dahlgren, VA
http://www.qsl.net/w9dmk

5. Re: PL-259 vs BNC vs. RCA?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 01:02:18 UTC
From: Dave <noone@nowhere.com>
Message-ID: <0ZSdnXZEd-kGa0jcRVn-2w@crocker.com>
Source record: 84444

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:5YiBd.11435$hc7.1718@trnddc06...
>
> > The RCA connector has been demonstrated to show a flat response from DC
> > to Light. The only problem with this connector is that it is hard solder
> > coax to the blasted thing.
> >
> > Dave WD9BDZ
>
> Can you direct me to the data that verifies this?
>
i just tried to shine a laser through one and the wire got in the way...
100% loss i would say.

6. Re: dc grounding on 25ft trap vertical ant 10m-80m

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 04:11:45 UTC
From: kelly@dvol.com
Message-ID: <1104552705.354675.105270@z14g2000cwz.googlegroups.com>
Source record: 84445

Charlie wrote:
> Thanks for those nice words...just today I added the 75M Hustler
"Super
> Resonator" and got it tuned to the 75M dx window. Can't wait till
this
> evening to do some 75M dx work. I do not have it guyed but do have
the tilt
> over bracket so if it's windy I can tilt it over all the way.

Nice looking installation but how will you mow the lawn next spring when the grass grows up thru your radial farm? Without the mower eating the radials?? I'd bury the things and forget them but I'm curious about how you plan to solve the problem.

> --
>
> Charlie
> Ham Radio - AD5TH
> www.ad5th.com
> Live Blues Music
> www.492acousticblues.com

w3rv

7. Re: Antenna building question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 04:29:09 UTC
From: kelly@dvol.com
Message-ID: <1104553749.560939.178940@z14g2000cwz.googlegroups.com>
Source record: 84446

stryped@hotmail.com wrote:
> I am new to all of this but when building a j pole, if the plan
calls
> for 1/2 inch and I go with a loarger diameter, say one inch, would
the
> spacing between the elements still be the same?
See http://www.vk1.wia.ampr.org/bulletins/jpole.html

w3rv

8. Re: Old Wives' Tales & Ground Rods

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 12:20:45 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cr64it$4lh$1@hercules.btinternet.com>
Source record: 84447

"Cecil Moore" wrote
> Reg, you need to follow the advice given in Proverbs 31:6,7.

==========

My dear old friend Cec,

I don't see the connection. Did you forget the smiley?

;o) ;o)

Reg

9. Re: Old Wives' Tales & Ground Rods

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 14:04:09 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cr6akp$is8$1@titan.btinternet.com>
Source record: 84448

"Old Ed" wrote -
> Reg, this may come as a surprise to you,

==========

Ed, I judge from from your writing you are an intelligent and educated USA voter.

The only thing which surprises me is how you manage to confuse slander with facts.

I take only one point from your message -

The ONLY terrorist attacks on the UK have ALL come from the Irish Republican Army - financed by charitable USA citizens, the CIA, and indirectly by USA governments regardless of political views.

Who needs enemies with 'special-relationship' friends like that?

USA citizens have no enemies who wish you harm. But you still suffer from "Reds Under the Bed." which, like WMD, are non-existent.

Reg.

10. Re: 30 + J200, 25 - J350 etc Refresher Course ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 14:31:01 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10tdd06jviu91c1@corp.supernews.com>
Source record: 84449

Dear Gary:
Robert is correct in what he says in his tutorial. (Well, there is an obvious transcription error in the answer of the last example.) However, if you use a typical calculator to perform some of the calculations, there is a potential problem.

ArcTan(b/a) can, and eventually will, give you the wrong number. As an example: If a = 1 and b = 1, obviously the angle is 45 degrees, and the ArcTan function will present 45 degrees. Consider the case where a = -1 and b = -1: most calculator's ArcTan functions will still return 45 degrees. So, if using a typical calculator and the ArcTan function, make a sketch to estimate what the angle should be and correct the calculator's presentation accordingly.

The introduction of complex numbers, which were once part of "pure" math, and the concept of impedance made (and continues to make) circuits much more easy to deal with than was previously the case.

Enjoy, 73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net

"W9DMK (Robert Lay)" <w9dmk@crosslink.net> wrote in message news:41d5eeb5.29385874@news.crosslink.net...

> >
> Dear Sir,
>
> Try the program "Vectors" at either of the following Web sites. By
> plugging a few examples into the program, you will again understand
> complex arithmetic.
> http://zaffora.f2o.org/W9DMK/W9dmk.html
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> The program does not run under an NT based system, such as Windows XP
> or Windows 2000 but it will run fine in DOS under Windows 9x or
> Windows ME.
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> Here is the short tutorial on complex arithmetic:
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> a1 + jb1 + a2 + jb2 = (a1 + a2) + j(b1 + b2)
> The rule for subtraction follows the obvious complement to the above
> example of addition.
>

> In order to do complex multiplication and division it is easier to
> convert first to polar form, as follows:
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> Magnitude of a + jb is sqrt(a^2 + b^2) and the Angle is arctan(b/a)
>
> In Polar form the product of two vectors is the product of their
> magnitues and the angle on the product is the arithmetic sum of the
> two angles.
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> In Polar form the quotient of two vectors is the quotient of their
> magnitudes with an angle that is the difference between the
> numerator's angle and divisor's angle.
>
> Example: 5@35 * 6@40 = 30@75
>
> 5@35 / 6@40 = 0.8333@-40
> where @ means "at an angle of"
>
>
> Bob, W9DMK, Dahlgren, VA
> http://www.qsl.net/w9dmk

11. Re: Antenna building question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 14:36:18 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41d6b433.1405477984@news.galilei.com>
Source record: 84450

The GAP (inside distance) between the Two Legs of the Matching Transformer is normally less than you can achieve using standard plumbing fittings especially on the upper frequencies. So the measurement is often doubled so to speak from 1/20th wavelength to 1/10th wavelength.
When increasing pipe diameter, don't forget the K-factor!
The 1/4 wave matching transformer will be slightly shorter, the 1/2 wave vertical will be shorter, and the GAP will be very slightly narrower.
Since you cut one leg of the transformer in conjunction with the vertical element as one piece, don't forget to shorten this pipe by both reductions in length.

TTUL
Gary

12. Re: Old Wives' Tales & Ground Rods

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 15:33:12 UTC
From: CW <cmagers@earthlink.net>
Message-ID: <SMydnWptcpPeX0vcRVn-pA@comcast.com>
Source record: 84451

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cr6akp$is8$1@titan.btinternet.com...
> USA citizens have no enemies who wish you harm. But you still suffer from
> "Reds Under the Bed." which, like WMD, are non-existent.
> ----
> Reg.
>
>
Paranoia is high here. Kept that way by our government. It amazes me how may
people think this thing in Iraq is part of the "war on terror".

13. Re: Antenna impedance analyzer comparison

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 15:44:00 UTC
From: Stephen Tompsett <stephen@blob.demon.co.uk>
Message-ID: <cr6gg1goo1$830fa7b3@news.demon.co.uk>
Source record: 84452

Kristinn Andersen, TF3KX wrote:
> Hi - I am looking for an impedance analyzer. Primarily for antenna
> measurements (only 1,8-30 MHz) and secondarily for misc. lab
> measurements (L,C,Q measurements, signal generation, etc.). The
> possibilities I have been looking at are (in no particular order,
> prices approximate):
>
> a) MFJ-259B ($300)
> b) MFJ-269 ($220)
> c) AEA VIA ($600)
> d) Autek VA1 ($200)
> d) Micro908 kit from AmQRP ($210)
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> At first glance I have the following points/questions:
>
> - Does MFJ-269 offer anything over 259B in addition to VHF/UHF?
> - W8WWV tests (web) don't indicate that AEA VIA performs better than
> the MFJs.
> - Micro908 is new. Any experiences, comments on impedance accuracy?
> - N2PK may be the most accurate(?) but needs a PC and involved
> construction.
> - Any comments on the Autek?
>
> All suggestions are appreciated, based on experience and technical
> quality.
>
> 73s de Kristinn, TF3KX

I have used three of these

MFJ-259B - OK while it was working, but it has failed twice. I do
not recommend!
Autek VA1 - Nice - but fiddley to use build quality not good
eats batteries!
AEA VIA - Very nice, the display makes on-site adjustments and checks
easy, ability to store and transfer data to a PC is useful
Solid build - won't run off NICAD/NIMH - it needs 12V!
N.B. I find the third party PC software better than the
official AEA software

73's Stephen G8LYB

14. Re: [VIRUS/SPYWARE!] Santa Clause like you have never seen him before

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 16:07:50 UTC
From: Bob <nowhere@nospam.org>
Message-ID: <2UzBd.69890$Tn1.2160042@news20.bellglobal.com>
Source record: 84453
Cross-posted to: rec.puzzles.crosswords,rec.pyrotechnics,rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

WARNING!!

For Windows XP users:
Clicking on the link provided will download a file called Microsoft
Office.hta which is placed in the sub-directory named : C:\Documents and

Settings\All Users\Start Menu\Programs\Startup\. When you reboot your

computer, this file calls for the download of another file called xp.exe
with a size of 18.5 Kb; about the normal size for spyware.
Windows XP firewall did not catch it, but my default downloas scheduler gave
me options before the actual download
Removal procedure: ???????

Abuse email already sent to a...@comcastonline.com for the site,
internet.ab...@sjrb.ca including headers of the first post and a...@rr.com
including headers for the second post.

Feel free to send your own complaint.

joshz@hotmail.com wrote:

> Santa Clause like you have never seen him before, this is a must see for everyone

15. Re: Antenna impedance analyzer comparison

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 17:08:30 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <e8tJ2uCOkt1BFA3t@ifwtech.co.uk>
Source record: 84454

Stephen Tompsett wrote:
>Kristinn Andersen, TF3KX wrote:
>> Hi - I am looking for an impedance analyzer. Primarily for antenna
>> measurements (only 1,8-30 MHz) and secondarily for misc. lab
>> measurements (L,C,Q measurements, signal generation, etc.). The
>> possibilities I have been looking at are (in no particular order,
>> prices approximate):
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>> the MFJs.
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>> construction.
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>> All suggestions are appreciated, based on experience and technical
>> quality.
>> 73s de Kristinn, TF3KX
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>I have used three of these
>
>MFJ-259B - OK while it was working, but it has failed twice. I do
> not recommend!
>Autek VA1 - Nice - but fiddley to use build quality not good
> eats batteries!
>AEA VIA - Very nice, the display makes on-site adjustments and checks
> easy, ability to store and transfer data to a PC is useful
> Solid build - won't run off NICAD/NIMH - it needs 12V!
> N.B. I find the third party PC software better than the
> official AEA software

At the time I attempted to review the AEA-CIA a few years ago, my worry was with the built-in firmware, which produced weird results in R-X mode (like, physically impossible).

The difference between the "amateur" and "professional" leagues for impedance measurement is that the professional Vector Network Analysers use a calibration procedure to compensate for their own internal errors. This boosts the measurement accuracy into a completely different league.

Of all the ones mentioned, only the N2PK and the TAPR designs can do
this. All the others really are playing in the amateur league.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

16. Re: dc grounding on 25ft trap vertical ant 10m-80m

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 17:37:25 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10tdnv378h53o54@news.supernews.com>
Source record: 84455

Hi Kelly..
I am slowly but surely covering the radials with top soil out of our
pasture. I should be done in time so that once the grass needs to be mowed I
can set the deck for 2 inches (I usually cut at 1 inch) and the soil
covered radials will be fine..I hope!!!

73 / DX

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

<kelly@dvol.com> wrote in message
news:1104552705.354675.105270@z14g2000cwz.googlegroups.com...
>
> Charlie wrote:
>> Thanks for those nice words...just today I added the 75M Hustler
> "Super
>> Resonator" and got it tuned to the 75M dx window. Can't wait till
> this
>> evening to do some 75M dx work. I do not have it guyed but do have
> the tilt
>> over bracket so if it's windy I can tilt it over all the way.
>
> Nice looking installation but how will you mow the lawn next spring
> when the grass grows up thru your radial farm? Without the mower eating
> the radials?? I'd bury the things and forget them but I'm curious about
> how you plan to solve the problem.
>
>> --
>>
>> Charlie
>> Ham Radio - AD5TH
>> www.ad5th.com
>> Live Blues Music
>> www.492acousticblues.com
>
> w3rv
>

17. Re: Old Wives' Tales & Ground Rods

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 18:30:48 UTC
From: W5DXP <w5dxp@hotmail.com>
Message-ID: <1104604248.004241.117440@z14g2000cwz.googlegroups.com>
Source record: 84456

"Give beer to those who are perishing, wine to those who are in
anguish." Proverbs 31:6

I assumed that without wine, you had to be in anguish. :-)
--
73, Cecil http://www.qsl.net/w5dxp

18. FA: Antenna Engineering Handbook McGraw Hill 2nd edition (c) 1984

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 18:36:16 UTC
From: Dave <stuff4sale@njcdr.com>
Message-ID: <41d6ed0f$0$63266$45beb828@newscene.com>
Source record: 84457

Not sure if it proper to post this here - but I think most will find it
useful. I am auctioning off several technical books including the Antenna
Engineering handbook mentioned above. Here is the link for it:
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=378&item=4515301247&rd=1

Also:
Sams RF Circuit Design by Chris Bowick

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=378&item=4515708652&rd=1

1994 ARRL Hanbook and Now You're Talkin (2 books)
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=15050&item=5740830560&rd=1

And a lot of other data manuals and such.... Just click on vieew other items
by seller.

Thanks for looking!
Dave, KF2DH

19. Re: Old Wives' Tales & Ground Rods

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 18:47:20 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <YeCBd.7328$yW5.2144@fed1read02>
Source record: 84458

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cr6akp$is8$1@titan.btinternet.com...
>
> "Old Ed" wrote -
>> Reg, this may come as a surprise to you,
>
> ============================
>
> Ed, I judge from from your writing you are an intelligent and educated USA
> voter.
>
> The only thing which surprises me is how you manage to confuse slander
> with
> facts.
>
> I take only one point from your message -
>
> The ONLY terrorist attacks on the UK have ALL come from the Irish
> Republican
> Army - financed by charitable USA citizens, the CIA, and indirectly by
> USA
> governments regardless of political views.
>
> Who needs enemies with 'special-relationship' friends like that?
>
> USA citizens have no enemies who wish you harm. But you still suffer from
> "Reds Under the Bed." which, like WMD, are non-existent.
> ----
> Reg.
>
>

So Reg, we are paranoid when it comes to "reds under the bed", but we are
unable to recognize "boyos under the bed"? Mr. Orwell would approve of your
doublespeak.

Ed (old, but not The Old)
wb6wsn

20. Re: Old Wives' Tales & Ground Rods

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 18:50:09 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <BhCBd.5110$wZ2.4976@newssvr13.news.prodigy.com>
Source record: 84459

W5DXP wrote:
> "Give beer to those who are perishing, wine to those who are in
> anguish." Proverbs 31:6
>
> I assumed that without wine, you had to be in anguish. :-)
> --
> 73, Cecil http://www.qsl.net/w5dxp
>

In the words of that old song, "I can't get well without muscatel."
73,
Tom Donaly, KA6RUH

21. Re: Old Wives' Tales & Ground Rods

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 19:04:36 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <7vCBd.7331$yW5.1906@fed1read02>
Source record: 84460

"Tom Donaly" <dtdonaly@sbcglobal.net> wrote in message
news:BhCBd.5110$wZ2.4976@newssvr13.news.prodigy.com...
> W5DXP wrote:
>> "Give beer to those who are perishing, wine to those who are in
>> anguish." Proverbs 31:6
>>
>> I assumed that without wine, you had to be in anguish. :-)
>> --
>> 73, Cecil http://www.qsl.net/w5dxp
>>
>
> In the words of that old song, "I can't get well without muscatel."
> 73,
> Tom Donaly, KA6RUH

I don't think Reg would imbibe Dago Red or Thunderbird; absinthe is more his
style.

Ed
wb6wsn

22. Re: Old Wives' Tales & Ground Rods

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 19:32:57 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10tdun8ag99kt6e@corp.supernews.com>
Source record: 84461

"W5DXP" <w5dxp@hotmail.com> wrote in message
news:1104604248.004241.117440@z14g2000cwz.googlegroups.com...
> "Give beer to those who are perishing, wine to those who are in
> anguish." Proverbs 31:6
>
> I assumed that without wine, you had to be in anguish. :-)
> --
> 73, Cecil http://www.qsl.net/w5dxp
>

No Cecil.....
If you're without anguish you can't have any wine.
Unless Reg says so.

73 & Happy 2005
H.

PS and requisite antenna post:

Concrete pour for the tower in Monday at 7AM.
Leveled the base with a laser transit.
The yagi is a 4 element SteppIR, it will be at 50 feet on a 70 foot hill.
Finally! After 42 years of ham radio I get my beam-on-a-tower.

23. Re: Old Wives' Tales & Ground Rods

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 19:53:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <h6bbt0t9aubbpbatm1eru1ajptqrorhmsa@4ax.com>
Source record: 84462

On Sat, 1 Jan 2005 13:32:57 -0600, "H. Adam Stevens, NQ5H"
<NQ5H@ARRL.net> wrote:

>Concrete pour for the tower in Monday at 7AM.

Hi OM,

Bond the rebar cage and have a lead to it accessible for an Ufer
ground.

73's
Richard Clark, KB7QHC

24. Re: Old Wives' Tales & Ground Rods

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 20:06:25 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10te0m04vk59m41@corp.supernews.com>
Source record: 84463

Richard
The tower's a 48' Trylon self-supporting affair.
The base, rebar cage, and additional rebar driven into the hole walls for positioning are all welded together.
The contractor made damn sure the base will remain plumb during the pour.
I intend to use 3 - 6 additional rods outside the cage attached to the legs with big cable.
Not familiar with the term "Ufer"?
73
H.

"Richard Clark" <kb7qhc@comcast.net> wrote in message news:h6bbt0t9aubbpbatm1eru1ajptqrorhmsa@4ax.com...
> On Sat, 1 Jan 2005 13:32:57 -0600, "H. Adam Stevens, NQ5H"
> <NQ5H@ARRL.net> wrote:
>
>>Concrete pour for the tower in Monday at 7AM.
>
> Hi OM,
>
> Bond the rebar cage and have a lead to it accessible for an Ufer
> ground.
>
> 73's
> Richard Clark, KB7QHC

25. Re: HAMSTIK DIPOLE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 20:30:57 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <5MDBd.8551$_X7.4861@newssvr33.news.prodigy.com>
Source record: 84464

Radio Man wrote:

> Can one use open ladderline with a 20 mtr hamstick & the appropriate
> tuner & work 20-10 mtrs.?

Sure. Don't know if it would be worth the effort, but it's
certainly possible. You're basically trading 'coax' problems
for 'ladderline' problems, there's a differnece in the mechanics.
No idea if the benifits would be worth the effort...
'Doc

26. Re: Old Wives' Tales & Ground Rods

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 20:41:27 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <XVDBd.8553$_X7.1006@newssvr33.news.prodigy.com>
Source record: 84465

Reg,
"continued USA use of weapons of mass-destruction in Iraq
and Afganistan"... Really? I certainly wasn't aware of that.
Maybe our definitions of 'weapons of mass destruction' are
different?
'Doc

27. Re: 30 + J200, 25 - J350 etc Refresher Course ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 20:57:24 UTC
From: W9DMK <w9dmk@crosslink.net>
Message-ID: <41d70e2c.803375@news.crosslink.net>
Source record: 84466

On Sat, 01 Jan 2005 00:45:51 GMT, W9DMK<w9dmk@crosslink.net> (Robert Lay) wrote:

>On Fri, 31 Dec 2004 18:41:48 -0500, nospam@nospam.com wrote:
>
>>I'm basically a lurker in the newsgroup but I've forgotten what the
>>term as used with an antenna impedance like 30 +J200 or 25 -J150 etc
>>means. I remember studying it about 10 years ago when I took my extra
>>test and I had it in tech school at about the same time from a Jr.
>>College during one 4 credit hour "communications" course that covered
>>everything from TV's to SSB and FM. I believe it's one way of
>>expressing an impedance with some reactance thrown in and I recall
>>converting between polar and rectangular methods of expressing the
>>same term (I would really need the book for that now !) But I don't
>>think I have the books from the school days around anymore. Any one
>>care to give me a short refresher course or post a URL ? I've got a
>>bad case of CRS (Can't Remeber Stuff ;-))
>>
>>Happy New Year !
>>
>>
>Dear Sir,
>
>Try the program "Vectors" at either of the following Web sites. By
>plugging a few examples into the program, you will again understand
>complex arithmetic.
>http://zaffora.f2o.org/W9DMK/W9dmk.html
>http://www.qsl.net/w9dmk/
>
>The program does not run under an NT based system, such as Windows XP
>or Windows 2000 but it will run fine in DOS under Windows 9x or
>Windows ME.
>
>Here is the short tutorial on complex arithmetic:
>
>a1 + jb1 + a2 + jb2 = (a1 + a2) + j(b1 + b2)
>The rule for subtraction follows the obvious complement to the above
>example of addition.
>
>In order to do complex multiplication and division it is easier to
>convert first to polar form, as follows:
>
>Magnitude of a + jb is sqrt(a^2 + b^2) and the Angle is arctan(b/a)
>

>In Polar form the product of two vectors is the product of their
>magnitues and the angle on the product is the arithmetic sum of the
>two angles.
>
>In Polar form the quotient of two vectors is the quotient of their
>magnitudes with an angle that is the difference between the
>numerator's angle and divisor's angle.
>
>Example: 5@35 * 6@40 = 30@75
>
> 5@35 / 6@40 = 0.8333@-40
>where @ means "at an angle of"
>
>
>Bob, W9DMK, Dahlgren, VA
>http://www.qsl.net/w9dmk

Thanks to the post from Mac, N8TT, I see that I made an obvious
mistake - the quotient of the two values in the last problem should be
0.8333@-5

Where was my brain?

Bob, W9DMK, Dahlgren, VA
http://www.qsl.net/w9dmk

28. Re: Old Wives' Tales & Ground Rods

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 21:37:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <k4hbt098a53m6cevo9jki2dpevb5gf4koh@4ax.com>
Source record: 84467

On Sat, 1 Jan 2005 14:06:25 -0600, "H. Adam Stevens, NQ5H"
<NQ5H@ARRL.net> wrote:

>Richard
>The tower's a 48' Trylon self-supporting affair.
>The base, rebar cage, and additional rebar driven into the hole walls for
>positioning are all welded together.
>The contractor made damn sure the base will remain plumb during the pour.
>I intend to use 3 - 6 additional rods outside the cage attached to the legs
>with big cable.
>Not familiar with the term "Ufer"?
>73
>H.

Hi OM,

Concrete is conductive and with the large surface area presents quite
an electrode - the Ufer ground. Providing for a connection to its
metal interior insures you have access to this characteristic (and
with the rebar welded, insures that there will be no exploding
concrete at the J-Bolts due to current crowding if/when lightning
strikes).

73's
Richard Clark, KB7QHC

29. Re: Old Wives' Tales & Ground Rods

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 22:17:38 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10te8c0o1vfco0f@corp.supernews.com>
Source record: 84468

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:k4hbt098a53m6cevo9jki2dpevb5gf4koh@4ax.com...
> On Sat, 1 Jan 2005 14:06:25 -0600, "H. Adam Stevens, NQ5H"
> <NQ5H@ARRL.net> wrote:
>
>>Richard
>>The tower's a 48' Trylon self-supporting affair.
>>The base, rebar cage, and additional rebar driven into the hole walls for
>>positioning are all welded together.
>>The contractor made damn sure the base will remain plumb during the pour.
>>I intend to use 3 - 6 additional rods outside the cage attached to the
>>legs
>>with big cable.
>>Not familiar with the term "Ufer"?
>>73
>>H.
>
> Hi OM,
>
> Concrete is conductive and with the large surface area presents quite
> an electrode - the Ufer ground. Providing for a connection to its
> metal interior insures you have access to this characteristic (and
> with the rebar welded, insures that there will be no exploding
> concrete at the J-Bolts due to current crowding if/when lightning
> strikes).
>
> 73's
> Richard Clark, KB7QHC

Hi Richard
Lightning and the practicalities (no J-bolts, tower leg extension into the
concrete, holding the damn thing still during the pour) pretty much require
all the metal to be welded together. Then I'll put several good rods around
the base a few feet out.
I've seen lightning strike concrete; blew a 3 foot hole.
73
H.

30. Re: GSM and PCS Dual Band PCB Antenna Design?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-01 23:43:53 UTC
From: Zebito Coog <invalid@nospam.com>
Message-ID: <33oqtcF417g73U1@individual.net>
Source record: 84469

<radio913@aol.com> wrote in message
news:1104527067.091350.225470@z14g2000cwz.googlegroups.com...
> Hi,
>
> I was wondering if anyone out there has
> designed a GSM and PCS (880MHz and
> 1910MHz) dual-band printed circuit board
> embedded antenna? I expect the design
> would include a parallel LC network, so
> that the electrical length changes depending
> on the injected frequency.
>
> If you have done so, did you use Microwave office
> or Momentum, or any other computer simulator?
> Thanks in advance!
>
>
> Slick

Yes, they are almost harmonically related which simplifies the design.

31. Re: Old Wives' Tales & Ground Rods

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 00:21:17 UTC
From: Old Ed <eXseniorsDeleteThisAndTheX@earthlink.net>
Message-ID: <18HBd.14697$RH4.4953@newsread1.news.pas.earthlink.net>
Source record: 84470

This will be my last feeding of the Troll(s) in this OT thread...

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cr6akp$is8$1@titan.btinternet.com...
>
> "Old Ed" wrote -
> > Reg, this may come as a surprise to you,
>
> ============================
>
> Ed, I judge from from your writing you are an intelligent and educated USA
> voter.
>
Guilty as charged.

> The only thing which surprises me is how you manage to confuse slander
> with facts.
>
Alas dear Reg, I'm afraid you describe yourself here.

> I take only one point from your message -
>
> The ONLY terrorist attacks on the UK have ALL come from the Irish
> Republican Army - financed by charitable USA citizens, the CIA, and
> indirectly by USA governments regardless of political views.
>
I would be very surprised if the Islamic terrorists have not managed even
one small attack in the UK; but if that's true, your police, military and
intelligence services must be doing an excellent job.

But your IRA problems are because of the CIA??? And their motivation
would be WHAT???

Good grief Reg! Is there ANY anti-US lie that is too absurd and stupid
for you to believe? Try this one: All your missing persons have been
abducted by alien flying saucers, under contract with the CIA. (You have
now seen it on the Net, so it must be true!)

> Who needs enemies with 'special-relationship' friends like that?
>
I think our "special relationship" is real, but applies primarily to
(sane) people of good will, in both countries--not the crazies.

> USA citizens have no enemies who wish you harm.

This pearl is right up there with your CIA sponsorship of the IRA.

You GOTTA get those toxics out of your system. When you do, read up
on an outfit popularly known as Al Qaeda.

> But you still suffer from
> "Reds Under the Bed." which, like WMD, are non-existent.
>
No Reds under my bed, just storage boxes and dust bunnies.

It's good to know that WMD are non-existent, though. Maybe this
explains why you are the only one that thinks we're using them.

> Reg.
>
>

32. Re: dc grounding on 25ft trap vertical ant 10m-80m

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 02:20:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10temiqet0f5td2@corp.supernews.com>
Source record: 84471

I've laid radials out over a lawn a number of times. The grass roots grow right over them in a short time, and the radials just disappear. No problems mowing. I do staple them down with pieces of electric fence wire bent into a U shape, to keep them down against the ground until the grass grows over them.

But this is an exceptionally good area for growing grass -- grass seed is the largest agricultural crop around here.

Roy Lewallen, W7EL

kelly@dvol.com wrote:
>
> Nice looking installation but how will you mow the lawn next spring
> when the grass grows up thru your radial farm? Without the mower eating
> the radials?? I'd bury the things and forget them but I'm curious about
> how you plan to solve the problem.
>
>
>>--
>>
>>Charlie
>>Ham Radio - AD5TH
>>www.ad5th.com
>>Live Blues Music
>>www.492acousticblues.com
>
>
> w3rv
>

33. Re: AM/FM outside antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 04:05:31 UTC
From: richardharrison@webtv.net
Message-ID: <16311-41D7730B-326@storefull-3258.bay.webtv.net>
Source record: 84372

Seabat wrote:
"So, if I took the "rinky-dink" plastic loop antenna outside and placed it abive the roof, it would work?"

Most likely. Seabat said his car radio worked on the site. An a-c radio should normally be sensitive enough to operate on the same site.

An AM radio antenna does not need to be st high altitude as medium waves follow the earth`s curvature as they propagate in most cases. The existing metal roof in combination with the earth itself form a sandwich with the loop antenna in the middle. This has proved unsatisfactory. Seabat has "The Tin Riof Blues". It`s only necessary to get the AM antenna in effect out from under the metal roof.

I suspect that just extending loop wires would be fraught with problems. A variable capacitance in the radio likely tunes the loop. This loop in parallel with the capacitance makes a high impedance parallel-resonant circuit. Its impedance rises to about Q times the inductive reactance. This circuit is susceptible to upset due to stray capacitance from any long high-Z feeders. That`s why I proposed two additional loops to capture the signal and to transfer it to the radio. A tuned loop in the clear would capture in the signal, and the untuned loop would transfer the signal to the radio`s "rinky-dinky" plastic antenna loop on the radio shelf. These two loops would be interconnected with a twisted-pair of wires.

Seabat also wrote:
"I suppose an pld car antenna would work for the FM if placed up high, also?"

Yes. It`s exactly what I`ve long used as a 2-meter antenna. It is collapsed telescopically to about 19 inches. I added (4) equally spaced, drooping by 45-degrees, radials under the vertical radiator. They are also 19 inches long. With full forward power into the antenna, the reflected power is very low. The rig talks and listens very well.

For the FM broadcast band the elements would need to be lengthened to almost 30 inches.

Construction details are given in books such as the "ARRL Antenna Book"

Best regards, Richard Harrison, KB5WZI

34. Re: Old Wives' Tales & Ground Rods

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 04:42:12 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <jqtet0llrkpues2dkkppu3g4q37j6tthle@4ax.com>
Source record: 84373

On Sun, 02 Jan 2005 00:21:17 GMT, "Old Ed"
<eXseniorsDeleteThisAndTheX@earthlink.net> wrote:

>This will be my last feeding of the Troll(s) in this OT thread...
>
>"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
>news:cr6akp$is8$1@titan.btinternet.com...
>>
>> "Old Ed" wrote -
>> > Reg, this may come as a surprise to you,
>>
>> ============================
>>
>> Ed, I judge from from your writing you are an intelligent and educated USA
>> voter.
>>
>Guilty as charged.
>
>> The only thing which surprises me is how you manage to confuse slander
>> with facts.
>>
>Alas dear Reg, I'm afraid you describe yourself here.
>
>> I take only one point from your message -
>>
>> The ONLY terrorist attacks on the UK have ALL come from the Irish
>> Republican Army - financed by charitable USA citizens, the CIA, and
>> indirectly by USA governments regardless of political views.
>>
>I would be very surprised if the Islamic terrorists have not managed even
>one small attack in the UK; but if that's true, your police, military and
>intelligence services must be doing an excellent job.
>
>But your IRA problems are because of the CIA??? And their motivation
>would be WHAT???
>
>Good grief Reg! Is there ANY anti-US lie that is too absurd and stupid
>for you to believe? Try this one: All your missing persons have been
>abducted by alien flying saucers, under contract with the CIA. (You have
>now seen it on the Net, so it must be true!)
>
>> Who needs enemies with 'special-relationship' friends like that?
>>
>I think our "special relationship" is real, but applies primarily to

>(sane) people of good will, in both countries--not the crazies.
>
>> USA citizens have no enemies who wish you harm.
>
>This pearl is right up there with your CIA sponsorship of the IRA.
>
>You GOTTA get those toxics out of your system. When you do, read up
>on an outfit popularly known as Al Qaeda.
>
>> But you still suffer from
>> "Reds Under the Bed." which, like WMD, are non-existent.

Sorry to piggy-back on your post, but apparently, there *WERE* "reds under the bed. I would direct your attention to "Mask of Treachery" by John Costello. In it is detailed the penetration of MI-5 and MI-6 by the Cambridge gang of traitors. There is enough information in there to demonstrate that James Angelton was right, there was a considerable amount of KGB and GRU penetration of the CIA and the US Department of State. One of FDR's personal assistants was probably a KGB or GRU spy. Another good book is "Operation Solo" by John Barron. It details the life of a top CPUSA operative named Morris Childs who was an FBI spy. The Soviets funneled (documented) millions of dollars into the CPUSA.

Russ

>>
>No Reds under my bed, just storage boxes and dust bunnies.
>
>It's good to know that WMD are non-existent, though. Maybe this
>explains why you are the only one that thinks we're using them.
>
>----
>> Reg.
>>
>>
>
>
>

35. Re: HAMSTIK DIPOLE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 04:44:26 UTC
From: W5DXP <w5dxp@hotmail.com>
Message-ID: <1104641066.226674.67410@c13g2000cwb.googlegroups.com>
Source record: 84374

Chuck asks:
> Are the radiation resistances for various Hamstiks published
anywhere?

Since the Hamsticks are approximately 8 feet long, these values from the ARRL Antenna Book should be in the same ballpark. 75m ~ 0.8 ohms, 40m ~ 3.0 ohms, 30m ~ 5.8 ohms, 20m ~ 11.0 ohms, 17m ~19 ohms, 12m ~ 29 ohms.
--
73, Cecil http://www.qsl.net/w5dxp

36. Re: dc grounding on 25ft trap vertical ant 10m-80m

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 09:41:52 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <VMWLKMEgH81BFAEy@ifwtech.co.uk>
Source record: 84375

Roy Lewallen wrote:
>
>kelly@dvol.com wrote:
>> Nice looking installation but how will you mow the lawn next spring
>> when the grass grows up thru your radial farm? Without the mower eating
>> the radials?? I'd bury the things and forget them but I'm curious about
>> how you plan to solve the problem.
>
>I've laid radials out over a lawn a number of times. The grass roots
>grow right over them in a short time, and the radials just disappear.
>No problems mowing. I do staple them down with pieces of electric fence
>wire bent into a U shape, to keep them down against the ground until
>the grass grows over them.
>
>But this is an exceptionally good area for growing grass -- grass seed
>is the largest agricultural crop around here.
>

The key question seems to be: Where you live, which is harder - growing
a lawn, or mowing it?

If your lawn seems to grow faster than you can mow it, you can safely
lay the radials on top... and then let the grass do all the hard work.

Some years ago, a friend laid a radial system of 1in wide metal strips,
simply stapled down onto his flat, dense English lawn. Within a year,
you couldn't see the strips from any distance away. After about five
years they were completely covered.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

37. stub&#65533;s instead of traps

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 14:19:17 UTC
From: pegge <pegge.j@DELETEtelia.com>
Message-ID: <FpTBd.126093$dP1.454471@newsc.telia.net>
Source record: 84376

I&#65533;m planning to build a new multi-band antenna, and found something
entirely new to me , an antenna like a w3dzz but with &#65533;stubs&#65533;instead of
traps. Take a look at www.g3ycc.koroo.net/lattin.htm
Should be possible to build with wires and spacers?
Anyone know (and uses!) this antenna?
I also have been thinking of a T2FD-ant, tips on
inductance-free resistors tnx, someone built a smart T2FD?
(smart meaning simple solutions for R and feeding (coax))
Comments please!

Happy Newyear etc / per / sm7aha

38. Re: stub´s instead of traps

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 14:49:13 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <1104677353.888424.35650@z14g2000cwz.googlegroups.com>
Source record: 84377

pegge wrote:
> I´m planning to build a new multi-band antenna, and found something
> entirely new to me , an antenna like a w3dzz but with ´stubs´
> instead of traps. Take a look at www.g3ycc.koroo.net/lattin.htm

Last I heard, no one has independently verified that it works as
advertised. A/B comparisons to a dipole would be nice as would a
simulation model.
--
73, Cecil http://www.qsl.net/w5dxp

39. Re: stub´s instead of traps

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 15:21:01 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <1104679261.618421.159210@c13g2000cwb.googlegroups.com>
Source record: 84378

pegge wrote:
> I´m planning to build a new multi-band antenna, and found something
> entirely new to me , an antenna like a w3dzz but with ´stubs´
> instead of traps. Take a look at www.g3ycc.koroo.net/lattin.htm

Just noticed that the URL should be:

http://www.g3ycc.karoo.net/lattin.htm

Here's an earlier quote that might interest you:

>Lee Carkenord KA0FPJ Denver CO wrote: >>This time we used the
much sturdier ladder line (for traps/radiator) as a starting point.
Mechanically, this was a fairly robust device. Electrically, it was
the same as our previous attempt. We spent a lot of time with it.
Cut up a lot of wire. We finally reluctantly gave up. We _WANTED_
it to work, but we were just not able to get anything accomplished.
Again, we felt that we were never close to having a workable, 50 ohm
coax-fed, multi-band antenna.<<
--
73, Cecil http://www.qsl.net/w5dxp

40. Re: stub&#65533;s instead of traps

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 17:18:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <25ldt05hvrfkeek60uc3jl5pqco5er49rd@4ax.com>
Source record: 84379

On Sun, 02 Jan 2005 14:19:17 GMT, "pegge" <pegge.j@DELETEtelia.com>
wrote:
>Iï¿½m planning to build a new multi-band antenna, and found something
>entirely new to me , an antenna like a w3dzz but with ï¿½stubsï¿½instead of
>traps.
http://www.g3ycc.karoo.net/lattin.htm

Hi Pegge,

This is one of those designs that has elements of authenticity, but
poor implementation. In other words, it does not work in the way it
is described (and is notorious for not working at all).

The elements of authenticity are with stubs as you have noted. Open
and closed stubs do replace lumped circuits of inductors and
capacitors to function as traps and loads. The poor implementation is
that you do not construct stubs to replace those traps or loads in the
ways commonly described (and the added stringer wires only compound
the poor logic).

Every implementation I've observed consists of building the stub
without feeding it across its mouth, but along its body. This makes
the other half of the stub (the total structure now no longer a stub)
simply a parasitic wire with no particular merit.

Proper stubs on VHF/UHF antennas that can support them, give the
proper orientation of being at 90ï¿½ to the radiating structure (unlike
the Lattin). Sometimes the stub is compressed by folding or rolling
its length around the antenna, but the mouth is always in series with
the radiating element. In other words (use fixed font to view one
half of a dipole, source on the left as ï¿½):
ï¿½----------------- ------------------
| |
| |
| |
--
But not:
ï¿½--
|

To build the Lattin style with mouth fed stubs (and probably not
functioning as traps), would require three wire constructions:
ï¿½--------------------------
|

|

Which is now verging on the concept of a Franklin Antenna which you should research in place of Lattin styles. However, I would point out that the Franklin is a single band gain antenna. I only mention it to study as it gives a better theoretical description (and works because of it).

73's
Richard Clark, KB7QHC

41. Re: stub&#65533;s instead of traps

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 17:33:07 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10tgc2i65ann23e@corp.supernews.com>
Source record: 84380

"pegge" <pegge.j@DELETEtelia.com> wrote in message
news:FpTBd.126093$dP1.454471@newsc.telia.net...
> I&#65533;m planning to build a new multi-band antenna, and found something
> entirely new to me , an antenna like a w3dzz but with &#65533;stubs&#65533;instead of
> traps. Take a look at www.g3ycc.koroo.net/lattin.htm
> Should be possible to build with wires and spacers?
> Anyone know (and uses!) this antenna?
> I also have been thinking of a T2FD-ant, tips on
> inductance-free resistors tnx, someone built a smart T2FD?
> (smart meaning simple solutions for R and feeding (coax))
> Comments please!
>
> Happy Newyear etc / per / sm7aha
>
>

hi pegge

the link didn't work for me

an example of stubs alone is the KLM beam

http://www.postech.ac.kr/~hl5nlq/ham/kt34a.htm

an example of stubs and traps is the Cushcraft R8 vertical

http://www.cushcraft.com/amateur/details.asp?catid=157

73
H.

42. What is a 'stub'

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 18:57:45 UTC
From: bbnn <jl@fnn.gfd>
Message-ID: <cr9g4a0mh0@enews2.newsguy.com>
Source record: 84381

.

43. Re: dc grounding on 25ft trap vertical ant 10m-80m

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 19:18:25 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <41D84931.7E7128AC@shaw.ca>
Source record: 84382

Roy Lewallen wrote:
>
> I've laid radials out over a lawn a number of times. The grass roots
> grow right over them in a short time, and the radials just disappear. No
> problems mowing. I do staple them down with pieces of electric fence
> wire bent into a U shape, to keep them down against the ground until the
> grass grows over them.
>
> But this is an exceptionally good area for growing grass -- grass seed
> is the largest agricultural crop around here.
>
> Roy Lewallen, W7EL
>
Three years ago I laid some RG-213 in the grass across my back yard and into the shack. It's
close enough to the ground that my mower doesn't touch it, and after one year
you couldn't even see it! It's about a 50 ft run and has stood up to two Alberta
winters with no signs of deterioration. I have also run radials in the grass and
was surprised at how fast they disappeared into the roots -- I didn't use any
staples -- too lazy!

Irv VE6BP
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/index.html
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/index.htm
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/index.htm
---
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

44. Re: What is a 'stub'

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 19:31:42 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <1104694302.185425.36480@c13g2000cwb.googlegroups.com>
Source record: 84383

A stub is an open-circuited or short-circuited section of transmission line. It can be a series stub or a parallel stub. It can be inductive, capacitive, or resonant depending upon length. At a single frequency, a stub can replace an inductor or capacitor and/or cause a change in impedance, i.e. a change in the voltage to current ratio. (Not to be confused with software stubs.)
--
73, Cecil http://www.qsl.net/w5dxp

45. Re: stub&#65533;s instead of traps

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 19:41:08 UTC
From: W9DMK <w9dmk@crosslink.net>
Message-ID: <41d84e4f.17869615@news.crosslink.net>
Source record: 84384

On Sun, 02 Jan 2005 14:19:17 GMT, "pegge" <pegge.j@DELETEtelia.com>
wrote:

>I&#65533;m planning to build a new multi-band antenna, and found something
>entirely new to me , an antenna like a w3dzz but with &#65533;stubs&#65533;instead of
>traps. Take a look at www.g3ycc.koroo.net/lattin.htm
>Should be possible to build with wires and spacers?
>Anyone know (and uses!) this antenna?
>I also have been thinking of a T2FD-ant, tips on
>inductance-free resistors tnx, someone built a smart T2FD?
>(smart meaning simple solutions for R and feeding (coax))

The URL above is in error - it should be
www.g3ycc.karoo.net/lattin.htm

I have built such an antenna, but I used the 1 inch wide window line
(450 ohm) instead of the 300 ohm foam filled. This should have 0.95
velocity factor instead of 0.8, so the sections had to be
proportionally longer. My dimensions are as follows:

A = 9.9 meters
B = 5.0 meters
C = 2.5 meters
D = 2.9 meters

I built it to be used as a hanging vertical fed against ground, but
have not been able to get it hung properly as yet. At the moment, for
test purposes only, it is hanging in a catenary with the high end
about 15 ft above ground and the feed point is at ground level and fed
agains a good earth ground.

Resonances occur at 2.96 MHz, 6.52 MHz, 10.12 MHz, 12.5 MHz, 19.46
MHz, and 28.57 MHz as measured with an MFJ Antenna Analyzer. I explain
the low frequency resonances being lower than the design values as
being due to the fact that the antenna is almost horizontal and not
very high. If I can get it hung vertically, I expect it exhibit
resonances closer to the design values.

Bob, W9DMK, Dahlgren, VA
http://www.qsl.net/w9dmk

46. Re: stub&#65533;s instead of traps

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 19:46:30 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10tgjsosvr2du14@corp.supernews.com>
Source record: 84385

"W9DMK (Robert Lay)" <w9dmk@crosslink.net> wrote in message
news:41d84e4f.17869615@news.crosslink.net...
> On Sun, 02 Jan 2005 14:19:17 GMT, "pegge" <pegge.j@DELETEtelia.com>
> wrote:
>
>>I&#65533;m planning to build a new multi-band antenna, and found something
>>entirely new to me , an antenna like a w3dzz but with &#65533;stubs&#65533;instead of
>>traps. Take a look at www.g3ycc.koroo.net/lattin.htm
>>Should be possible to build with wires and spacers?
>>Anyone know (and uses!) this antenna?
>>I also have been thinking of a T2FD-ant, tips on
>>inductance-free resistors tnx, someone built a smart T2FD?
>>(smart meaning simple solutions for R and feeding (coax))
>
>
> The URL above is in error - it should be
> www.g3ycc.karoo.net/lattin.htm
>
> I have built such an antenna, but I used the 1 inch wide window line
> (450 ohm) instead of the 300 ohm foam filled. This should have 0.95
> velocity factor instead of 0.8, so the sections had to be
> proportionally longer. My dimensions are as follows:
>
> A = 9.9 meters
> B = 5.0 meters
> C = 2.5 meters
> D = 2.9 meters
>
> I built it to be used as a hanging vertical fed against ground, but
> have not been able to get it hung properly as yet. At the moment, for
> test purposes only, it is hanging in a catenary with the high end
> about 15 ft above ground and the feed point is at ground level and fed
> agains a good earth ground.
>
> Resonances occur at 2.96 MHz, 6.52 MHz, 10.12 MHz, 12.5 MHz, 19.46
> MHz, and 28.57 MHz as measured with an MFJ Antenna Analyzer. I explain
> the low frequency resonances being lower than the design values as
> being due to the fact that the antenna is almost horizontal and not
> very high. If I can get it hung vertically, I expect it exhibit
> resonances closer to the design values.
>
>
> Bob, W9DMK, Dahlgren, VA

> http://www.qsl.net/w9dmk

Thanks for sorting out the link.
Looks like a sound design.
Careful construction and measurement should yield a successful antenna.
73
H.

47. Re: What is a 'stub'

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 20:11:51 UTC
From: Dave <noone@nowhere.com>
Message-ID: <DMydnYlkpq4XyEXcRVn-vg@crocker.com>
Source record: 84386

"bbnn" <jl@fnn.gfd> wrote in message news:cr9g4a0mh0@enews2.newsguy.com...
> .

a piece of transmission line that is used to either simulate a lumped
reactance or resonant circuit.

48. Re: What is a 'stub'

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 20:35:43 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10tgmp0tcn5k181@corp.supernews.com>
Source record: 84387

but not always

"Dave" <noone@nowhere.com> wrote in message
news:DMydnYlkpq4XyEXcRVn-vg@crocker.com...
>
> "bbnn" <jl@fnn.gfd> wrote in message news:cr9g4a0mh0@enews2.newsguy.com...
>> .
>
> a piece of transmission line that is used to either simulate a lumped
> reactance or resonant circuit.
>
>
>

49. Re: What is a 'stub'

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 21:00:35 UTC
From: Left Coast <Lefty@bizarre.com>
Message-ID: <ThZBd.37745$8e5.34579@fed1read07>
Source record: 84388

See URL:
http://www.radioelectronicschool.com/reading/reading38.pdf
Page 11

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LC

50. Re: stub&#65533;s instead of traps

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 21:03:08 UTC
From: David J Windisch <davidw@copper.net>
Message-ID: <41d861d5$1_1@newsfeed.slurp.net>
Source record: 84389

Hi, all concerned:

www.g3ycc.karoo.net/lattin.html

is the corrected url.

If the dimensions are added up, the overall physical length approaches that of an 80M dipole. "Loading-effect" of the "fat-wire" dipole could be helped along if needed on 80M by additional wire length past A.

The A-stubs reduce the electrical lengths each side to overall 40M-dipole-size.

Ditto B-stubs on 20M.

Ditto C-stubs on 15M.

Changing the D-lengths to single wires, or shorting both inner ends, completes the 10M-dipole section.

Editorial comments:

The feed shown is "incorrect". Stubs at D are not needed, unless one wishes to add higher-frequency capability. Single wires are sufficient for the 10M portions of the dipole.

This Lattin antenna is not easily constructed or tuned, and it reminds me of something from the category of solutions running around looking for problems.

The current amateur application that I can think of which is done "properly" is the KLM h-f tribander. The stubs are of open-construction, and the first stubs, at the outside end the 10M portions of the antenna elements, can be seen easily, even in pictures.

73, Dave, N3HE

"pegge" <pegge.j@DELETEtelia.com> wrote in message
news:FpTBd.126093$dP1.454471@newsc.telia.net...
> I&#65533;m planning to build a new multi-band antenna, and found something
SNIP

51. Re: stub´s instead of traps

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 22:07:02 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10tgs4car7kr7b1@corp.supernews.com>
Source record: 84390

While a stub can be made to act just like a resonant circuit at one frequency, and almost like one over a range of frequencies, it behaves quite differently at frequencies which are quite different from the resonant frequency -- such as on other bands. That is, the stub will act like a trap at one band, but not at all like a conventional trap at other bands. There's no inherent disadvantage in this, but it means you can't simply replace traps with stubs and have the antenna behave the same as before on all bands. Considerable redesign or adjustment might be required.

Another caution is that a stub is likely to have lower Q than a good trap. This can, but doesn't necessarily, result in significant loss on some bands. Careful modeling can give a pretty realistic idea of the loss you can expect.

Finally, if you model a stub in an application like this, you can't use NEC or EZNEC transmission line models, because the currents on the wires aren't equal and opposite -- you have to make the stub models out of wires. And be sure to include wire loss if you want the model to give a realistic assessment of loss.

Roy Lewallen, W7EL

pegge wrote:
> Iï¿½m planning to build a new multi-band antenna, and found something
> entirely new to me , an antenna like a w3dzz but with ï¿½stubsï¿½instead of
> traps. Take a look at www.g3ycc.koroo.net/lattin.htm
> Should be possible to build with wires and spacers?
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> I also have been thinking of a T2FD-ant, tips on
> inductance-free resistors tnx, someone built a smart T2FD?
> (smart meaning simple solutions for R and feeding (coax))
> Comments please!
>
> Happy Newyear etc / per / sm7aha
>
>

52. Re: stub&#65533;s instead of traps

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-02 22:20:03 UTC
From: W9DMK <w9dmk@crosslink.net>
Message-ID: <41d870f3.26736965@news.crosslink.net>
Source record: 84391

On Sun, 2 Jan 2005 16:03:08 -0500, "David J Windisch"
<davidw@copper.net> wrote:

>Hi, all concerned:
>
>www.g3ycc.karoo.net/lattin.html
>
>is the corrected url.
>
>If the dimensions are added up, the overall physical length approaches that
>of an 80M dipole. "Loading-effect" of the "fat-wire" dipole could be helped
>along if needed on 80M by additional wire length past A.
>
>The A-stubs reduce the electrical lengths each side to overall
>40M-dipole-size.
>
>Ditto B-stubs on 20M.
>
>Ditto C-stubs on 15M.
>
>Changing the D-lengths to single wires, or shorting both inner ends,
>completes the 10M-dipole section.
>
>Editorial comments:
>
>The feed shown is "incorrect". Stubs at D are not needed, unless one wishes
>to add higher-frequency capability. Single wires are sufficient for the 10M
>portions of the dipole.
>
>This Lattin antenna is not easily constructed or tuned, and it reminds me of
>something from the category of solutions running around looking for
>problems.
>
>The current amateur application that I can think of which is done "properly"
>is the KLM h-f tribander. The stubs are of open-construction, and the first
>stubs, at the outside end the 10M portions of the antenna elements, can be
>seen easily, even in pictures.

Dear Dave,

I could certainly be wrong, but my calculations indicate that the "C"
stubs are designed to produce a trap for 10 meters - not 15 meters.

The feed shown is at worst ambiguous. Actually, according to my
measurements and according to common sense, the "D" stubs perform no

useful function. You can feed from either wire or you can twist those two wires together and feed jointly - same result.

I think the purpose in carrying the same material all the way through the design was the real point, but section D is just wire for the 10 meter dipole. There may have been some subtle reason for having a stub at position D that resonates at 25 MHz, but I don't see it.

Bob, W9DMK, Dahlgren, VA
http://www.qsl.net/w9dmk

53. 10 watt limit for ducky?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 00:55:06 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <ai5ht09sfv39ilju0m5jh6c9f2hgi53dqi@4ax.com>
Source record: 84392

Why are power limits specified so low for dual-band and tri-band HT
rubber duck antennas? The conductors in the couple I saw surgerized
looked like they could handle lots more.

I am considering a mobile magnetic base that accepts SMA antennas,
but am deterred by the low limits for the duckies I would want to use.

The concept is that you transfer your ducky from the HT to the roof
when you get into your car. No problem with just the HT but not so
good with a QRP amp that outputs 30 watts.

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

54. 21st Century E-Commerce Money Making Formula

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 02:12:58 UTC
From: NeoOne <Dariusjkelly@msn.com>
Message-ID: <1104718378.614058.111880@c13g2000cwb.googlegroups.com>
Source record: 84393

Neo Tech Party Administration

Posted By: 21st Cent Neo-Tycoon
Date: January 2, 2004, at 7:00pm
21st Century E-Commerce Money Making Formula

This works better than letters & it's all electronic!

Posted By: E'Sean Date: Wednesday, 21 July 2004 eMoney Making Formula

"This is so awesome. Try it. The more people that do it the better."

"I turned $3 into $14,706 within the first 30 days of operating the business plan that I am about to reveal to you free of charge."

If you decide to take action on the following instructions, I will personally GUARANTEE that you will enjoy a similar return!"

Please do not be skeptical about this program.

At least think about it for a few days.

Otherwise you will be throwing away over $10,000 in cash!

Dear Friend, My name is Mark Sutton. I was laid off from my job in August of 2001 At that time I wasliving beyond my means and in serious debt. Several debt collectors were hounding me on an almost daily basis, and this consequently started a chain reaction that ended with the repossession of my car and then my home. As you can probably imagine, my prospects looked pretty bleak. Then, in March of 2002, I received a short and simple email telling me how to make over $10,000 at a time.

I ignored it because of course, I was skeptical.

However, I didn't delete that email because something about it rang true to me, and I was desperate to know whether it was possible to make that amount of money in such a short space of time. By this time, I was even deeper in debt, and I had just about reached the point of despair. I finally realized that I had absolutely nothing to lose by having a go at the plan offered to me in that email.

And apart from that, I just couldn't stop myself from thinking "What if it actually works?" Therefore, I put my doubts to one side and I went ahead and followed the simple instructions given in that email. It took me less than 30 minutes

to complete and it cost me no more than $3. And yet, by the end of 2002, I was able to book the family holiday of a lifetime in Miami, and

I bought a brand new Audi A8 with hard cash. And in the autumn of 2003, I purchased a tidy semi-detached home for no less than $125,000. And yet,

I don't owe a single penny to anyone!

To date, I have made exactly $392,718. My accountant has drawn up a cash-flow forecast in which he predicts that, within the next 24 months, I will become a millionaire just through this one business alone. Even now as I write this, I find it strange to come to terms with the fact that, like most people, I've worked hard and struggled all my life just to 'get by' and then something ridiculously simple drops into my lap and immediately turns my life around completely.

When I think back to all the similar emails I had previously deleted, it makes me shudder, because now I know just how close I came to missing out completely.

What did it say in that email?

What were those simple instructions that enabled me to amass so much money in so little time?

Well, if you'll read on, all will be revealed!

The business plan I am about to share with you works perfectly every single time. I've never made less than $10,000 from it on each occasion. Let me assure you that this is a LEGITIMATE BUSINESS OPPORTUNITY, a perfectly legal moneymaking enterprise. It does not require you to sell anything. It does not require you to speak to your friends, family or anybody else (unless you want to). In fact, you do not need to come into contact with any people whatsoever. Anyone with a pulse can become successful and make their fortune with this system. If you believe that 'every dog has his day', then follow the simple step-by-step plan exactly as it is set out below. If you do this and this alone, I GUARANTEE that within the next 30 days you will receive over $10,000 in cash via your PayPal account. I know that this must sound like an outrageous claim, particularly if you've never had possession of this sort of money before, but believe me, this business works like nothing else you may have seen before in your life!

By following the simple 3-step plan set out below, within a few short weeks your life will be transformed beyond all recognition! Please do not allow your initial skepticism to deprive you of certain financial success. If you decide not to take advantage of this life-changing opportunity, I would like you to know that I sincerely respect your decision and I understand that you will have your reasons. I therefore wish you the very best of luck for the future. I am able to say this with absolute sincerity because, as you will see, if you decide to work this plan, I will not receive any financial compensation from you whatsoever. After all, I am sharing this system with you for free. However, remember life is short. Nobody has ever said that you can't have the financial freedom to do what you want to do, when you want to

do it.

But you must first pay the price. The price here is action; it's as simple as that!

I'm very proud to be able to say that I've fulfilled my duty to my wife and children by securing their financial future in a very uncertain world, and I don't believe that any price is too great to pay for such peace of mind. THIS IS THE CHEAPEST, FASTEST & EASIEST WAY TO MAKE MONEY ONLINE - PERIOD!

There are a lot of companies out there offering to put you in your own business, but I'm so certain you will make a SERIOUS INCOME with what I am going to tell you that I'm willing to roll up my sleeves and help you begin - RIGHT NOW!!

Remember, I am not asking you to send me a single penny for the lucrative business project I am about to share with you. In addition, you will not be asked to buy anything or sacrifice your free time. You will make some fast and easy cash, using just a copy of this email and the simplest and most popular Internet payment system in existence!

You have most likely seen or heard about this project on TV programs such as 20/20 and Oprah Winfrey, or you may have read about it in the Wall Street Journal. If not, here it is below - revealed to you in step-by-step detail. This program is by no means new. It has been in existence in many forms for at least ten years. But in the early days, it required a lot more time and effort, as well as an outlay of a few hundred dollars. However, thanks to PayPal and the Internet, the outlay is now virtually ZERO! On top of that, the entire process is FASTER, EASIER, and MORE LUCRATIVE than it has EVER been! If you're already running a home business, you can easily do this one along with it. If not, this is the FASTEST and EASIEST way to earn serious money online that you've ever seen so far in the history of the Internet! This program works no matter what country you are in, or what currency you use. It doesn't matter how old or how young you are. And you certainly won't need any special knowledge or talent. You won't need to run a website, or make phone calls, or make photocopies, or send out letters through the mail, or pay for advertising, etc.

The only things you will need are: * An email address * A Premier or Business PayPal account with at least $3 deposited in it * 30 minutes of your time

This program takes just half an hour to set up. After that, there is absolutely no work whatsoever to do on your part. And yet, you will stand to gain many thousands of dollars within the next few weeks from those 30 minutes of easy work! Yes, I know, it sounds too good to be true! I thought exactly the same thing myself until I actually tried it out!

Even if you are already involved in another program, stay with it, but do yourself a big favour and DO THIS ONE as well. You have absolutely

NOTHING to lose, but you stand to gain a LIFE-CHANGING amount of money within the next few weeks! In fact, there is NO LIMIT to the amount of income you can generate from this one single business program!! The facts are simple: If you need to make a few thousand dollarss REALLY FAST, then this program is the way to do it! It's the CHEAPEST, FASTEST, EASIEST, and MOST LUCRATIVE program you will ever participate in!

Please be sure to read all of this page . . . take your time, come back to it . . . go over and over it, you won't be sorry, I can certainly promise you that! If you don't have time to read all of this now, then save this page, or add it to your Favorites list, so you can come back to it later. ALL YOU NEED IS A PAYPAL ACCOUNT & AN EMAIL ADDRESS! Just about everyone has heard about "PayPal" (if you haven't you will soon!) and when I came across this concept I knew it would work because, as a member of PayPal, I had already experienced their efficiency and excellent standing. PayPal is the simplest method of making and receiving payments online that anyone has ever seen! Anyone with an email address can join for FREE! Once you have a PayPal account, you can send and receive credit card payments to or from anyone - anywhere in the world! Please read further before you go there... You can complete this whole process within just half an hour and you will NEVER forget the day you decided to do so!!!

NEED PROOF? Here are just 3 testimonials from the countless individuals who decided to invest nothing more than $3 and half an hour of their time to participate in this program:

" What an amazing plan! I followed your instructions just 3 weeks ago, and although I haven't made 10 grand yet, I'm already up to $6,135. I'm absolutely gob smacked." Alan Humphries , Leicester

"This is Lisa. Well, what can I say?... THANK YOU SO MUCH! I sent 40 e-mail's out like you said and then I just forgot about the whole thing. To be honest, I didn't really think anything would come of it. But when I checked my paypal account a week later, there was over $3,000 in it! After 30 days I now have over $11,000 to spend! I can't thank you enough!" Lisa McDonald, Northampton

" I was shocked when I saw how much money came flooding into my paypal account. Within 3 weeks my account balance has ballooned to $7,449. At first I thought there had been some sort of error with my account!" Richard Barrie , Cirencester

Just a few months ago, each of these people were doing the same thing as you are at this very moment - reading this! But because they decided to follow the simple instructions given below, they are now considerably better off as a result. And there's no reason whatsoever why you can't share in this success. You've got nothing to lose, and EVERYTHING to gain! Let's get started, just follow the instructions exactly as set out below and then prepare yourself for a HUGE influx of cash over the next 30 days!

HERE'S WHAT YOU NEED TO DO. . .

STEP 1

Ok, if you're not already a PayPal user, the very first thing you need to do is use the PayPal link below and SIGN UP. It takes just two minutes!
https://www.paypal.com/us/mrb/pal=ZVR6VDMJUDB5Y

Be sure to use this link so you can sign up for a free PREMIER or BUSINESS account. You'll need to have a PREMIER or BUSINESS account (and not a PERSONAL account) otherwise you won't be able to receive credit card payments from other people.

STEP 2

It is an undeniable law of the universe that we must first give in order to receive. So the first thing to do when you have your Premier/Business PayPal account is to IMMEDIATELY send a $3 payment from your PayPal account to the FIRST email address in the list below, along with a note saying: " Please add me to your mailing list." Be certain to add this note, as this is what KEEPS THIS PROGRAM LEGAL. Instructions on how to send a payment are under "SEND MONEY" at the Paypal Site. It's so Easy!! When you send your $3 payment to the first address in the list, do it with a great big smile on your face because "as you sow, so shall you reap!"
<>Here's the current list
(1)bmedsker@cablespeed.com (2)disbellj@midsouth.rr.com (3) moty7ellek@adelphia.net (4)spontaniuz@msn.com (5)dholla@msn.com

After you have transferred a $3 payment to the email address at the top of the list, something very eerie happens. It gives you an indescribable, overwhelming sense of certainty, belief and conviction in the system. You've just proved to yourself that, because you have done it, there must be a great number of other people ready to do exactly the same. Thus you have now seen for yourself, first hand, that this business actually works!

STEP 3

Once you've sent a $3 payment to the address at the top of the list (along with a note,please add me to you mailing list! - this is VERY important!), the next thing you need to do is to obtain a copy of this email message, as you'll be sending it out to at least 40 people.

The copy that you will send out will contain YOUR unique PayPal referral URL and YOUR email address at number 5 in the list - having deleted the address at Number 1 in the list, and moving the others up a position. The easiest way to do this is to:

(A) Go to your toolbar (at the very top of the screen) and select EDIT and then SELECT ALL.

(B) Go to the toolbar again and select EDIT and then COPY.

(C) Start (compose) a new email message (PLAIN TEXT so everyone can view it!).

(D) Fill in your email address and subject line.

(E) Go to EDIT and PASTE to paste this text into your new email message. Now you can edit this email message in any way you want!

The first thing to edit are the email addresses in the list above. Delete the top email address, and then move the others up a position, and then add YOUR email address to the bottom of the list (the number 5 position). Be sure to use your email address that is associated with your PayPal account. But DO NOT forget to send $3 via PayPal (along with your note!) to the email address at position number 1 before deleting it! Don't be tempted to add your name to position 1 in order to earn money fast! It doesn't work like that!

If you do that, you will ONLY reach the people you directly send emails to, and then your name will be immediately removed from the No.1 place and you won't reach thousands of people! But, if you add your name to the Number 5 position, there will be literally thousands of people receiving and sending email's later - when your name is at the Number 1 spot!!!

Now you need to edit the PayPal referring URL (shown above in Step 1) with your own PayPal referring URL. You can find YOUR referring URL at Paypal after you join. Just look at the bottom of the first page once you sign into Paypal, and click on the "referrals" link. You will be given a referring URL similar to the one above, except the code number at the end will be different. Simply delete the current PayPal referral URL in Step 1 above, and replace it with your PayPal referral URL.

(F) Once you've edited your email message as outlined above, send out a minimum of 40 copies of this email. You can advertise it any way you want to But no spam.
Best of luck and remember to play fairly and honestly and this will really work

Yours Truly
Neo-Tycoon

55. Re: 10 watt limit for ducky?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 02:27:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <69aht0pek6p9ju5kaa476fadkm4uk3725a@4ax.com>
Source record: 84394

On Sun, 02 Jan 2005 19:55:06 -0500, Ken <cprstn54zz@att.net> wrote:

>Why are power limits specified so low for dual-band and tri-band HT
>rubber duck antennas?

Hi Ken,

I think you've got the cart before the horse. Rubber Duck antennas are usually associated with low power radios; not low power with Rubber Ducks. In other words, the limitation comes with the radio, not the antenna.

Now, on the other hand, performance invariably improves when you replace the Rubber Duck with a standard antenna (however that may be achieved). The reasons may be manifold, but I would figure issues of loss would be found in the soft tissues of the antenna mast (a hand/arm) or nearby obstructions (skull/torso).

Let's just flip the argument, and speculate how well a mike mounted Rubber Duck for a 100W rig would be accepted in the marketplace. Anyone worried that the Duck might melt has misplaced priorities. (Reminds me of last week's Simpsons where Homer discovers a walk-in Microwave Oven where he proceeds to cook his popcorn.)

Well, I suppose most of those fantasies above are restricted to single band antennas. The dual banders would undoubtedly contain components that were designed to feed or present a Hi-Z antenna, and would thus face a rather stiff voltage - hence the limits on power.

73's
Richard Clark, KB7QHC

56. Whazza stub?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 02:55:35 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <10thd1bf09p6e37@corp.supernews.com>
Source record: 84395

I got blank screens when I looked at the two posts about stubbs. I may have one, I have a W9INN multiband dipole and it has several "non traps" I can't find the liturature on the thing so don't know what he called the things, and W9INN is now a silent key.

Butch Magee KF5DE

57. Baluns for RX doublet

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 05:34:04 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <6olht09relddihopavb9h7j7dj83okdar9@4ax.com>
Source record: 84396

I am trying to get the best performance from my Ten Tec RX-320 when it is connected to my shack's QRP 40M extended double zepp (176 ft overall, fed with 300 ohm twinlead).

Performance on HF improved when I inserted an LDG 4:1 balun. I substituted a $3 TV balun (300/75) and the improvment remained.

However, I noticed that VLF/LF -- for which my radio has the AMRAD mod -- has gone more or less deaf. I can't even hear Loran on 100 kHz; without the balun it was 59. BCB -- already attenuated with an I.C.E. BCB filter but also 59 -- has also gotten worse.

Why would a balun made for high frequency impede low frequency (i.e. below 1.5 kHz)?

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

58. Re: Antenna impedance analyzer comparison

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 05:37:12 UTC
From: Rick Karlquist N6RK <richard@karlquist.removethis.com>
Message-ID: <cS4Cd.611717$wV.601406@attbi_s54>
Source record: 84397

The N2PK would be the best, except that it only runs when
connected to a laptop. I don't have a laptop, and if I did, I
wouldn't want to carry it out to the antennas, and furthermore,
laptop displays are usually not visible outdoors during daylight.
All the others don't work if you have nearby AM BCB stations
like I do.

Still looking for an antenna analyzer I can really use.

Rick N6RK

59. Re: 10 watt limit for ducky?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 06:11:05 UTC
From: Dave VanHorn <dvanhorn@dvanhorn.org>
Message-ID: <3vCdnX7np9BEfEXcRVn-iw@comcast.com>
Source record: 84398

Some of it has to do with the rather wildly variable impedance that an HT antenna will present, but in general, HT's aren't high power devices, pretty much by definition.

60. PLL02a question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 06:35:40 UTC
From: George Kinzer <horseflygk@worldnet.att.net>
Message-ID: <0J5Cd.1214250$Gx4.1047703@bgtnsc04-news.ops.worldnet.att.net>
Source record: 84399

anyone know a simple 10khz jump feature mod for this PLL?
I have a brand new older model Midland CB 40 channel that I would
like to do this to..I know all the other "band" mods, but do not wish to do
them.
A buddy 35 miles away has a birthday on the 20th of January.
I offered him a AM/SSB radio, but he does not like the SSB mode. He is going
blind and
a simple switch to go from 27.185mhz to a very quiet 27.195 will be a
tremendous
blessing. I have done tons of searches and came up with only one that was
worth trying.

http://www.geocities.com/y40002000/plowboy2.html

if someone here has tried this and it WORKS , let me know BEFORE I open this
baby up.
Email me at horseflygk@att.net

I don't post here often, when I do I am generally giving away info for you
guys. My goal before I get old is to get my Ham ticket, which will take all
of month of studying or less If I cram. Been in electronics long
time....my HR2510 takes me in the 10-11 meter bands from 26.000mhz to
29.000mhz AM, FM, CW, USB, LSB..
.
I am "W-F-L-Y" World-Wide Horsefly, 118, North Alabama

73's and Happy New Year to all, and to all a good night.

61. Re: Baluns for RX doublet

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 07:07:06 UTC
From: Howard <mensch90249@yahoo.com>
Message-ID: <9oqht0pe57cjr6ctqjibragqr5t3nmgja3@4ax.com>
Source record: 84400

On Mon, 03 Jan 2005 00:34:04 -0500, Ken <cprstn54zz@att.net> wrote:

>I am trying to get the best performance from my Ten Tec RX-320 when it
>is connected to my shack's QRP 40M extended double zepp (176 ft
>overall, fed with 300 ohm twinlead).
>
>Performance on HF improved when I inserted an LDG 4:1 balun. I
>substituted a $3 TV balun (300/75) and the improvment remained.
>
>However, I noticed that VLF/LF -- for which my radio has the AMRAD mod
>-- has gone more or less deaf. I can't even hear Loran on 100 kHz;
>without the balun it was 59. BCB -- already attenuated with an I.C.E.
>BCB filter but also 59 -- has also gotten worse.
>
>Why would a balun made for high frequency impede low frequency (i.e.
>below 1.5 kHz)?
>
>Ken KC2JDY
>
>Ken
>(to reply via email
>remove "zz" from address)
Ken,
When I was reading articles on home-rolled baluns the "TV balun" was
referenced a few times in regard to use on HF. From what I recall,
they started to poop out around 10 MHz and got worse as the frequency
lowered which would explain why you're okay on HF but worse on
MW/LF/VLF. From what I recall it has to do with the fact that those
"TV baluns" just don't have a sufficient number of windings to "prime
the electron pump" at lower frequencies. I've taken a couple apart to
use the torroid for a 9:1 transformer and the winding ratio on each
was 2:1. Are you okay on the lower frequencies with the LDG balun?
If so then at least it's narrowed down to one component.
Perhaps it's time to bust open the balun, remove the torroid and roll
your own. Use #26 or smaller enamel wire (magnet wire) and a 20:10
winding ratio for your 4:1 balun and you may find your problem on the
lower frequencies goes away ..... or at least isn't as bad.

Hope that helps,
Howard

62. Re: PLL02a question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 08:41:23 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <41D90533.1010901@optusnet.com.au>
Source record: 84401

Wellll..

Legalities aside and being strictly technical...

The PLL02A is a binary programmable divider device and from memory a logical change of the least significant bit is 10kHz.

I don't remember the pin numbers off hand but if you probe around with a multimeter you will find that pin that changes state every 10kHz. Make sure you pick a range where the channels really do change 10kHz at a time (eg 16 through 19).

With some logical thinking and the knowledge that either side of 27.195 the state will either be high or low, you will find that setting the selector to 185 or 205 and changing that pins state will change to 195. You will be able to do the same thing for the other "gaps" at ch3-4, 7-8, 11-12, & 15-16.

So how do you change the state? I cant remember whether the chip has pull-ups or pulldowns and which way the channel selector goes. I guess you should break the connection and insert a switch with centre to the chip. Once side you should reconnect to the original wiring and the other to a pullup or down as needed.

I don't suggest you go pulling a crystal off frequency as outlined on the URL you posted. You should note by the way that the mod above will give a 10kHz change on roughly half the channels. The rest wont change at all.

My reply address is bogus. If you wish to reply substitute bcnuup for bcnntp

Try http://www.cbsite.nl/modif/onderdelen/pll02a.htm - It took me 30 seconds to find.

Cheers Bob VK2YQA

George Kinzer wrote:
> anyone know a simple 10khz jump feature mod for this PLL?
> I have a brand new older model Midland CB 40 channel that I would
> like to do this to..I know all the other "band" mods, but do not wish to do
> them.
> A buddy 35 miles away has a birthday on the 20th of January.
> I offered him a AM/SSB radio, but he does not like the SSB mode. He is going
> blind and
> a simple switch to go from 27.185mhz to a very quiet 27.195 will be a
> tremendous
> blessing. I have done tons of searches and came up with only one that was

> worth trying.
>
> http://www.geocities.com/y40002000/plowboy2.html
>
> if someone here has tried this and it WORKS , let me know BEFORE I open this
> baby up.
> Email me at horseflygk@att.net
>
> I don't post here often, when I do I am generally giving away info for you
> guys. My goal before I get old is to get my Ham ticket, which will take all
> of month of studying or less If I cram. Been in electronics long
> time....my HR2510 takes me in the 10-11 meter bands from 26.000mhz to
> 29.000mhz AM, FM, CW, USB, LSB..
> .
> I am "W-F-L-Y" World-Wide Horsefly, 118, North Alabama
>
> 73's and Happy New Year to all, and to all a good night.
>
>
>
>

63. Re: What is a 'stub'

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 09:36:04 UTC
From: harrogate2 <harrogate2@ntlworld.com>
Message-ID: <8m8Cd.38$Uq2.25@newsfe3-win.ntli.net>
Source record: 84402

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:1104694302.185425.36480@c13g2000cwb.googlegroups.com...
> A stub is an open-circuited or short-circuited section of
transmission
> line. It can be a series stub or a parallel stub. It can be
inductive,
> capacitive, or resonant depending upon length. At a single
frequency, a
> stub can replace an inductor or capacitor and/or cause a change in
> impedance, i.e. a change in the voltage to current ratio. (Not to be
> confused with software stubs.)
> --
> 73, Cecil http://www.qsl.net/w5dxp
>

In their most common form stubs are multiples of a quarter wavelength
and, at least at VHF and higher, consist of a piece of coax cable.

A stub that is an odd multiple of a quarter wavelength will exhibit at
its connection end the opposite of the other end of the cable, i.e. if
the remote end of the cable is open circuit then the connection end
will exhibit a short circuit. This can be useful in making a parallel
connected notch to tune out an interfering signal, such as paging or
whatever, and can be found empirically by snipping little bits off the
cable until it has most - or at least enough - effect.

By the same token if the remote end is short circuit then the
connection end will be seen as open circuit. This is often used
professionally in aerial combiner systems where the tuned feed
resonator - usually something like a metal beer barrel in
construction - has a short on its output pickup coil which, when
connected onto the cable that interconnects the barrels, looks like an
open circuit. Thus each barrel 'sees' none of the others on the system
just the aerial.

A piece of coax that is an even multiple of a quarter wavelength
reflects the same at the connection point as at the remote end. In the
example above of a combiner, the interconnect between the barrel
connection points is a half wavelength.

Hope that helps.

--
Woody

harrogate2 at ntlworld dot com

64. balun at resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 11:37:25 UTC
From: ml <m@di.net>
Message-ID: <m-7A1C85.06372003012005@news.verizon.net>
Source record: 84403

hi

i've build a 80 center fed dipole, cut for 80, to use multiband-- fed via coax.

my goal is to use a balun.

my recomendations so far have been for 1:1 /4:1 and 9:1, got nearly a equal tally of votes on each

leaves me a bit confused however

lets say i use a 9:1 for example

on 80 my dipole is resonant, therefore should be around 72ohms. lets presume it is

now w/a 9:1 attached what happens? is this my trade off, ie i become very ineff at resonance while gaining some better match at the non resonant points?

thanks

m

65. Plane of folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 12:22:29 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <3vdit0l7abdt7t89flne3l59rbj3b395h7@4ax.com>
Source record: 84404

I will be attaching a 33' folded dipole for RX (made from 300 ohm twinlead) to the underside of my wood deck. It will be horizontal. Does it matter if the parallel conductors are in the horizontal or vertical plane?

If I just staple the twinlead to the joists (most convenient and invisible), the conductors will be in the horizontal plane.

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

66. Re: stub's instead of traps

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 12:38:12 UTC
From: David J Windisch <davidw@copper.net>
Message-ID: <41d93d04_1@newsfeed.slurp.net>
Source record: 84405

Hi, Bob:

I'm good, really too good ;o) at mis-writing, dag nab it, and I forgot that 15M wasn't a ham band when Lattin was working on the patent for this kluge. IIRC, the design was for 4, not 5, bands: 10-20-40-80M, with single wires at D. Accepting that, and re-writing just the C-stub function ...

SNIP
>>If the dimensions are added up, the overall physical length approaches
>>that
>>of an 80M dipole. "Loading-effect" of the "fat-wire" dipole could be
>>helped
>>along if needed on 80M by additional wire length past A.
>>
>>The A-stubs reduce the electrical lengths each side to overall
>>40M-dipole-size.
>>
>>Ditto B-stubs on 20M.
>>
******rewrite*** >>Ditto C-stubs on 10M. ******rewrite******
>>
>>Changing the D-lengths to single wires, or shorting both inner ends,
>>completes the 10M-dipole section.
SNIP

.. should do it.

Imagine adding 60-30-17-15-12M to this kluge.

Lattin's patent was 2535298.

73, Dave, N3HE

67. Re: 10 watt limit for ducky?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 13:09:59 UTC
From: Dave <noone@nowhere.com>
Message-ID: <FqudnWJbOKyx2UTcRVn-jQ@crocker.com>
Source record: 84406

try pumping a kw into a 6" ducky on 2m and see how long it takes to be a roast ducky... but it surely won't smell as good while cooking. oh, and since most ducky's are not very far from the people using them you may get a bit warm also.

"Ken" <cprstn54zz@att.net> wrote in message news:ai5ht09sfv39ilju0m5jh6c9f2hgi53dqi@4ax.com...
> Why are power limits specified so low for dual-band and tri-band HT
> rubber duck antennas? The conductors in the couple I saw surgerized
> looked like they could handle lots more.
>
> I am considering a mobile magnetic base that accepts SMA antennas,
> but am deterred by the low limits for the duckies I would want to use.
>
> The concept is that you transfer your ducky from the HT to the roof
> when you get into your car. No problem with just the HT but not so
> good with a QRP amp that outputs 30 watts.
>
> Ken KC2JDY
>
> Ken
> (to reply via email
> remove "zz" from address)

68. Re: stub´s instead of traps

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 14:16:12 UTC
From: "carkenord@juno.com" <carkenord@juno.com>
Message-ID: <1104761772.521775.149020@z14g2000cwz.googlegroups.com>
Source record: 84407

>>>I forgot that
>>>15M wasn't a ham band when Lattin was >>>working on the patent for
this kluge.
>>>IIRC, the design was for 4, not 5, bands

Lattin (W4JRW) mentions in his December 1960 QST article that any of
his "decoupling stub" antennas that include 40 meters will also work
on 15 meters.

A quote from the article:

"Any of the antennas which will operate on 40M can also be used on 15M
as the 40M stubs will be approx. 3/4 wavelength long and will provide
decoupling."

Lee Carkenord KA0FPJ

69. Re: dipole rfi/tvi reduction

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 14:31:58 UTC
From: richardharrison@webtv.net
Message-ID: <10221-41D9575E-7@storefull-3258.bay.webtv.net>
Source record: 84409

ML wrote:
"Was wondering if there was anything that could be done (antenna feedline wise) to reduce chances of giving off interference from amy type of wire antennas."

Almost all medium wave broadcast stations reduce harmonic radiation by allowing only magnetic coupling to their radio towers. Capacitive coupling favors harmonics. The tower feedline is interrupted by a cpupling transformer which has a Faraday screen between its primary and secondary. Capacitive coupling is grounded out on the scree, Magnetic coupling is unaffected. Multiples of the fundamental frequency don`t get any boost from lower capacitive reactance at higher frequencies.

Best regards, Richard Harrison, KB5WZI

70. Re: balun at resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 14:41:56 UTC
From: John Steffes <jsteffes@cfl.rr.com>
Message-ID: <UQcCd.212825$6w6.139802@tornado.tampabay.rr.com>
Source record: 84408

Too bad you couldn't use 300 ohm ladder line instead of coax. With the addition of a antenna tuner and ladder line, you could eliminate the use of the balun altogether and mathcing would not be a problem on any band (well almost).

John

KE0GG

ml wrote:
> hi
>
> i've build a 80 center fed dipole, cut for 80, to use multiband-- fed
> via coax.
>
> my goal is to use a balun.
>
> my recomendations so far have been for 1:1 /4:1 and 9:1, got nearly a
> equal tally of votes on each
>
>
>
> leaves me a bit confused however
>
> lets say i use a 9:1 for example
>
> on 80 my dipole is resonant, therefore should be around 72ohms. lets
> presume it is
>
> now w/a 9:1 attached what happens? is this my trade off, ie i become
> very ineff at resonance while gaining some better match at the non
> resonant points?
>
>
> thanks
>
> m

71. Re: What is a 'stub'

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 14:50:29 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <1104763829.381555.298820@z14g2000cwz.googlegroups.com>
Source record: 84410

harrogate2 wrote:
> A piece of coax that is an even multiple of a quarter wavelength
> reflects the same at the connection point as at the remote end.

```
+----------Z0--------Source
|
| 1/4WL stub
|
|
```

Given a constant Z0 above, there are no reflections at the connection point '+'. All the reflections occur at the open end of the stub. For an ideal lossless stub, the voltage to current ratio at the open-circuit reflection point is infinite. The voltage to current ratio at '+' is zero but there are no reflections occuring at '+'.

Think about it. If 100% reflection occured at the connection point, there would be no energy in the stub to be reflected at the open end. Yet measurements in the example above prove that the forward and reflected power inside the stub are identical to the forward and reflected power at the connection point.
--
73, Cecil http://www.qsl.net/w5dxp

72. Re: balun at resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 14:57:22 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <1104764242.057754.4230@z14g2000cwz.googlegroups.com>
Source record: 84412

ml wrote:
> i've build a 80 center fed dipole, cut for 80, to use multiband--
> fed via coax.

It is not a good idea to use a coax-fed 80m CFD on the other bands because of losses due to SWR in the coax. Your balun problems are the least of your worries. If you feed the 80m CFD with ladder-line, you could use it on the other bands without suffering massive SWR losses. For that configuration, all one needs is a 1:1 choke at the tuner. Take a look at http://www.qsl.net/w5dxp/notuner.htm for some ideas on your antenna.
--
73, Cecil, W5DXP

73. Re: balun at resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 14:57:33 UTC
From: W9DMK <w9dmk@crosslink.net>
Message-ID: <41d95cc2.1366625@news.crosslink.net>
Source record: 84411

On Mon, 03 Jan 2005 11:37:25 GMT, ml <m@di.net> wrote:

>hi
>
>i've build a 80 center fed dipole, cut for 80, to use multiband-- fed
>via coax.
>
>my goal is to use a balun.
>
>my recomendations so far have been for 1:1 /4:1 and 9:1, got nearly a
>equal tally of votes on each
>
>
>
>leaves me a bit confused however
>
>lets say i use a 9:1 for example
>
>on 80 my dipole is resonant, therefore should be around 72ohms. lets
>presume it is
>
>now w/a 9:1 attached what happens? is this my trade off, ie i become
>very ineff at resonance while gaining some better match at the non
>resonant points?

Permit me to ask a simple question. Aside from the transformation of
the impedance, what benefit were you planning to obtain from the
Balun? If you can't answer that question, then perhaps you don't
really need a Balun.

Another question, if you don't mind. Are you familiar with Choke
Baluns or the W2DU Balun?

Bob, W9DMK, Dahlgren, VA
http://www.qsl.net/w9dmk

74. Re: 10 watt limit for ducky?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 15:10:23 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <zfdCd.5727$wZ2.4358@newssvr13.news.prodigy.com>
Source record: 84413

Not to mention safty concerns- like those FCC rules for hams in the KW class- minimum safty standards - and those at 100 FEET, not in front of your face ! Also, those have rarely had great swr readings when measured. Most likely a combonation of these concerns-- Jim NN7K

Richard Clark wrote:

The reasons may be manifold, but I would figure issues of
> loss would be found in the soft tissues of the antenna mast (a
> hand/arm) or nearby obstructions (skull/torso).
>
The dual banders would undoubtedly contain components
> that were designed to feed or present a Hi-Z antenna, and would thus
> face a rather stiff voltage - hence the limits on power.
>
> 73's
> Richard Clark, KB7QHC

75. Loft Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 15:16:53 UTC
From: Simon Smith <s.Smith@btinternet.com>
Message-ID: <crbnl5ejj1@sparta.btinternet.com>
Source record: 84414

I have been refused permission for any kind of outdoor Antenna due to the area in which I live in the UK having "permitted development rights removed"
I think that this may be a conservation area. Having recently passed the foundation course I am getting impatient - and dissapointed to say the least.
I am now faced with only one or two alternatives - an Indoor or Loft Antenna. I realise that this may restrict me to 2m only but at least it will be better than nothing - or to operate mobile only.
Has anyone on the group got any suggestions ? I have a fair sized loft with approx. 2.5m headroom, which runs the whole width of the house -almost 30ft. - is there anything I use in the loft like a loop Antenna for instance ? Or a fixed Station Antenna ?

Thaks for your help
John
M3IIV

76. Re: PLL02a question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 15:34:05 UTC
From: Eskay <sieb_k@yahoo.ca>
Message-ID: <1g0wiengziijw.11uwj9wt07zia$.dlg@40tude.net>
Source record: 84415

On Mon, 03 Jan 2005 06:35:40 GMT, George Kinzer wrote:

> anyone know a simple 10khz jump feature mod for this PLL?
> I have a brand new older model Midland CB 40 channel that I would
> like to do this to..I know all the other "band" mods, but do not wish to do
> them.
> A buddy 35 miles away has a birthday on the 20th of January.
> I offered him a AM/SSB radio, but he does not like the SSB mode. He is going
> blind and
> a simple switch to go from 27.185mhz to a very quiet 27.195 will be a
> tremendous
> blessing. I have done tons of searches and came up with only one that was
> worth trying.
>
> http://www.geocities.com/y40002000/plowboy2.html
>
> if someone here has tried this and it WORKS , let me know BEFORE I open this
> baby up.
> Email me at horseflygk@att.net
>
> I don't post here often, when I do I am generally giving away info for you
> guys. My goal before I get old is to get my Ham ticket, which will take all
> of month of studying or less If I cram. Been in electronics long
> time....my HR2510 takes me in the 10-11 meter bands from 26.000mhz to
> 29.000mhz AM, FM, CW, USB, LSB..
> .
> I am "W-F-L-Y" World-Wide Horsefly, 118, North Alabama
>
> 73's and Happy New Year to all, and to all a good night.

Try the below mentioned website they may have what you need.
Many articles were written for 73 magazine on the conversion of Hy Gain
boards to 10 meters.. There was also an article in Ham Radio magazine on
conversion to 10 meter FM.
http://www.cbcintl.com/

73 and Happy 2005 de VE3JUA..

77. Re: Plane of folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 15:34:21 UTC
From: Dave VanHorn <dvanhorn@dvanhorn.org>
Message-ID: <UYWdndYyDLIE-ETcRVn-vQ@comcast.com>
Source record: 84416

>I will be attaching a 33' folded dipole for RX (made from 300 ohm
> twinlead) to the underside of my wood deck. It will be horizontal.
> Does it matter if the parallel conductors are in the horizontal or
> vertical plane?

Short answer: No

Think of it this way, what's the separation distance, relative to a
wavelength?
If it's less than 0.05 wavelength, then any difference is almost certainly
unobservable at any significant distance.

You won't be using metal staples though, right?

78. Re: balun at resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 15:36:31 UTC
From: Dave VanHorn <dvanhorn@dvanhorn.org>
Message-ID: <K5ednTilM8zG-0TcRVn-1Q@comcast.com>
Source record: 84417

> Permit me to ask a simple question. Aside from the transformation of
> the impedance, what benefit were you planning to obtain from the
> Balun? If you can't answer that question, then perhaps you don't
> really need a Balun.

One would think that converting from a balanced antenna to unbalanced
feedline would be a primary benefit offered by a balun.

79. Re: Loft Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 16:12:25 UTC
From: W9DMK <w9dmk@crosslink.net>
Message-ID: <41d96dc5.5721396@news.crosslink.net>
Source record: 84418

On Mon, 3 Jan 2005 15:16:53 +0000 (UTC), "Simon Smith"
<s.Smith@btinternet.com> wrote:

>I have been refused permission for any kind of outdoor Antenna due to the
>area in which I live in the UK having "permitted development rights
>removed"
>I think that this may be a conservation area. Having recently passed the
>foundation course I am getting impatient - and dissapointed to say the
>least.
>I am now faced with only one or two alternatives - an Indoor or Loft
>Antenna. I realise that this may restrict me to 2m only but at least it
>will be better than nothing - or to operate mobile only.
>Has anyone on the group got any suggestions ? I have a fair sized loft with
>approx. 2.5m headroom, which runs the whole width of the house -almost
>30ft. - is there anything I use in the loft like a loop Antenna for instance
>? Or a fixed Station Antenna ?
>
>Thaks for your help
>John
>M3IIV

Dear John,

It has been my experience that the inefficiency of loft antennas make
them nearly useless. However, you have to work with what you've got.
My suggestion would be to build the best 20 meter dipole antenna you
can build for the space available. Try to keep the ends of the antenna
as far away from anything that absorbs RF as possible - even wood and
brick do absorb RF. If necessary, use loading coils in the dipole to
get the dipole resonant (at 14.070 MHz). Think about PSK31 as an
operational mode because that gives you the best bang for the buck in
terms of being heard 'round the world and being able to hear others in
adverse conditions.

Bob, W9DMK, Dahlgren, VA
http://www.qsl.net/w9dmk

80. Re: balun at resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 16:14:35 UTC
From: W9DMK <w9dmk@crosslink.net>
Message-ID: <41d96f23.6071700@news.crosslink.net>
Source record: 84419

On Mon, 3 Jan 2005 10:36:31 -0500, "Dave VanHorn"
<dvanhorn@dvanhorn.org> wrote:

>> Permit me to ask a simple question. Aside from the transformation of
>> the impedance, what benefit were you planning to obtain from the
>> Balun? If you can't answer that question, then perhaps you don't
>> really need a Balun.
>
>One would think that converting from a balanced antenna to unbalanced
>feedline would be a primary benefit offered by a balun.

I'm perfectly aware of most of the reasons for using a balun. I'm
trying to uncover the motivation of the complainant.

Bob, W9DMK, Dahlgren, VA
http://www.qsl.net/w9dmk

81. Stainless steel elements.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 16:15:08 UTC
From: stryped@hotmail.com
Message-ID: <1104768908.329441.163180@c13g2000cwb.googlegroups.com>
Source record: 84420

Would there be a problem using stainless steel elements in a beam antenna? Can I solder the lead in to stainless?

82. I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 16:18:43 UTC
From: stryped@hotmail.com
Message-ID: <1104769123.243179.179300@c13g2000cwb.googlegroups.com>
Source record: 84421

I really like to build things. I can weld even small material with a mig welder I have at home. You mentioned building a j pole. I thought of doing this myself. To be honest, I have always wanted to make something, (not necessarily an antenna) that I could sell for a few extra dollars on ebay or something. I wonder if a person could make any money building antennas and doing that? I am not wanting to get rich but I like building things and I could use some "pocket money". We just had our second shild born yesterday. It is my first son!

I thought about making a j-pole out of stainless steel tubing. It seems this would be attractive because of it being rustproof and to me more "visably appealing" that a copper one after it become tarnished. But some people have told me there is more resistance in stainless than copper. SOmeone else told me it would not amount to much in ham use.

Thought about building yagis too.

The only problem would be figuring out how to ship an antenna where it would not cost much.

83. Element resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 16:46:30 UTC
From: stryped@hotmail.com
Message-ID: <1104770790.535973.15490@f14g2000cwb.googlegroups.com>
Source record: 84322

How can you determine the electrical resistance of element materials?
Do EMT tubing and stainless tubing have similar resistance?

84. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 17:45:18 UTC
From: richardharrison@webtv.net
Message-ID: <21381-41D984AE-198@storefull-3256.bay.webtv.net>
Source record: 84325

Strioed wrote:
"Someone told me it would not amount to much in ham use."

It`s how long te elements need to be that determines the loss stainless steel adds to an antenna. For VHF, stainless is fine. For HF, you may be creating a combination antenna and dummy load by using stainless in place of aluminum or copper.

You can imitate what is usual commerciall practice for an amateur antenna at similar frequencies. There are gold-plated antennas, but this isn`t usual practice. It is extreme and certainly so for VHF. Some of the best antennas used at VHF have long been stainless steel. The big problem is stainless steel hardware which galls and binds. There is bound to be an anti-sieze preparation to mitigate this bind.

Best regards, Richard Harrison, KB5WZI

85. Re: PLL02a question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 17:47:51 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnctj1a7.sgb.bit-bucket@shell.config.com>
Source record: 84323

On Mon, 03 Jan 2005 06:35:40 GMT, George Kinzer wrote:
> anyone know a simple 10khz jump feature mod for this PLL?
> I have a brand new older model Midland CB 40 channel that I would
> like to do this to..I know all the other "band" mods, but do not wish to do
> them.
> A buddy 35 miles away has a birthday on the 20th of January.
> I offered him a AM/SSB radio, but he does not like the SSB mode. He is going
> blind and
> a simple switch to go from 27.185mhz to a very quiet 27.195 will be a
> tremendous
> blessing.

If all he wants is AM, and the ability to select 1 of 2 - possibly 3
CB channels, buy an old 23-ch xtal-based rig at a second-hand store
(Goodwill, ARC, Salvation Army, etc.) $10 - tops. Then, open the rig
and devise new mechanical stops on the rotary (channel) switch.

I did that for my Dad (the first W3DHJ) about 10 years ago. He was
in a nursing home and had lost his eyesight to the drugs he was taking
for COPD. .....anyways: I set up an old ICOM IC-22A for him to let
him use his local, favorite repeater and the 146.52 simplex freq.

The IC-22A is (was) basically built using the then-popular 23CH CB
'form factor'. What I did was "brute-force" solder some new stops on the
switch frame to only allow the thing to be switched between 2 selections
-- those two selections were then populated with the crystal pairs
for the repeater and the simplex freq. (Of course, in your case, you'd
select a pair [or triplet] of ajoining CB channels.)

That - plus a mag-mount antenna on the steel cover over the heat
radiator under the window - got my dad back On The Air.

HTH es HNY
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

86. Re: Loft Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 18:00:30 UTC
From: geir knutsen <ge-knuts@online.no>
Message-ID: <zKfCd.2692$Sl3.74329@news4.e.nsc.no>
Source record: 84324

There is a few possibilities except putting an antenna in the loft. I`ve read an article on the www amount tuning the rain gutter as an antenna. An other option is to just put up your antenna while transmitting. The antenna can be a telescopic 16' fishing rod with the antenna wire taped in the bottom of each joint. An adoption of this link http://pages.zdnet.com/radio_k7zb/id8.html

Make an STL and run it on NVIS by putting it horizontal abt 2' above the ground. http://www.qsl.net/aa5tb/loop.html

If you have a garden get a flagpole of glass fiber and run a wire inside the pole with an auto tuner by the base and fed by an underground coax (the other option is to feed it by a duplet coax and tuner inside).

If you goggle a bit on the net for "stelth antenna" you will probably find something suitable for your needs.

Regards

Geir

"Simon Smith" <s.Smith@btinternet.com> wrote in message news:crbnl5ejj1@sparta.btinternet.com...
>I have been refused permission for any kind of outdoor Antenna due to the
>area in which I live in the UK having "permitted development rights
>removed"
> I think that this may be a conservation area. Having recently passed the
> foundation course I am getting impatient - and dissapointed to say the
> least.
> I am now faced with only one or two alternatives - an Indoor or Loft
> Antenna. I realise that this may restrict me to 2m only but at least it
> will be better than nothing - or to operate mobile only.
> Has anyone on the group got any suggestions ? I have a fair sized loft
> with approx. 2.5m headroom, which runs the whole width of the
> house -almost 30ft. - is there anything I use in the loft like a loop
> Antenna for instance ? Or a fixed Station Antenna ?
>
> Thaks for your help
> John
> M3IIV
>

87. Re: Loft Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 18:02:22 UTC
From: geir knutsen <ge-knuts@online.no>
Message-ID: <iMfCd.2693$SI3.74590@news4.e.nsc.no>
Source record: 84326

I forgot this one
http://users.erols.com/k3mt/graswire/graswire.htm

"Simon Smith" <s.Smith@btinternet.com> wrote in message
news:crbnl5ejj1@sparta.btinternet.com...
>I have been refused permission for any kind of outdoor Antenna due to the
>area in which I live in the UK having "permitted development rights
>removed"
> I think that this may be a conservation area. Having recently passed the
> foundation course I am getting impatient - and dissapointed to say the
> least.
> I am now faced with only one or two alternatives - an Indoor or Loft
> Antenna. I realise that this may restrict me to 2m only but at least it
> will be better than nothing - or to operate mobile only.
> Has anyone on the group got any suggestions ? I have a fair sized loft
> with approx. 2.5m headroom, which runs the whole width of the
> house -almost 30ft. - is there anything I use in the loft like a loop
> Antenna for instance ? Or a fixed Station Antenna ?
>
> Thaks for your help
> John
> M3IIV
>

88. money!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 18:07:23 UTC
From: deck.bound@mac.com
Message-ID: <1104775643.933900.273140@z14g2000cwz.googlegroups.com>
Source record: 84327

Subject:
Postal Lottery: Turn $6 into $60,000 in 90 days, GUARANTEED

Postal Lottery: Turn $6 into $60,000 in 90 days, GUARANTEED

I found this in a news group and decided to try it. A little while back, I was browsing through newsgroups, just like you are now and came across a message just like this that said you could make thousands of dollars within weeks with only an initial investment of $6.00!!!

So I thought yeah right, this must be a scam!!! But like most of us, I was curious, so I kept reading. Anyway, it said that you send $1.00 to each of the 6 names and addresses stated in the message. You then place your own name and address at the bottom of the list at #6 and post the message in at least 200 news groups. (There are thousands to choose from). No catch, that was it.

So after thinking it over, and talking to a few people first. I thought about trying it. I figured, what have I got to lose except 6 stamps and $6.00, right? So I invested the measly $6.00!!! Guess what? Within 7 days I started getting money in the mail!!! I was shocked!!! I figured it would end soon, but the money just kept coming in!!! In my first week, I had made about $25.00. By the end of the second week, I had made a total of over $1,000.00!!! In the third week, I had over $10,000.00 and it is still growing!!! This is now my fourth week and I have made a total of just over $42,000.00 and it is still coming in rapidly!!! It's certainly worth $6.00 and 6 stamps!!! I have spent more than that on the lottery!!!

Let me tell you how this works and most importantly, why it works!!!

Also, make sure you print a copy of this message now. So you can get the information off of it as you need it. I promise you that if you follow the directions exactly, that you will start making more money than you thought possible by doing something so easy!!!

Suggestion: Read this entire message carefully!!! (Print it out or download it.) Follow the simple directions and watch the money come in!!! It's easy!!! It's legal!!! Your investment is only $6.00 (plus postage).

IMPORTANT: This is not a rip-off!!! It is not illegal!!! ? It is almost entirely risk free and it really works!!! If all of the following instructions are adhered to, you will receive extraordinary dividends!!!

Please note: Follow these directions EXACTLY, and $60,000.00 or more can be yours in 20 to 90 days!!! This program remains successful because of the honesty and the integrity of the participants!!! Please continue its success by carefully adhering to the instructions.

You will now become part of the mail order business. In this business your product is not solid or tangible, it is a service. You are in the business of developing mailing lists. Many large corporations are happy to pay big bucks for quality lists. However, the money made from a mailing list is secondary to the income which is made from people like you and me asking to be included on your mailing list!!!

Here are the 4 easy steps to success:-

Step 1:- Get 6 separate pieces of paper and write the following on each piece of paper.

PLEASE PUT ME ON YOUR MAILING LIST

Now get 6 U.S. dollar bills and place ONE inside each of the 6 pieces of paper so the bills will not be seen through the envelopes (to prevent mail theft). Next, place one paper in each of the 6 envelopes and seal them, you should now have 6 sealed envelopes. Each with a piece of paper stating the above phrase, your name and address, and a $1.00 bill.

THIS IS ABSOLUTELY LEGAL!!! YOU ARE REQUESTING A LEGITIMATE SERVICE AND YOU ARE PAYING FOR IT!!!

Like most of us, I was a little skeptical and a little worried about the legal aspect of it all. So I checked it out with the U.S. Postal Service and they confirmed that it is indeed legal!!!

Mail the 6 envelopes to the following addresses:-

#1)Eric Stilley
1715 Possum Trail
Harker Heights, TX 76548

#2)Pierre Jenkins
7816 Regent Drive
Arlington, TX 76001

#3)P. Miller
41 Kenview Ave.
Kenmore, New York 14217

#4)Trish Smollett
35 Madison St
Fort Erie, Ontario L2A 3Z7

#5) Jack Genua
P.O. Box 1420
Crystal Beach, Ontario L0S 1B0

#6) Elizabeth Cooper
1003 S Fremont
Springfield Missouri 65804

Step 2:- Now take the #1 name off the list that you see above, move the other names up (6 becomes 5, 5 becomes 4, etc.) and add your name as number 6 on the list.

Step 3:- Change anything you need to, but try to keep this message as close to what you see as possible. Now, post your amended message to at least 200 news groups. I think there are close to 24,000 groups!!! All you need is 200, but remember, the more you post, the more money you make!!! This is perfectly legal!! If you have any doubts, refer to Title18 Sec. 1302 & 1341 of the postal lottery laws. Keep a copy of these steps for yourself and whenever you need money, you can use it again.

Please remember that this program remains successful because of the honesty and the integrity of the participants and by their carefully adhering to the directions!!!

Look at it this way. If you are of integrity, the program will continue and the money that so many others have received will come your way!!!

Note: - You may want to retain every name and address sent to you, either on your computer or hard copy and keep the notes people send you. This verifies that you are truly providing a service. Also, it might be a good Idea to wrap the $1 bills in dark paper to reduce the risk of mail theft.

So, as each post is downloaded and the directions carefully followed, six members will be reimbursed for their participation as a list developer with one dollar each. Your name will move up the list geometrically so that when your name reaches the #1 position, you will be receiving thousands of dollars in cash!!! What an opportunity for only $6.00!!! ($1.00 for each of the first six people listed above).

Send it now, add your own name to the list and your in business!!!

DIRECTIONS FOR HOW TO POST TO A NEWS GROUP!!!

Step 1:- You do not need to re-type this entire message to do your own posting. Simply put your cursor at the beginning of this message and drag your cursor to the bottom of this message and select copy from the edit menu. This will copy the entire message into the computer memory.

Step 2:- Open a blank note pad file and place your cursor at the top of the blank page. From the edit menu select paste. This will paste a copy of the message into notepad so that you can add your name to the list.

Step 3:- Save your new notepad file as a txt file. If you want to do your posting in a different setting, you'll always have this file to

go back to.

Step 4:- Use Netscape or Internet Explorer and try searching for various news groups (on-line forums, message boards, chat sites, discussions, etc.)

Step 5:- Visit these message boards and post this message as a new message by highlighting the text of this message from your notepad and selecting paste from the edit menu. Fill in the subject, this will be the header that everybody sees as they scroll through the list of postings in a particular group. Click the post message button. You've done your first one! Congratulations!!! All you have to do is jump to different news groups and post away, after you get the hang of it, it will take about 30 seconds for each news group!

REMEMBER, THE MORE NEWS GROUPS YOU POST IN, THE MORE MONEY YOU WILL MAKE!!! (But you have to post a minimum of 200).

That's it!!! You will begin receiving money from around the world within days!!! You may eventually want to rent a P.O. Box due to the large amount of mail you will receive. If you wish to stay anonymous, you can invent a name to use, as long as the postman will deliver it.

JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT!!!

Now the why part. Out of 200 postings, say you receive only 5 replies (a very low example). So then you made $5.00 with your name at #6 on the letter. Now, each of the 5 persons who sent you $1.00 make the minimum 200 postings, each with your name at #5 and only 5 persons respond to each of the original 5, that is another $25.00 for you. Now those 25 each make 200 MINIMUM posts with your name at #4 and only 5 replies each, you will bring in an additional $125.00!!! Now, those 125 persons turn around and post the minimum 200 with your name at #3 and only receive 5 replies each, you will make an additional $625.00!!! OK, now here is the fun part, each of those 625 persons post a minimum 200 messages with your name at #2 and they each only receive 5 replies, that
just made you $3,125.00!!! Those 3,125 persons will all deliver this message to 200 news groups. If just 5 more reply you will receive $15,625.00!!! All with an original investment of only $6.00!!! Amazing isn't it!!!! When your name is no longer on the list, you just take the latest posting in the news groups and send out another $6.00 to the names on the list, putting your name at number 6 again.

You must realize that thousands of people all over the world are joining the internet and reading these messages every day!!! Just like you are now!!! So, can you afford $6.00 and see if it really works? I'm glad I did!!! People have said, "what if the plan is played out and no one sends you the money?" So what!!! What are the chances of that happening, when there are tons of new honest users and new honest people who are joining the internet and news groups everyday and are willing to give it a try? Estimates are at 20,000 to 50,000 new users,

every day!!!

REMEMBER PLAY HONESTLY AND FAIRLY AND THIS WILL REALLY WORK!!!

-- Comments/Feedback (please post your feedback/experiences here) --

Not bad for 1 hr's work..made me around $5320 in roughly 35 days
Anthony M - TX

Hello, I rcvd 269 bucks in the post in 2 weeks.
Dan Miami - FL

I had to wait around 10 days before I had any results - $13,450 as of 3rd Jan 2003 to date (14th Feb 2003).Am gonna re-post it again for more money!!
Del from Alberta - Canada

Only received around £588 in the post the last 2 months since I started the program but I'd posted to approx. 100 newsgroups.
James P - Manchester, UK

Cool..didn't expect much out of this "scam" initially but I have pay my credit card bill
Mustafa - Jordan

For $6,I made $246 in 2 weeks
ROMEO2326 - Little Rock, AR -US of A

Hey, just droppin a line to say that after posting to well over 820 newsgroups on google and my ISP newsgroup server over a period of 4 1/2 months ,Ive raked in $54280 . Mucho dinero baby!!!! Peace..
Drew Dallas - TX

89. Re: Loft Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 18:08:22 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <79WdnRuaVJCNF0TcRVn-jg@comcast.com>
Source record: 84328

"Simon Smith" <s.Smith@btinternet.com> wrote in message
news:crbnl5ejj1@sparta.btinternet.com...
>I have been refused permission for any kind of outdoor Antenna due to the
>area in which I live in the UK having "permitted development rights
>removed"
> I think that this may be a conservation area. Having recently passed the
> foundation course I am getting impatient - and dissapointed to say the
> least.
> I am now faced with only one or two alternatives - an Indoor or Loft
> Antenna. I realise that this may restrict me to 2m only but at least it
> will be better than nothing - or to operate mobile only.
> Has anyone on the group got any suggestions ? I have a fair sized loft
> with approx. 2.5m headroom, which runs the whole width of the
> house -almost 30ft. - is there anything I use in the loft like a loop
> Antenna for instance ? Or a fixed Station Antenna ?
>
> Thaks for your help
> John
> M3IIV
>
John,
If you string a wire antenna outside, can they do anything to you other than
have you take it down? Some people in your position have gotten away with
it. You could also put a 20 m vertical inside a plastic pipe, and call it a
flagpole; radials might get a little touchy.

Tam/WB2TT

90. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 18:12:23 UTC
From: geir knutsen <ge-knuts@online.no>
Message-ID: <HVfCd.2695$SI3.74604@news4.e.nsc.no>
Source record: 84329

I would suggest that you get someone to calculate the antenna with NEC or similar to get the right lengths and resistive loss. Then build an prototype for 2m and 70cm and put it on eBay to check if there is any interest for the antenna. To reduce the size it might be an idea to think about using Parker tube fittings in some of the joints.

73
Geir

<stryped@hotmail.com> wrote in message
news:1104769123.243179.179300@c13g2000cwb.googlegroups.com...
>I really like to build things. I can weld even small material with a
> mig welder I have at home. You mentioned building a j pole. I thought
> of doing this myself. To be honest, I have always wanted to make
> something, (not necessarily an antenna) that I could sell for a few
> extra dollars on ebay or something. I wonder if a person could make any
> money building antennas and doing that? I am not wanting to get rich
> but I like building things and I could use some "pocket money". We just
> had our second shild born yesterday. It is my first son!
>
> I thought about making a j-pole out of stainless steel tubing. It seems
> this would be attractive because of it being rustproof and to me more
> "visably appealing" that a copper one after it become tarnished. But
> some people have told me there is more resistance in stainless than
> copper. SOmeone else told me it would not amount to much in ham use.
>
> Thought about building yagis too.
>
> The only problem would be figuring out how to ship an antenna where it
> would not cost much.
>

91. Re: Element resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 18:14:37 UTC
From: Dave <noone@nowhere.com>
Message-ID: <HOSdnR4-dcwPFkTcRVn-1w@crocker.com>
Source record: 84330

<stryped@hotmail.com> wrote in message
news:1104770790.535973.15490@f14g2000cwb.googlegroups.com...
> How can you determine the electrical resistance of element materials?
> Do EMT tubing and stainless tubing have similar resistance?
>

with an ohm meter??

yes, they are similar... or at least more similar than emt and carbon
tubing, or emt and fiberglass tubing are.

92. has any body use the ez hang for wire ant?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 18:14:51 UTC
From: dx440@webtv.net
Message-ID: <15457-41D98B9B-70@storefull-3274.bay.webtv.net>
Source record: 84332

i think i am going to try to make my own ez hang .cause 99.$ is to much
for a sling shot and a cheap reel . 73s from 11 meter dx land

93. Re: Baluns for RX doublet

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 18:14:52 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <gP6dnSXW1pMLFkTcRVn-sg@comcast.com>
Source record: 84331

"Ken" <cprstn54zz@att.net> wrote in message
news:6olht09relddihopavb9h7j7dj83okdar9@4ax.com...
>I am trying to get the best performance from my Ten Tec RX-320 when it
> is connected to my shack's QRP 40M extended double zepp (176 ft
> overall, fed with 300 ohm twinlead).
>
> Performance on HF improved when I inserted an LDG 4:1 balun. I
> substituted a $3 TV balun (300/75) and the improvment remained.
>
> However, I noticed that VLF/LF -- for which my radio has the AMRAD mod
> -- has gone more or less deaf. I can't even hear Loran on 100 kHz;
> without the balun it was 59. BCB -- already attenuated with an I.C.E.
> BCB filter but also 59 -- has also gotten worse.
>
> Why would a balun made for high frequency impede low frequency (i.e.
> below 1.5 kHz)?
>
> Ken KC2JDY
>
> Ken
> (to reply via email
> remove "zz" from address)

Ken,
I swept a pair of 300:75 Ohm TV baluns back/back on an HP network analyzer
once. As I recall, they were useless below about 7 MHz.

Tam/WB2TT

94. Re: Plane of folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 19:06:38 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <k35jt0t8vsfa7rigp57levd3tkr2k7r5jk@4ax.com>
Source record: 84333

On Mon, 3 Jan 2005 10:34:21 -0500, "Dave VanHorn"
<dvanhorn@dvanhorn.org> wrote:
>You won't be using metal staples though, right?

Uhhhhhh. Was gonna.

ARRL tech dep't once told me that I could use metal staples on 1000
watt, 450 ohm ladderline. Figured this was the same thing. How much
coupling can a skinny, short staple every 32" inject on a 33 ft RX
antenna?

What are my options, other than staples or those old twinlead
standoffs?

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

95. Re: balun at resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 19:22:59 UTC
From: John Steffes <jsteffes@cfl.rr.com>
Message-ID: <nYgCd.212853$6w6.3695@tornado.tampabay.rr.com>
Source record: 84334

Very clever design, Robert! Your system should provide gain at the
higher operationg frquencies as a bonus.

John

KE0GG

W9DMK (Robert Lay) wrote:
> On Mon, 3 Jan 2005 10:36:31 -0500, "Dave VanHorn"
> <dvanhorn@dvanhorn.org> wrote:
>
>
>>>Permit me to ask a simple question. Aside from the transformation of
>>>the impedance, what benefit were you planning to obtain from the
>>>Balun? If you can't answer that question, then perhaps you don't
>>>really need a Balun.
>>
>>One would think that converting from a balanced antenna to unbalanced
>>feedline would be a primary benefit offered by a balun.
>
>
> I'm perfectly aware of most of the reasons for using a balun. I'm
> trying to uncover the motivation of the complainant.
>
>
> Bob, W9DMK, Dahlgren, VA
> http://www.qsl.net/w9dmk

96. Re: Antenna impedance analyzer comparison

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 20:31:17 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10tjarkjq5vm01c@corp.supernews.com>
Source record: 84335

Dear Rick, N6RK:

If you believe that none of the "other" analyzers will work at your site
because of the presence of strong signals from below 1700 kHz, then you
could do one of the following:

1. You could build a high-pass filter to go between analyzer and antenna
to attenuate the MF signals. I have heard of people doing this successfully
such that the filter is essentially transparent at HF.

2. You could add one or more band stop resonators that can be tuned to
number 1 and really cut down the one or two most strong broadcast signals.

3. You could search for a used or new bridge type of instrument. They
tend to be insensitive to off-frequency signals.

4. Many types of antennas will deliver little of a signal that is far
away in frequency. An inverted L is expected to deliver a lot of signal
from nearby MF stations. A balanced LPDA with a shorting strap at its far
end is expected to pick up little from vertically polarized MF stations.

Let the group know what type of antennas you wish to analyze.

73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Rick Karlquist N6RK" <richard@karlquist.removethis.com> wrote in message
news:cS4Cd.611717$wV.601406@attbi_s54...
> The N2PK would be the best, except that it only runs when
> connected to a laptop. I don't have a laptop, and if I did, I
> wouldn't want to carry it out to the antennas, and furthermore,
> laptop displays are usually not visible outdoors during daylight.
> All the others don't work if you have nearby AM BCB stations
> like I do.
>
> Still looking for an antenna analyzer I can really use.
>
> Rick N6RK
>
>

97. Re: balun at resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 20:41:02 UTC
From: John Steffes <jsteffes@cfl.rr.com>
Message-ID: <y5iCd.175946$8G4.62318@tornado.tampabay.rr.com>
Source record: 84336

Sorry, I meant this reply to Cecil, W5DXP.

John

John Steffes wrote:
> Very clever design, Robert! Your system should provide gain at the
> higher operationg frquencies as a bonus.
>
> John
>
> KE0GG
>
> W9DMK (Robert Lay) wrote:
>
>> On Mon, 3 Jan 2005 10:36:31 -0500, "Dave VanHorn"
>> <dvanhorn@dvanhorn.org> wrote:
>>
>>
>>>> Permit me to ask a simple question. Aside from the transformation of
>>>> the impedance, what benefit were you planning to obtain from the
>>>> Balun? If you can't answer that question, then perhaps you don't
>>>> really need a Balun.
>>>
>>>
>>> One would think that converting from a balanced antenna to unbalanced
>>> feedline would be a primary benefit offered by a balun.
>>
>>
>>
>> I'm perfectly aware of most of the reasons for using a balun. I'm
>> trying to uncover the motivation of the complainant.
>>
>>
>> Bob, W9DMK, Dahlgren, VA
>> http://www.qsl.net/w9dmk
>
>

98. Re: My radio always fights with my toaster !!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 20:54:22 UTC
From: redrum <ninguna>
Message-ID: <41d9a46b$2_2@nova.entelchile.net>
Source record: 84273

```
10 dollars to the toaster!
```

"Bruno Beam" <zendo_joystick_ankh_hero@yahoo.com.br> escribi&#65533; en el mensaje
news:9f63c9ae.0412182005.523bf8a1@posting.google.com...
> The two can't stand each other!
>
> What can I do?

99. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 21:04:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10tjcqq2e7vg626@corp.supernews.com>
Source record: 84339

Stainless steel causes significant loss only if the antenna is long and small in diameter, such as an HF antenna (particularly one for the lower frequency bands) made from stainless steel wire, or if the antenna is electrically very small, such as a small tuned HF loop.

Your antenna isn't in either of those categories, so the stainless won't cause any appreciable loss.

Roy Lewallen, W7EL

stryped@hotmail.com wrote:
> I really like to build things. I can weld even small material with a
> mig welder I have at home. You mentioned building a j pole. I thought
> of doing this myself. To be honest, I have always wanted to make
> something, (not necessarily an antenna) that I could sell for a few
> extra dollars on ebay or something. I wonder if a person could make any
> money building antennas and doing that? I am not wanting to get rich
> but I like building things and I could use some "pocket money". We just
> had our second shild born yesterday. It is my first son!
>
> I thought about making a j-pole out of stainless steel tubing. It seems
> this would be attractive because of it being rustproof and to me more
> "visably appealing" that a copper one after it become tarnished. But
> some people have told me there is more resistance in stainless than
> copper. SOmeone else told me it would not amount to much in ham use.
>
> Thought about building yagis too.
>
> The only problem would be figuring out how to ship an antenna where it
> would not cost much.
>

100. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 21:08:10 UTC
From: stryped@hotmail.com
Message-ID: <1104786490.005159.269070@f14g2000cwb.googlegroups.com>
Source record: 84338

geir knutsen wrote:
> I would suggest that you get someone to calculate the antenna with
NEC or
> similar to get the right lengths and resistive loss. Then build an
prototype
> for 2m and 70cm and put it on eBay to check if there is any interest
for the
> antenna. To reduce the size it might be an idea to think about using
Parker
> tube fittings in some of the joints.
>
> 73
> Geir

I really appreciate the advice! What is "NEC"? I assume it is an
antenna performance computer program?

Are you saying build a dual band prototype of one for each band?

What are "Parker tube fittings"?

>
>
>
> <stryped@hotmail.com> wrote in message
> news:1104769123.243179.179300@c13g2000cwb.googlegroups.com...
> >I really like to build things. I can weld even small material with a
> > mig welder I have at home. You mentioned building a j pole. I
thought
> > of doing this myself. To be honest, I have always wanted to make
> > something, (not necessarily an antenna) that I could sell for a few
> > extra dollars on ebay or something. I wonder if a person could make
any
> > money building antennas and doing that? I am not wanting to get
rich
> > but I like building things and I could use some "pocket money". We
just
> > had our second shild born yesterday. It is my first son!
> >
> > I thought about making a j-pole out of stainless steel tubing. It
seems
> > this would be attractive because of it being rustproof and to me
more
> > "visably appealing" that a copper one after it become tarnished.
But

> > some people have told me there is more resistance in stainless than
> > copper. SOmeone else told me it would not amount to much in ham
use.
> >
> > Thought about building yagis too.
> >
> > The only problem would be figuring out how to ship an antenna where
it
> > would not cost much.
> >

101. Re: Element resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 21:09:32 UTC
From: stryped@hotmail.com
Message-ID: <1104786572.922155.176260@z14g2000cwz.googlegroups.com>
Source record: 84337

I tried with an ohm meter but all it would display is "1" on everything
or nothing at all.

102. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 21:13:40 UTC
From: stryped@hotmail.com
Message-ID: <1104786820.837218.294010@f14g2000cwb.googlegroups.com>
Source record: 84340

Isnt it a copywrite problem if you copy someone else's antenna design?

103. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 21:17:32 UTC
From: stryped@hotmail.com
Message-ID: <1104787052.859506.213330@z14g2000cwz.googlegroups.com>
Source record: 84341

Do they have these fititngs in stainless?

104. Re: Loft Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 21:36:45 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <crcdtd$bs9$1@titan.btinternet.com>
Source record: 84342

John,

The most power-efficient antenna which will fit into a loft is the so-called magnetic loop.

A loop, 2 or 2.5-metres square, or a circular or broad rectangular loop of the same perimeter, made with 25mm plumbers' copper pipe will work reasonably well at frequencies as low as the 160m band.

The greater the area enclosed by the loop and the greater the conductor diameter, the greater the efficiency.

A remotely-controlled, slow-motion, vacuum tuning capacitor (1000pF for 160m) can be expensive. But capacitors rapidly get progressively much smaller on the 80 and 40m bands, etc. A range of three bands, eg., 80, 40 and 20m, can be covered with one capacitor.

Very high efficiency, comparable with a 1/2-wave dipole can be acheived at the higher frequencies within a much smaller space.

Whether you make one or purchase one, or just amuse yourself with figures you can compare performance versus dimensions by downloading program MAGLOOP4 from website below. Download in a few seconds and run immediately.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

105. money!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 21:49:49 UTC
From: deck.bound@mac.com
Message-ID: <1104788989.229062.114150@c13g2000cwb.googlegroups.com>
Source record: 84343

Subject:
Postal Lottery: Turn $6 into $60,000 in 90 days, GUARANTEED

Postal Lottery: Turn $6 into $60,000 in 90 days, GUARANTEED

I found this in a news group and decided to try it. A little while back, I was browsing through newsgroups, just like you are now and came across a message just like this that said you could make thousands of dollars within weeks with only an initial investment of $6.00!!!

So I thought yeah right, this must be a scam!!! But like most of us, I was curious, so I kept reading. Anyway, it said that you send $1.00 to each of the 6 names and addresses stated in the message. You then place your own name and address at the bottom of the list at #6 and post the message in at least 200 news groups. (There are thousands to choose from). No catch, that was it.

So after thinking it over, and talking to a few people first. I thought about trying it. I figured, what have I got to lose except 6 stamps and $6.00, right? So I invested the measly $6.00!!! Guess what? Within 7 days I started getting money in the mail!!! I was shocked!!! I figured it would end soon, but the money just kept coming in!!! In my first week, I had made about $25.00. By the end of the second week, I had made a total of over $1,000.00!!! In the third week, I had over $10,000.00 and it is still growing!!! This is now my fourth week and I have made a total of just over $42,000.00 and it is still coming in rapidly!!! It's certainly worth $6.00 and 6 stamps!!! I have spent more than that on the lottery!!!

Let me tell you how this works and most importantly, why it works!!!

Also, make sure you print a copy of this message now. So you can get the information off of it as you need it. I promise you that if you follow the directions exactly, that you will start making more money than you thought possible by doing something so easy!!!

Suggestion: Read this entire message carefully!!! (Print it out or download it.) Follow the simple directions and watch the money come in!!! It's easy!!! It's legal!!! Your investment is only $6.00 (plus postage).

IMPORTANT: This is not a rip-off!!! It is not illegal!!! ? It is almost entirely risk free and it really works!!! If all of the following instructions are adhered to, you will receive extraordinary dividends!!!

Please note: Follow these directions EXACTLY, and $60,000.00 or more can be yours in 20 to 90 days!!! This program remains successful because of the honesty and the integrity of the participants!!! Please continue its success by carefully adhering to the instructions.

You will now become part of the mail order business. In this business your product is not solid or tangible, it is a service. You are in the business of developing mailing lists. Many large corporations are happy to pay big bucks for quality lists. However, the money made from a mailing list is secondary to the income which is made from people like you and me asking to be included on your mailing list!!!

Here are the 4 easy steps to success:-

Step 1:- Get 6 separate pieces of paper and write the following on each piece of paper.

PLEASE PUT ME ON YOUR MAILING LIST

Now get 6 U.S. dollar bills and place ONE inside each of the 6 pieces of paper so the bills will not be seen through the envelopes (to prevent mail theft). Next, place one paper in each of the 6 envelopes and seal them, you should now have 6 sealed envelopes. Each with a piece of paper stating the above phrase, your name and address, and a $1.00 bill.

THIS IS ABSOLUTELY LEGAL!!! YOU ARE REQUESTING A LEGITIMATE SERVICE AND YOU ARE PAYING FOR IT!!!

Like most of us, I was a little skeptical and a little worried about the legal aspect of it all. So I checked it out with the U.S. Postal Service and they confirmed that it is indeed legal!!!

Mail the 6 envelopes to the following addresses:-

#1)Eric Stilley
1715 Possum Trail
Harker Heights, TX 76548

#2)Pierre Jenkins
7816 Regent Drive
Arlington, TX 76001

#3)P. Miller
41 Kenview Ave.
Kenmore, New York 14217

#4)Trish Smollett
35 Madison St
Fort Erie, Ontario L2A 3Z7

#5) Jack Genua
P.O. Box 1420
Crystal Beach, Ontario L0S 1B0

#6) Elizabeth Cooper
1003 S Fremont
Springfield Missouri 65804

Step 2:- Now take the #1 name off the list that you see above, move the other names up (6 becomes 5, 5 becomes 4, etc.) and add your name as number 6 on the list.

Step 3:- Change anything you need to, but try to keep this message as close to what you see as possible. Now, post your amended message to at least 200 news groups. I think there are close to 24,000 groups!!! All you need is 200, but remember, the more you post, the more money you make!!! This is perfectly legal!! If you have any doubts, refer to Title18 Sec. 1302 & 1341 of the postal lottery laws. Keep a copy of these steps for yourself and whenever you need money, you can use it again.

Please remember that this program remains successful because of the honesty and the integrity of the participants and by their carefully adhering to the directions!!!

Look at it this way. If you are of integrity, the program will continue and the money that so many others have received will come your way!!!

Note: - You may want to retain every name and address sent to you, either on your computer or hard copy and keep the notes people send you. This verifies that you are truly providing a service. Also, it might be a good Idea to wrap the $1 bills in dark paper to reduce the risk of mail theft.

So, as each post is downloaded and the directions carefully followed, six members will be reimbursed for their participation as a list developer with one dollar each. Your name will move up the list geometrically so that when your name reaches the #1 position, you will be receiving thousands of dollars in cash!!! What an opportunity for only $6.00!!! ($1.00 for each of the first six people listed above).

Send it now, add your own name to the list and your in business!!!

DIRECTIONS FOR HOW TO POST TO A NEWS GROUP!!!

Step 1:- You do not need to re-type this entire message to do your own posting. Simply put your cursor at the beginning of this message and drag your cursor to the bottom of this message and select copy from the edit menu. This will copy the entire message into the computer memory.

Step 2:- Open a blank note pad file and place your cursor at the top of the blank page. From the edit menu select paste. This will paste a copy of the message into notepad so that you can add your name to the list.

Step 3:- Save your new notepad file as a txt file. If you want to do your posting in a different setting, you'll always have this file to

go back to.

Step 4:- Use Netscape or Internet Explorer and try searching for various news groups (on-line forums, message boards, chat sites, discussions, etc.)

Step 5:- Visit these message boards and post this message as a new message by highlighting the text of this message from your notepad and selecting paste from the edit menu. Fill in the subject, this will be the header that everybody sees as they scroll through the list of postings in a particular group. Click the post message button. You've done your first one! Congratulations!!! All you have to do is jump to different news groups and post away, after you get the hang of it, it will take about 30 seconds for each news group!

REMEMBER, THE MORE NEWS GROUPS YOU POST IN, THE MORE MONEY YOU WILL MAKE!!! (But you have to post a minimum of 200).

That's it!!! You will begin receiving money from around the world within days!!! You may eventually want to rent a P.O. Box due to the large amount of mail you will receive. If you wish to stay anonymous, you can invent a name to use, as long as the postman will deliver it.

JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT!!!

Now the why part. Out of 200 postings, say you receive only 5 replies (a very low example). So then you made $5.00 with your name at #6 on the letter. Now, each of the 5 persons who sent you $1.00 make the minimum 200 postings, each with your name at #5 and only 5 persons respond to each of the original 5, that is another $25.00 for you. Now those 25 each make 200 MINIMUM posts with your name at #4 and only 5 replies each, you will bring in an additional $125.00!!! Now, those 125 persons turn around and post the minimum 200 with your name at #3 and only receive 5 replies each, you will make an additional $625.00!!! OK, now here is the fun part, each of those 625 persons post a minimum 200 messages with your name at #2 and they each only receive 5 replies, that
just made you $3,125.00!!! Those 3,125 persons will all deliver this message to 200 news groups. If just 5 more reply you will receive $15,625.00!!! All with an original investment of only $6.00!!! Amazing isn't it!!!! When your name is no longer on the list, you just take the latest posting in the news groups and send out another $6.00 to the names on the list, putting your name at number 6 again.

You must realize that thousands of people all over the world are joining the internet and reading these messages every day!!! Just like you are now!!! So, can you afford $6.00 and see if it really works? I'm glad I did!!! People have said, "what if the plan is played out and no one sends you the money?" So what!!! What are the chances of that happening, when there are tons of new honest users and new honest people who are joining the internet and news groups everyday and are willing to give it a try? Estimates are at 20,000 to 50,000 new users,

every day!!!

REMEMBER PLAY HONESTLY AND FAIRLY AND THIS WILL REALLY WORK!!!

-- Comments/Feedback (please post your feedback/experiences here) --

Not bad for 1 hr's work..made me around $5320 in roughly 35 days
Anthony M - TX

Hello, I rcvd 269 bucks in the post in 2 weeks.
Dan Miami - FL

I had to wait around 10 days before I had any results - $13,450 as of 3rd Jan 2003 to date (14th Feb 2003).Am gonna re-post it again for more money!!
Del from Alberta - Canada

Only received around £588 in the post the last 2 months since I started the program but I'd posted to approx. 100 newsgroups.
James P - Manchester, UK

Cool..didn't expect much out of this "scam" initially but I have pay my credit card bill
Mustafa - Jordan

For $6,I made $246 in 2 weeks
ROMEO2326 - Little Rock, AR -US of A

Hey, just droppin a line to say that after posting to well over 820 newsgroups on google and my ISP newsgroup server over a period of 4 1/2 months ,Ive raked in $54280 . Mucho dinero baby!!!! Peace..
Drew Dallas - TX

106. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 21:57:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9mfjt01aotq0vrvh262q6g2gfsi27cschj@4ax.com>
Source record: 84344

On 3 Jan 2005 13:13:40 -0800, stryped@hotmail.com wrote:

>Isnt it a copywrite problem if you copy someone else's antenna design?

Hi OM,

We used to have a PhD here who would have claimed so (after having claimed the Earth, Sea, and the Sky in patents "pending"). As a girl friend of mine described "he had all of his sense educated out of him."

Copyright covers claims to authorship and trade of the author's product - which in this case the only tangible evidence is generally found on paper in written or drawn form or in other means of recording.

Patent covers claims to invention and trade of the inventor's product - which in this case would be that antenna.

In either case, the law provides the author or inventor a means to pursue his loss of profit if these works are duplicated without license or permission. With few exceptions, Common Law would suggest that the practice of duplication by an individual for their own use (and not to produce for sale or distribution) is allowed. Copyright and Patent are then issues of the marketplace, not the home.

Patents expire in time. Copyright expires after the author does (and only many years after that). Both then enter into the Public Domain.

As far as legal advice goes, caveat reader. As I pointed out above, the law provides a means, the courts, not a guarantee. Further, it should come as no surprise that even lacking this, you can always be taken to court - even if you don't get out of bed for fear of being sued.

73's
Richard Clark, KB7QHC

107. Re: Antenna impedance analyzer comparison

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 21:57:53 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <BdjCd.70486$k25.61399@attbi_s53>
Source record: 84345

"Rick Karlquist N6RK" <richard@karlquist.removethis.com> wrote in message
news:cS4Cd.611717$wV.601406@attbi_s54...
> The N2PK would be the best, except that it only runs when
> connected to a laptop. I don't have a laptop, and if I did, I
> wouldn't want to carry it out to the antennas, and furthermore,
> laptop displays are usually not visible outdoors during daylight.
> All the others don't work if you have nearby AM BCB stations
> like I do.
>
> Still looking for an antenna analyzer I can really use.
>
> Rick N6RK

Rick, you don't HAVE to use a laptop, or carry it to the antenna or worry about being able to see the LCD. Simply take your N2PK, couple it to the feedline in the shack, (and your desktop computer) do the OSL calibration out at the antenna end of the feedline and measure the antenna from the comfort of your operating position. You've just calibrated out the feedline. You can REALLY use the VNA.

Regards

W4ZCB
>
>

108. Re: Element resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 22:06:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <oofjt0t8crj55u2c9ohkusuv9fdvld97q3@4ax.com>
Source record: 84346

On 3 Jan 2005 13:09:32 -0800, stryped@hotmail.com wrote:

>I tried with an ohm meter but all it would display is "1" on everything
>or nothing at all.

Hi OM,

For all intents and practical purposes, your Ohmmeter is barely a continuity tester and wholly useless in forecasting RF resistance if the material is unknown.

There are very few retail Ohmmeters that are very accurate below 10 Ohms and clearly inadequate below 1 Ohm. The proper instrument would use what are called "Kelvin clips," which are simply the leads to a Kelvin Bridge. This is a four terminal measurement and it makes heavy demands on a current source and requires a good shunt to insure decent resolution and accuracy.

Unless you are building a small loop and need to confirm contact and joint resistance, you will probably never need one. Wire tables provide enough information that is accurate.

73's
Richard Clark, KB7QHC

109. Re: 10 watt limit for ducky?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-03 22:41:35 UTC
From: garigue <garigue@comcast.net>
Message-ID: <jSjCd.19888$wu4.13273@attbi_s52>
Source record: 84347

"Jim - NN7K" <nn7kexk7zfg@NOSPAMsbcglobal.net> wrote in message
news:zfdCd.5727$wZ2.4358@newssvr13.news.prodigy.com...
> Not to mention safty concerns- like those FCC rules for hams in the KW
> class- minimum safty standards - and those at 100 FEET, not in front of
> your face ! Also, those have rarely had great swr readings when
> measured. Most likely a combonation of these concerns-- Jim NN7K

Years ago there was a very interesting letter from a real old timer who put a telephone element across the output of his transmitter .. He was having a voice QSO with another ham for the first time.. He does not remember what happened but woke up on the floor. The RF had caused some intercranial changes and this fellow was fortunate enough to make it alive. I remember years ago giving SW diathermy transcranial for Alzheimer's with capacity plates at either ear. I would not want to do that again but it was standard practice. It is really amazing what tissue heating feels like with those RF fields ..... adds a new meaning to the phrase ..."a warm feeling within".

73 Tom Popovic KI3R Belle Vernon Pa

110. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 00:31:47 UTC
From: geir knutsen <ge-knuts@online.no>
Message-ID: <mtlCd.2768$SI3.75468@news4.e.nsc.no>
Source record: 84348

Yes NEC is a antenna calculation program.
Try the Parker website and you will find the fittings I'm thinking about (
there is a similar type called swage lock)

Here is an example of an dual band j-pole
http://www.durm-online.de/jpole.htm
I have seen several variations of this design, but can't find any of the
links.

Geir

<stryped@hotmail.com> wrote in message
news:1104786490.005159.269070@f14g2000cwb.googlegroups.com...
>
> geir knutsen wrote:
>> I would suggest that you get someone to calculate the antenna with
> NEC or
>> similar to get the right lengths and resistive loss. Then build an
> prototype
>> for 2m and 70cm and put it on eBay to check if there is any interest
> for the
>> antenna. To reduce the size it might be an idea to think about using
> Parker
>> tube fittings in some of the joints.
>>
>> 73
>> Geir
>
> I really appreciate the advice! What is "NEC"? I assume it is an
> antenna performance computer program?
>
> Are you saying build a dual band prototype of one for each band?
>
> What are "Parker tube fittings"?
>
>>
>>
>>
>> <stryped@hotmail.com> wrote in message
>> news:1104769123.243179.179300@c13g2000cwb.googlegroups.com...
>> >I really like to build things. I can weld even small material with a
>> > mig welder I have at home. You mentioned building a j pole. I
> thought
>> > of doing this myself. To be honest, I have always wanted to make
>> > something, (not necessarily an antenna) that I could sell for a few

>> > extra dollars on ebay or something. I wonder if a person could make
> any
>> > money building antennas and doing that? I am not wanting to get
> rich
>> > but I like building things and I could use some "pocket money". We
> just
>> > had our second shild born yesterday. It is my first son!
>> >
>> > I thought about making a j-pole out of stainless steel tubing. It
> seems
>> > this would be attractive because of it being rustproof and to me
> more
>> > "visably appealing" that a copper one after it become tarnished.
> But
>> > some people have told me there is more resistance in stainless than
>> > copper. SOmeone else told me it would not amount to much in ham
> use.
>> >
>> > Thought about building yagis too.
>> >
>> > The only problem would be figuring out how to ship an antenna where
> it
>> > would not cost much.
>> >
>

111. Re: Loft Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 00:36:39 UTC
From: Dave Holford <MyLastname@DELETE_THISsympatico.ca>
Message-ID: <qylCd.5100$7n1.346580@news20.bellglobal.com>
Source record: 84351

Simon Smith wrote:
> I have been refused permission for any kind of outdoor Antenna due to the
> area in which I live in the UK having "permitted development rights
> removed"
> I think that this may be a conservation area. Having recently passed the
> foundation course I am getting impatient - and dissapointed to say the
> least.
> I am now faced with only one or two alternatives - an Indoor or Loft
> Antenna. I realise that this may restrict me to 2m only but at least it
> will be better than nothing - or to operate mobile only.
> Has anyone on the group got any suggestions ? I have a fair sized loft with
> approx. 2.5m headroom, which runs the whole width of the house -almost
> 30ft. - is there anything I use in the loft like a loop Antenna for instance
> ? Or a fixed Station Antenna ?
>
> Thaks for your help
> John
> M3IIV
>
>
I have run into this situation twice.

Once I installed a multiband - parallel wire - dipole for 10, 15, 20 and
40m and had reasonably good results.

The other place I installed a "Slinky dipole" which worked quite well on
10, 15, 20 and 40; but was marginal on 80m. Also had the disadvantage
that I had to go up to change bands.

Friends facing the same situation have used wire loop around the outside
of the house, and a hinged vertical which lay behind a fence and only
came up after dark.

Good luck
Dave

112. Re: Stainless steel elements.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 00:38:11 UTC
From: news <w3jxp@adelphia.net>
Message-ID: <h9KdnarqiPfzeETcRVn-vg@adelphia.com>
Source record: 84349

<stryped@hotmail.com> wrote in message
news:1104768908.329441.163180@c13g2000cwb.googlegroups.com...
> Would there be a problem using stainless steel elements in a beam
> antenna? Can I solder the lead in to stainless?

Hi:
There are some problems with using stainless steel for elements in a beam.
1) Stainless Steel has much higher loss than aluminum. Remember because of skin effect the RF current flows only in the outer few thousand of an inch of the metal. The depth of conduction gets less as the frequency goes higher so 2m antenna made of stainless would have higher loss than a 6m and 440 antenna would have even more.
2) Stainless Steel is heavy. It means that the antenna would need to be heavily constructed just to hold up it's own weight.
3) Stainless Steel can be soldered to but not easily. So can aluminum be soldered but soldering is not the best way to make connections to antennas even ones made out of copper as the solder doesn't hold up well in the weather.
Of course there are some antennas that are made of stainless steel because they need the corrosion resistance or the strength and flexibility of stainless steel. Mobile whips come to mind for one case, the other would be an antenna that is used in a corrosive environment like on a buoy at sea.
Of course if you need a antenna made out of a strong light weight corrosion resistant metal, I know of one that's made from titanium. It's as strong as steel, almost as light as aluminum and is a good conductor but it's very costly compared to aluminum.

--
John Passaneau, W3JXP
State College, PA
w3jxp@adelphia.net
>

113. Re: Loft Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 00:50:58 UTC
From: Ron <rmrippy@hotmail.com>
Message-ID: <SLICd.14717$z92.496417@twister.southeast.rr.com>
Source record: 84350

Hi John,

I had a similar problem and initially tried a Buddipole dipole in the
attic. It worked but not too well and also flooded the house with RFI.
I then switched to a screwdriver antenna hidden in a rubbermaid shed
and it works fine. See: http://www.qrz.com/w4tqt

Ron, W4TQT

Simon Smith wrote:
> I have been refused permission for any kind of outdoor Antenna due to the
> area in which I live in the UK having "permitted development rights
> removed"
> I think that this may be a conservation area. Having recently passed the
> foundation course I am getting impatient - and dissapointed to say the
> least.
> I am now faced with only one or two alternatives - an Indoor or Loft
> Antenna. I realise that this may restrict me to 2m only but at least it
> will be better than nothing - or to operate mobile only.
> Has anyone on the group got any suggestions ? I have a fair sized loft with
> approx. 2.5m headroom, which runs the whole width of the house -almost
> 30ft. - is there anything I use in the loft like a loop Antenna for instance
> ? Or a fixed Station Antenna ?
>
> Thaks for your help
> John
> M3IIV
>
>

114. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 01:28:00 UTC
From: dplatt@radagast.org
Message-ID: <10tjs90is4muk1d@corp.supernews.com>
Source record: 84352

>Patent covers claims to invention and trade of the inventor's product
>- which in this case would be that antenna.

Right. And, the invention claimed must be novel (new), useful, and non-obvious to a skilled practitioner of the art. In theory, it has to actually work (otherwise it isn't "useful") but in most cases the Patent Office seems to have stopped requiring any sort of actual evidence on this point.

Antenna designs which were originally published decades ago (and that seems to be most of them) cannot now be patented. Neither, in principle, can slight or trivial or obvious variations on older antennas.

>In either case, the law provides the author or inventor a means to
>pursue his loss of profit if these works are duplicated without
>license or permission. With few exceptions, Common Law would suggest
>that the practice of duplication by an individual for their own use
>(and not to produce for sale or distribution) is allowed.

My understanding is that this is true to some extent for copyright (the "fair use" principle). I've been told that it is _not_ true for patented inventions. You're allowed to re-create the patented invention yourself in order to study it, or to figure out a different way of achieving the same goal (that is, a similar device which doesn't actually infringe on the patent). However, re-creating the patented invention for actual personal use is not allowed.

In practice, of course, this usually goes undetected and nobody gives a hoot. Some patentholders have a practice of offering anyone who asks a license to manufacture one (or a few) of the devices, for their own use, with no royalty fee... but patentholders are _not_ required to do so, or to license the patent to anyone at all.

Some years ago, the Bose corporation earned itself some bad blood in the audiophile community, by sending a stern letter to Speaker Builder magazine stating that a homebrew speaker-building article published therein used a design which Bose felt infringed on one of their patents (a "birdhouse" multi-chamber resonator design, I believe). They accused Speaker Builder of "contributory infringement" of the patent (i.e. encouraging others to infringe). This action was viewed by many of the magazine's readers as an example of a big, monied corporation bullying individuals.

>As far as legal advice goes, caveat reader. As I pointed out above,
>the law provides a means, the courts, not a guarantee. Further, it

>should come as no surprise that even lacking this, you can always be
>taken to court - even if you don't get out of bed for fear of being
>sued.

A very good point!

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

115. Stub revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 02:18:19 UTC
From: bbnn <jl@fnn.gfd>
Message-ID: <crcuaa02tdd@enews2.newsguy.com>
Source record: 84353

What is an example of using a stub on a ham antenna, its real purpose and how it does it?

Like a R5 or beam.

116. Re: Stainless steel elements.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 02:42:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10tk0kha7uv9r5d@corp.supernews.com>
Source record: 84354

news wrote:
>
> Hi:
> There are some problems with using stainless steel for elements in a beam.
> 1) Stainless Steel has much higher loss than aluminum. Remember because of
> skin effect the RF current flows only in the outer few thousand of an inch
> of the metal. The depth of conduction gets less as the frequency goes higher
> so 2m antenna made of stainless would have higher loss than a 6m and 440
> antenna would have even more. . . .

If you do the actual calculations, you'll find that even the greater loss of stainless is insignificant for typical VHF and higher frequency antennas, even when made with wire of moderate diameter. When made with tubing, loss is even less.

And, it's not necessarily true that antenna loss increases with frequency. The skin depth decreases only as the square root of frequency, while for a given antenna length in wavelengths, the element length is inversely proportional to frequency. For example, if you increase the frequency by a factor of two, the skin depth decreases by a factor of about 1.4 while the length shortens by a factor of 2. The net result is *lower* total resistance as the frequency increases -- a factor of about 0.71 each time you double the frequency. (This is assuming that you maintain the same absolute conductor diameter and keep the length constant in terms of wavelength.) That's why stainless steel isn't a problem for higher frequency antennas.

Roy Lewallen, W7EL

117. Re: Loft Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 02:49:09 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <FunCd.6440$5R.1180@newssvr21.news.prodigy.com>
Source record: 84355

John- must second Reg- for an antenna for 20-10 meters. AEA used to make
such an antenna (cant remember the name, but think now made by MFJ. As
to higher freqs (dont laugh too hard) a friend, in K.Falls, OREGON
lived in an apartment with a loft - placed a rotator up in it, with a
combination 3 element 2 meter quad, nested inside a 2 element 6 meter
quad. One caviat, tho, make sure that if it is insulated (the loft),
that no alumiuium foil is on it for a vapor barrier! (makes a great
faraday shield!) Such an antenna is indeed worthy, as he worked ZL/VK,
as well as the east coast during f2, as well as multihop openings on
Eskip! one other thing to consider is , if you have ground fault
outlets, they are suceptable to RF tripping them, as many have found
out! As info-- Jim NN7K

Reg Edwards wrote:
> John,
>
> The most power-efficient antenna which will fit into a loft is the so-called
> magnetic loop.
>
> A loop, 2 or 2.5-metres square, or a circular or broad rectangular loop of
> the same perimeter, made with 25mm plumbers' copper pipe will work
> reasonably well at frequencies as low as the 160m band.
>
> The greater the area enclosed by the loop and the greater the conductor
> diameter, the greater the efficiency.
>
> A remotely-controlled, slow-motion, vacuum tuning capacitor (1000pF for
> 160m) can be expensive. But capacitors rapidly get progressively much
> smaller on the 80 and 40m bands, etc. A range of three bands, eg., 80, 40
> and 20m, can be covered with one capacitor.
>
> Very high efficiency, comparable with a 1/2-wave dipole can be acheived at
> the higher frequencies within a much smaller space.
>
> Whether you make one or purchase one, or just amuse yourself with figures
> you can compare performance versus dimensions by downloading program
> MAGLOOP4 from website below. Download in a few seconds and run immediately.
> ----
> ....
> Regards from Reg, G4FGQ
> For Free Radio Design Software go to
> http://www.btinternet.com/~g4fgq.regp
> ....
>

>

118. tow9dmk/Re: balun at resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 03:01:36 UTC
From: ml <m@di.net>
Message-ID: <m-CE9990.22013103012005@news.verizon.net>
Source record: 84356

thank you for responding,

well, chaning the impedance, you mentioned i thought would be important,
as also i'd like to not have my 'shield' flowing w/rf

i've been told it might help reduce 'interference' not sure

however i fail to see how my ability or inablity to explain something
equates to 'needing' a particular part or not, hence why i want to
learn if i knew, all the ''angles' and aspects i wouldn't post

i am still missing the info i seek

In article <41d95cc2.1366625@news.crosslink.net>,
W9DMK<w9dmk@crosslink.net> (Robert Lay) wrote:

> On Mon, 03 Jan 2005 11:37:25 GMT, ml <m@di.net> wrote:
>
> >hi
> >
> >i've build a 80 center fed dipole, cut for 80, to use multiband-- fed
> >via coax.
> >
> >my goal is to use a balun.
> >
> >my recomendations so far have been for 1:1 /4:1 and 9:1, got nearly a
> >equal tally of votes on each
> >
> >
> >
> >leaves me a bit confused however
> >
> >lets say i use a 9:1 for example
> >
> >on 80 my dipole is resonant, therefore should be around 72ohms. lets
> >presume it is
> >
> >now w/a 9:1 attached what happens? is this my trade off, ie i become
> >very ineff at resonance while gaining some better match at the non
> >resonant points?
>
> Permit me to ask a simple question. Aside from the transformation of
> the impedance, what benefit were you planning to obtain from the
> Balun? If you can't answer that question, then perhaps you don't
> really need a Balun.
>

> Another question, if you don't mind. Are you familiar with Choke
> Baluns or the W2DU Balun?
>
> Bob, W9DMK, Dahlgren, VA
> http://www.qsl.net/w9dmk

119. FA: Antenna Engineering Handbook McGraw Hill 2nd edition (c) 1984 and more...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 03:15:04 UTC
From: Dave <stuff4sale@njcdr.com>
Message-ID: <41da09a2$0$99207$45beb828@newscene.com>
Source record: 84357

3 hours left on the Antenna Engineering Handbook!

Not sure if it proper to post this here - but I think most will find it
useful. I am auctioning off several technical books including the Antenna
Engineering handbook mentioned above. Here is the link for it:
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=378&item=4515301247&rd=1

Also:
Sams RF Circuit Design by Chris Bowick
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=378&item=4515708652&rd=1

And a lot of other data manuals and such.... Just click on view sellers
other items.

Thanks for looking!
Dave, KF2DH

120. Re: Stub revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 04:52:11 UTC
From: W9DMK <w9dmk@crosslink.net>
Message-ID: <41da1ee6.51066489@news.crosslink.net>
Source record: 84358

On Mon, 03 Jan 2005 18:18:19 -0800, bbnn <jl@fnn.gfd> wrote:

>What is an example of using a stub on a ham antenna, its real purpose
>and how it does it?
>
>Like a R5 or beam.

If you have access to the catalogs, antenna specs or even the advertisements from HyGain, you can see stubs all over their verticals.

As to its real purpose. It is often, but not exclusively a means of imposing the equivalent of an open circuit in a part of the antenna, so as to make the antenna seem shorter at that frequency.

In other applications a stub is just a way of inserting a capacitance or an inductance into the feedline. The inductance or capacitance obtained in this way is generally cheaper and less vulnerable to the elements than using a discrete component.

As to how it does it - it is the nature of a section of transmission line (stub) to transform any non-matching impedance at one end into a different impedance seen looking into the other end. In the particular case of a stub the terminating impedance is usually a short or an open, thus reflecting a pure reactance to the other end. If you want more detail than that, then it's time to start looking into an understanding of the transmission line equations.

Bob, W9DMK, Dahlgren, VA
http://www.qsl.net/w9dmk

121. Re: Antenna Engineering Handbook McGraw Hill 2nd edition (c) 1984 and more...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 05:01:53 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10tk8p0nr4vod84@corp.supernews.com>
Source record: 84359

Just a comment about my attitude. I want nothing to do with Ebay.

Offering items of special interest to the antenna group might be OK.
But using Ebay puts them out of reach of those who also wish nothing to do
with Ebay.

If anyone has a copy of LaPort's book, I am interested.

73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net

"Dave" <stuff4sale@njcdr.com> wrote in message
news:41da09a2$0$99207$45beb828@newscene.com...
> 3 hours left on the Antenna Engineering Handbook!
>
> Not sure if it proper to post this here - but I think most will find it
> useful. I am auctioning off several technical books including the Antenna
> Engineering handbook mentioned above. Here is the link for it:
>
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=378&item=4515301247&r
d=1
>
> Also:
> Sams RF Circuit Design by Chris Bowick
>
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=378&item=4515708652&r
d=1
>
>
> And a lot of other data manuals and such.... Just click on view sellers
> other items.
>
> Thanks for looking!
> Dave, KF2DH
>
>
>

122. Re: tow9dmk/Re: balun at resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 05:03:01 UTC
From: W9DMK <w9dmk@crosslink.net>
Message-ID: <41da2166.51705778@news.crosslink.net>
Source record: 84360

On Tue, 04 Jan 2005 03:01:36 GMT, ml <m@di.net> wrote:

>
>
>thank you for responding,
>
>well, chaning the impedance, you mentioned i thought would be important,
>as also i'd like to not have my 'shield' flowing w/rf

That is exactly why I asked. Since you do not want RF on the outer shield, then instead of a transformer type balun, you may find that the choke balun or W2DU balun will better serve your needs. It is designed specifically to reduce the flow of RF on the outer shield.
>
>i've been told it might help reduce 'interference' not sure

Correct!

>however i fail to see how my ability or inablity to explain something
>equates to 'needing' a particular part or not, hence why i want to
>learn if i knew, all the ''angles' and aspects i wouldn't post
>
> i am still missing the info i seek

You were apparently disturbed by my question. However, it has been my experience that it is very important to find out what is the real problem, because it is only when you know the real problem you can hope to find the best answer.

For example, someone asks for a recommendation for a good hammer, and he gets hundreds of recommendations for good hammers - all different and all good hammers for something, but none are the best answer for his needs. Once it is discovered that what he really needs is a good way to kill chickens - then we tell him to wring their necks.

Do you see my point?

It is truly a shame, but most people do not know how to seek help, properly. They must forget their idea of a solution and define their real problem. It is not a natural talent, but is certainly a valuable one, which earns them better answers, quicker.

Bob, W9DMK, Dahlgren, VA
http://www.qsl.net/w9dmk

123. Re: Antenna impedance analyzer comparison

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 05:10:08 UTC
From: Rick Karlquist N6RK <richard@karlquist.removethis.com>
Message-ID: <QypCd.275615$5K2.10633@attbi_s03>
Source record: 84361

I have 1000 feet of open wire line with matching transformers
at the ends. I really need to measure at the antenna.

Rick N6RK

"Harold E. Johnson" <W4ZCB@mchsi.com> wrote in message
news:BdjCd.70486$k25.61399@attbi_s53...
>
> "Rick Karlquist N6RK" <richard@karlquist.removethis.com> wrote in message
> news:cS4Cd.611717$wV.601406@attbi_s54...
> > The N2PK would be the best, except that it only runs when
> > connected to a laptop. I don't have a laptop, and if I did, I
> > wouldn't want to carry it out to the antennas, and furthermore,
> > laptop displays are usually not visible outdoors during daylight.
> > All the others don't work if you have nearby AM BCB stations
> > like I do.
> >
> > Still looking for an antenna analyzer I can really use.
> >
> > Rick N6RK
>
> Rick, you don't HAVE to use a laptop, or carry it to the antenna or worry
> about being able to see the LCD. Simply take your N2PK, couple it to the
> feedline in the shack, (and your desktop computer) do the OSL calibration
> out at the antenna end of the feedline and measure the antenna from the
> comfort of your operating position. You've just calibrated out the
feedline.
> You can REALLY use the VNA.
>
> Regards
>
> W4ZCB
> >
> >
>
>

124. Re: Antenna impedance analyzer comparison

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 05:16:09 UTC
From: Rick Karlquist N6RK <richard@karlquist.removethis.com>
Message-ID: <jEpCd.845680$8_6.563207@attbi_s04>
Source record: 84362

"J. Mc Laughlin" <jcm@power-net.net> wrote in message
news:10tjarkjq5vm01c@corp.supernews.com...
> Dear Rick, N6RK:
>
> If you believe that none of the "other" analyzers will work at your
site
> because of the presence of strong signals from below 1700 kHz, then you
> could do one of the following:
>
> 1. You could build a high-pass filter to go between analyzer and
antenna
> to attenuate the MF signals. I have heard of people doing this
successfully
> such that the filter is essentially transparent at HF.

The filter needs to have no group delay in the band of measurement (not
just flat group delay and amplitude). It is impossible to build a high
pass filter with no group delay.

>
> 2. You could add one or more band stop resonators that can be tuned to
> number 1 and really cut down the one or two most strong broadcast signals.

Too much trouble.

>
> 3. You could search for a used or new bridge type of instrument. They
> tend to be insensitive to off-frequency signals.

I have a GR-916 bridge if I really must make a measurement.

>
> 4. Many types of antennas will deliver little of a signal that is far
> away in frequency. An inverted L is expected to deliver a lot of signal
> from nearby MF stations. A balanced LPDA with a shorting strap at its far
> end is expected to pick up little from vertically polarized MF stations.
>
> Let the group know what type of antennas you wish to analyze.

I have a 90 foot vertical for 160 meters. I use it because it gets
out very well. Unfortunately, it is also a good BCB receive
antenna, developing nearly a volt of RF.

Rick N6RK

>
> 73 Mac N8TT

>
> --
> J. Mc Laughlin; Michigan U.S.A.
> Home: JCM@Power-Net.Net
> "Rick Karlquist N6RK" <richard@karlquist.removethis.com> wrote in message
> news:cS4Cd.611717$wV.601406@attbi_s54...
> > The N2PK would be the best, except that it only runs when
> > connected to a laptop. I don't have a laptop, and if I did, I
> > wouldn't want to carry it out to the antennas, and furthermore,
> > laptop displays are usually not visible outdoors during daylight.
> > All the others don't work if you have nearby AM BCB stations
> > like I do.
> >
> > Still looking for an antenna analyzer I can really use.
> >
> > Rick N6RK
> >
> >
>
>

125. Re: What kind of antenna is this?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 05:24:23 UTC
From: Mr Bungle <nospam@nospam.com>
Message-ID: <33unjiF459jv6U1@individual.net>
Source record: 84363

loop antenna (some on a pcb can look strange - not a loop, but really are)

"DaveC" <me@privacy.net> wrote in message
news:0001HW.BDFF22CD00098347F04075B0@news.individual.net...
> A small transceiver in a wireless security system uses a small square
spiral
> solid wire (3 turns?) as an antenna. The frequency is 315 MHz, I think.
>
> What kind of antenna is this? What are its characteristics?
>
> Web references to peruse?
>
> Just curious...
>
> Thanks,
> --
> Please, no "Go Google this" replies. I wouldn't
> ask a question here if I hadn't done that already.
>
> DaveC
> me@privacy.net
> This is an invalid return address
> Please reply in the news group
>

126. windom questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 05:26:03 UTC
From: RB <rbig@bellsouth.nospam.net>
Message-ID: <lKpCd.12017$7N4.9654@bignews5.bellsouth.net>
Source record: 84364

I have a 136' (1/2 wave on 80m) Carolina Windom from Radio Works. It's a good antenna, and works well for me.

There is a transformer or balun at the feedpoint (14% off center). Then, a 22' coax downdrop to a choke balun. Coax on to the shack.

What function does the choke balun play? There's coax on both sides of it. I thought unbalanced signal goes in one end of a choke balun, and balanced signal comes out. Having coax on the balanced output side of the balun would seem to be counterproductive. But, it works, and works well. How/why?

Does the off-center feed shift the current peak over by the amount of offset on some bands? Is the current peak symmetrically centered on some bands? What is the effect of off center feed?

The antenna is rated for 160m use, too. What do I have when on 160? Is it sort of a 22' top loaded vertical? It's a shortie, physically, for 160, if you consider only the horizontal part. Likely very reactive---which is why power input rating on 160 is only 500 watts.

127. Re: PLL02a question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 06:15:03 UTC
From: George Kinzer <horseflygk@worldnet.att.net>
Message-ID: <HvqCd.65034$uM5.23413@bgtnsc05-news.ops.worldnet.att.net>
Source record: 84365

no no...a 10khz up for ALL channels
just the CB band.

128. Re: Plane of folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 06:38:54 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <2SqCd.9969$by5.3704@newssvr19.news.prodigy.com>
Source record: 84366

Ken,
Your original post said for "RX" receive purposes,
so staples or no staples would make about as much
difference as the color of the deck...
'Doc

129. Re: FA: Antenna Engineering Handbook McGraw Hill 2nd edition (c) 1984 and more...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 07:01:39 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <qjfkt0dv7g46gfurblo559nmvmfoh3l2f4@4ax.com>
Source record: 84367

On 3 Jan 2005 21:15:04 -0600, "Dave" <stuff4sale@njcdr.com> wrote:

|3 hours left on the Antenna Engineering Handbook!

Thanks for the timely notice!
|
|Not sure if it proper to post this here -

Not sure either, but if you're going to clutter up the group, at least
do it with enough lead time to make it possible for someone to
participate.

130. Re: What's the deal? (was: Re: AM radio reception inside passenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 07:46:01 UTC
From: richardharrison@webtv.net
Message-ID: <26648-41DA49B9-305@storefull-3255.bay.webtv.net>
Source record: 84370

Jack Painter wrote:
"Modelimg examples cited below appear to be incorrect for lightning, similar to how modeling for ocean weaves cannot be done in a bathtub,---."

As far as I know there is one set of rules which rules electrical phenomena, not rules for weak snd onother set of rules for strong electricity. Lightning is so stromg that it sometimes seems to play by its own rules, but it really does not.

Jack`s waves in a bathtub metaphor was particularly ironnic. Franklin`s experiments proved the electricity he was studying was the same stuff on whatever scale. He charged Leyden jars from the clouds then used the stored charge to conduct other experiments with the stored charge as his contempories were doing. Franklin found that hemp twine was a conductor of sorts while silk was an insulator.

Irony springs from Jacj`s bathtub metaphor. According to the December 2001 issue of "Modern Maturity":
"Alexander Graham Bell - yes, of telephone fame - also invented the hydrofoil, a boat that rides on a duchion of air. He tested models of this invention in his tub."

Best regards, Richard Harrison, KB5WZI

131. Re: Antenna impedance analyzer comparison

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 07:51:24 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <KVicMBD8rk2BFAfE@ifwtech.co.uk>
Source record: 84368

Rick Karlquist N6RK wrote:

>> 1. You could build a high-pass filter to go between analyzer and
>antenna
>> to attenuate the MF signals. I have heard of people doing this
>successfully
>> such that the filter is essentially transparent at HF.
>
>The filter needs to have no group delay in the band of measurement (not
>just flat group delay and amplitude). It is impossible to build a high
>pass filter with no group delay.
>
[...]
>
>I have a 90 foot vertical for 160 meters. I use it because it gets out
>very well. Unfortunately, it is also a good BCB receive antenna,
>developing nearly a volt of RF.
>
Any impedance/network analyser is going to need a BCB-reject filter in order to handle that level of interference. However, imperfections in the filter don't matter with a more advanced VNA such as the N2PK design, because the filter can be included *inside* the calibration loop.

As Harold W4ZCB says, a long coax can be included inside the calibration loop as well, so you could make the measurements from home... in principle. But you'd have to do a lot of shuttling back and forth between the shack and the antenna to swap connectors, start the VNA etc. At Rick's QTH (www.n6rk.com) that would involve a *lot* of travelling time.

Seriously, Rick, if the lack of a laptop is all that's stopping you... then get a laptop already! (Almost any old wreck will run an N2PK VNA.) Add an awning, a camping table, chair and cooler, and you're all set for accurate impedance measurements in the field.

I'm going to be doing a lot of that in the next two years, but the environmental problems will be slightly different. Where can I find a laptop with a screen demister and two-speed wipers?

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

132. Re: Loft Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 08:00:12 UTC
From: Ken Luther <sparkzz@aol.com>
Message-ID: <6ZrCd.7900$Me4.1944@bignews4.bellsouth.net>
Source record: 84369

Hello,

Throw as much wire as you can up in your loft, feed it in the center with ladder line to a tuner. I used one for years. I called it a "Dog-eared dipole" because I let the ends just droop down and along the attic floor when I ran out of attic length. It was cut for 40 meters (33 feet per side) and worked good enough. Since it's a balanced load, I don't have any trouble with TVI, but it does get into the telephone sometimes. I just used a staple gun to get it as high as I could.

Good luck & 73's
KD5ZCL

Robert Lay wrote:

> On Mon, 3 Jan 2005 15:16:53 +0000 (UTC), "Simon Smith"
> <s.Smith@btinternet.com> wrote:
>
>>I have been refused permission for any kind of outdoor Antenna due to the
>>area in which I live in the UK having "permitted development rights
>>removed"
>>I think that this may be a conservation area. Having recently passed the
>>foundation course I am getting impatient - and dissapointed to say the
>>least.
>>I am now faced with only one or two alternatives - an Indoor or Loft
>>Antenna. I realise that this may restrict me to 2m only but at least it
>>will be better than nothing - or to operate mobile only.
>>Has anyone on the group got any suggestions ? I have a fair sized loft
>>with
>>approx. 2.5m headroom, which runs the whole width of the house -almost
>>30ft. - is there anything I use in the loft like a loop Antenna for
>>instance ? Or a fixed Station Antenna ?
>>
>>Thaks for your help
>>John
>>M3IIV
>
> Dear John,
>
> It has been my experience that the inefficiency of loft antennas make
> them nearly useless. However, you have to work with what you've got.
> My suggestion would be to build the best 20 meter dipole antenna you
> can build for the space available. Try to keep the ends of the antenna
> as far away from anything that absorbs RF as possible - even wood and
> brick do absorb RF. If necessary, use loading coils in the dipole to

> get the dipole resonant (at 14.070 MHz). Think about PSK31 as an
> operational mode because that gives you the best bang for the buck in
> terms of being heard 'round the world and being able to hear others in
> adverse conditions.
>
> Bob, W9DMK, Dahlgren, VA
> http://www.qsl.net/w9dmk

133. Re: Antenna Engineering Handbook McGraw Hill 2nd edition (c) 1984 ...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 08:06:42 UTC
From: richardharrison@webtv.net
Message-ID: <26648-41DA4E92-306@storefull-3255.bay.webtv.net>
Source record: 84371

Mac, N8TT wrote:
"But using Sbay puts them out of reach of those who also want nothing to do with Ebay."

Saw a woman on TV last week complaining she was so unlucky that she caught herpes from her vibrator. Said it would be the last time she bought anything from Ebay.

Best regards, Richard Harrison, KB5WZI

134. Re: Loft Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 08:23:59 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <ClqeAnFfKl2BFAtj@ifwtech.co.uk>
Source record: 84272

John wrote:
>I have been refused permission for any kind of outdoor Antenna due to the
>area in which I live in the UK having "permitted development rights
>removed"
>I think that this may be a conservation area. Having recently passed the
>foundation course I am getting impatient - and dissapointed to say the
>least.
>I am now faced with only one or two alternatives - an Indoor or Loft
>Antenna. I realise that this may restrict me to 2m only but at least it
>will be better than nothing - or to operate mobile only.
>Has anyone on the group got any suggestions ? I have a fair sized loft with
>approx. 2.5m headroom, which runs the whole width of the house -almost
>30ft. - is there anything I use in the loft like a loop Antenna for instance
>? Or a fixed Station Antenna ?

Lots of good advice elsewhere in the thread. You certainly can operate HF from a loft that size... though RF interference may be a problem.

But we're getting ahead of ourselves - it's too soon to give up on outside antennas yet.

No matter where you are, the planners don't have the authority to issue a blanket refusal. Even in a conservation area, there are still plenty of legitimate options involving 'stealth' antennas, night-time operation etc.

Here in town, there's an amateur who lives in a Listed building that is right opposite the District Council offices - the planning officer's desk is by the window, literally overlooking the rear of his house! It's hard to imagine a worse situation than that, yet he *can* put up outside antennas, and he gets out fine on 80m and VHF.

So don't ever accept a flat "No" for an answer. Push back at officialdom. Find out if you really are in a conservation area, and by what right they are restricting you. Ask them for chapter-and-verse on that. On the technical side, think up some solutions for outdoor antennas that they cannot reasonably refuse. Keep pushing - politely, but also relentlessly. When they eventually realise that you're not going to give up, they *will* say "Yes" to something.

Talk to the RSGB Planning Panel (details at www.rsgb.org) and I'm sure they can help you.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

135. Center Fed " Zepp " with Coaxial Balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 11:35:12 UTC
From: Gary
Message-ID: <suukt0djpje0pbtorpounl0tkr3n3590qd@4ax.com>
Source record: 84274

I'm mulling over different antenna designs for this spring / summer
and a friend of mine has suggested for 80m on up a full size 80 meter
"dipole" 66' X inches per leg, center fed with 300 Ohm twinlead. He
has this arrangement and the twinlead comes into his house and is
connected to two 10' sections of RG-8X both rolled into a coil about
6" in diameter. He then takes and connects the braid and shield of one
of the coax coils to one leg of the twindlead and I'm not exactly
certain how the other leg is connected. He claims it's a 4:1 coaxial
balun. I wonder if some of the experts here are familiar with this
type of arrangement. He claims it has lower losses than connecting it
to the 4:1 balun in his tuner. Any thoughts on the subject ?

Thanks in advance

73 Gary K8IQ

Remove extra @'s to reply directly

136. Re: Antenna impedance analyzer comparison

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 11:55:18 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <GuvCd.73081$k25.31593@attbi_s53>
Source record: 84275

> Any impedance/network analyser is going to need a BCB-reject filter in
> order to handle that level of interference. However, imperfections in
> the filter don't matter with a more advanced VNA such as the N2PK
> design, because the filter can be included *inside* the calibration
> loop.

GM Ian, Actually, I have used the N2PK under the same conditions that Rick has and you DON'T need the reject filter. That volt is an aggregate number and at any 2-3 Hz bandwidth that the VNA detector is looking at, it's at the uVolt level and not a bother. (Unless you tune TO the BC signal itself of course!) As for the walk, would probably do most of us some good, but I even substituted the guy that wanted the measurements made and a pair of $5. FRS radios for the walk. Works fine if you really want to measure the antenna. Rick can put the feedline, his transformers and the kitchen sink inside the cal loop and still measure his antenna if he REALLY wanted to use it.

Used Laptops with a parallel port (And worn out battery) are running 25-50 bucks around here. Had one given to me that Alice plays the cardgame with using the charger. Most will still hold a charge for an hour or so.
>
> I'm going to be doing a lot of that in the next two years, but the
> environmental problems will be slightly different. Where can I find a
> laptop with a screen demister and two-speed wipers?

Try a portable igloo, Rain-X doesn't work very well.

Regards
W4ZCB

137. Very pleased with Hustler 5-BTV - photos

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 11:55:49 UTC
From: Charlie <charlie@aol.com>
Message-ID: <CvvCd.13676$6i.5689@bignews6.bellsouth.net>
Source record: 84276

I've had my new station on the air now for nearly 2 weeks. The Hustler 5-BTV
is working really well ground mounted with 72 radials.
I'm using the DX Engineering stainless steel radial plate and their
tilt-over mount which is so sweet. Got a couple dozen antenna installation
photos at this link.
1. http://www.ad5th.com/5-BTV.html

73 / DX

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

138. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 13:43:12 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20050104084312.21604.00002395@mb-m11.aol.com>
Source record: 84277

>Isnt it a copywrite problem if you copy someone else's antenna design?
>

Copywrite, copy wleft.
Copyright relates to literary works, software, photos, etc.
Antenna designs can be protected by patent, design patent. But that does not prevent individual from building one. You just can't market stolen design.

Happy New Year to all antenna aficionados!!

Yuri, K3BU.us

139. Re: Antenna impedance analyzer comparison

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 13:55:39 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10tl81p9fg88268@corp.supernews.com>
Source record: 84278

Dear Rick:
OK. Your vertical antenna certainly picks up a lot of stray RF.

However, one of the beauties of using a network analyzer is the ability to characterize the transmission line (even 1000 feet of it) and a filter that is between the network analyzer and the antenna, AND THEN to have the effects of all of the stuff between the analyzer and antenna removed so as to leave the properties of the antenna.

One has to measure the "stuff" (transmission line +) with the "stuff" disconnected from the antenna. Even if you went out to the antenna, you would need (temporarily) to disconnect the "stuff" from the antenna.

This scheme really works. One has some front-end-load required in order to characterize the "stuff," but then it is straight forward.

73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net

140. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 15:06:03 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41daad66.1665881000@news.galilei.com>
Source record: 84279

Well, if you like to build things and are thinking about something along the lines of a J-Pole, I have something that I have made about 50 of for my friends who just love having them.

It's a self-standing full sized J-Pole that fits into your pocket or backpack and does NOT need to be hung from something like the wire ribbon version.

Construction is simple, but does require welding as the unit is made from arced spring steel and 1/2 of an 8 ounce paint can.

The antenna and coax fit inside the can, which doubled as the Horizontal member of a J-Pole.

I purposely used a specially manufactured 4 ounce can suited for this purpose, with an opening tab (like on the old tobacco cans), that the lid itself became the horizontal member and would fit snugly to the bottom of the can for extra weight and support.

But the elements themselves are simple to come by. On 440 antenna's I used 3/4 inch tape measure spring steel and on 2-meter antenna's I used 1 inch tape measure spring steel.
You can buy tape measures or order the painted or unpainted steel in rolls from a supplier.

These are welded to the removable lid so that they roll inward and fit into the can when not in use.

To use the antenna, you affix the lid to the base and unroll the vertical and stub completely. They will stay open by themselves.

I also added 4 little arms about 2 inches long each on later antennas, that could be opened from the lid to give a larger 6 inch wide footprint to keep it from toppling over on the picnic table if it was a little windy to stay upright by itself.

It was a fun project, and everyone that got one put them to good use, especially on Field Day and Fox Hunts.

TTUL
Gary

141. Re: windom questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 15:31:22 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <lfdlt0d0vnhpo7p0d5eidk54cnnqtuahdb@4ax.com>
Source record: 84280

On Mon, 3 Jan 2005 23:26:03 -0600, "RB" <rbig@bellsouth.nospam.net>
wrote:

>I have a 136' (1/2 wave on 80m) Carolina Windom from Radio Works. It's a
>good antenna, and works well for me.
>
>There is a transformer or balun at the feedpoint (14% off center). Then, a
>22' coax downdrop to a choke balun. Coax on to the shack.
>
>What function does the choke balun play? There's coax on both sides of it.
>I thought unbalanced signal goes in one end of a choke balun, and balanced
>signal comes out. Having coax on the balanced output side of the balun
>would seem to be counterproductive. But, it works, and works well.
>How/why?

Well, the coax before the choke balun radiates signal, and I would
imagine the coax after the balun does not. How the balun, or line
isolator, as they call it, works, I dunno.

Bob
k5qwg

>
>Does the off-center feed shift the current peak over by the amount of offset
>on some bands? Is the current peak symmetrically centered on some bands?
>What is the effect of off center feed?
>
>The antenna is rated for 160m use, too. What do I have when on 160? Is it
>sort of a 22' top loaded vertical? It's a shortie, physically, for 160, if
>you consider only the horizontal part. Likely very reactive---which is why
>power input rating on 160 is only 500 watts.
>

142. Re: PLL02a question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 17:29:22 UTC
From: drwxr-xr-x <bit-bucket@config.com>
Message-ID: <slrnctlkji.17s0.bit-bucket@shell.config.com>
Source record: 84281

On Tue, 04 Jan 2005 06:15:03 GMT, George Kinzer wrote:
> no no...a 10khz up for ALL channels
> just the CB band.

I wonder what you're nattering on about.

143. Re: balun at resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 17:51:15 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <crel2j$3rk$1@sparta.btinternet.com>
Source record: 84282

> my recomendations so far have been for 1:1 /4:1 and 9:1, got nearly a
> equal tally of votes on each
>
> leaves me a bit confused however
>
==========

Dear m, Confusion is only to be expected.

Its sometimes a good idea to take the average of the recommendations offered in this newsgroup.

But in your case you should include in the offerings a 0-to-0 balun - ie., no balun ar all.

So the most logical thing to begin with is NO balun (because it is the least expensive) which in all likelihood will probably do fine on 80 meters using a coax feedline.

But, having an experimental mind, after that you could try an indeteminate impedance-to-indeterminate impedance choke balun. The sort wound with twin speaker cable on a ferrite ring. Which in some circumstances MIGHT work slightly better by doing what a balun is supposed to do but will certainly not make things worse.

And whatever you use, a tuner will be essential for multi-band operation. Length of dipole is non-critical, whatever fits into your backyard. Prefer 450-ohm or open-wire transmission line for the best performing HF dipole antenna you will ever have. Unless you can make it even higher.

Happy experimenting in 2005 !

Reg, G4FGQ

144. discone or scantenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 18:53:35 UTC
From: redrum <ninguna>
Message-ID: <41dad99d$2_2@nova.entelchile.net>
Source record: 84314

Which is better?

is scantenna really omnidirectional? is it built for a better reception on the most used frequencies or is really multiband?

who sells the better implementation of discone?

my needs on scanning are 25Mhz to 1.3 Ghz.

I own a uniden bc-796d and a bc-246t

Thanks for any help.

Greetings from Chile!

145. Re: Baluns for RX doublet

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 19:07:54 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <crepiacls1@sparta.btinternet.com>
Source record: 84283

It's not surprising a balun intended for TV frequencies doesn't work at all on MF and LF.

The inductance of the balun windings is far too small. Like-wise, the ferrite core dimensions and the number of turns. The windings are practically short-circuits.

Reg, G4FGQ

146. Re: windom questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 20:06:20 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <1104865496.477056.31760@z14g2000cwz.googlegroups.com>
Source record: 84284

Bob Miller wrote:
> Well, the coax before the choke balun radiates signal, and I would
> imagine the coax after the balun does not. How the balun, or line
> isolator, as they call it, works, I dunno.

I wonder if the isolator simply reflects the common mode waves
thus causing common mode standing waves on the vertical section?
--
73, Cecil http://www.qsl.net/w5dxp

147. Re: Loft Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 20:33:18 UTC
From: Dave VanHorn <dvanhorn@dvanhorn.org>
Message-ID: <7IednbnjFMTgYEfcRVn-pA@comcast.com>
Source record: 84285

The local neighborhood hysterical society was giving my dad some heat for his installation.
He lived in a 100 yr old house on the edge, but not IN the hystreical district.

I told them that if they gave him any problems, I'd help him put up a "period" wireless station.
Big clothesline antenna, spark-gap transmitter... Or would they prefer he stay on 2 meters and HF at moderate power? :)

148. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 20:42:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10tlvu7skr5ub4d@corp.supernews.com>
Source record: 84286

Yuri Blanarovich wrote:
>. . .
> Antenna designs can be protected by patent, design patent. But that does not
> prevent individual from building one. You just can't market stolen design.
> . . .

The law does *forbid* you from making a patented item even for your own use. (From http://www.uspto.gov/web/offices/pac/doc/general/index.html#patent: "The right conferred by the patent grant is, in the language of the statute and of the grant itself, ï¿½the right to exclude others from making, using, offering for sale, or sellingï¿½ the invention in the United States or ï¿½importingï¿½ the invention into the United States." Notice the word "making".)

But the law doesn't *prevent* anyone from doing anything they like, as long as they're not caught. This general attitude is also common among people who pirate software, music, and other copyrighted items, as well.

Roy Lewallen, W7EL

149. Re: Loft Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 20:44:27 UTC
From: AaronJ <noemail@noemail.com>
Message-ID: <bqult0hkgoqol3joomv0tinr3af8buch34@4ax.com>
Source record: 84287

John wrote:

>I am now faced with only one or two alternatives - an Indoor or Loft
>Antenna.

I live in a no antenna HOA area. I ended up laying a #22 wire around the outer edge of my roof and hooked it up as a loop. It is a random length of over 200' and varies in height from 7' to 20'. I chose the wire color to match the red tile roof so that you can't see it. I use it on 160 through 10 and have had decent results, nothing spectacular, but generally good solid contacts. (I usually run 50 watts, although sometimes less.) Just another idea for you to consider...

150. ELF/VLF/LF/BCB ferrite bar antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 21:36:03 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <a22mt0p19ickcievc59nsfs8fc6romt1gl@4ax.com>
Source record: 84288

Having modded my Ten Tec RX-320 for VLF/LF (for no good reason other than I was in there anyway), I am looking for a cheap and easy low low band antenna. Two miles of wire is not practical for my QTH. Also, big loops are problematic. So I am considering antennas using huge ferrite bars and reasonable wire lengths.

In particular, I am interested in the antenna entiled "Shortwave / AM / Longwave Radio Booster" shown at:
http://www.stormwise.com/vfr12cproject.htm

I would use the direct connect option, since my radio has no internal ferrite bar for coupling to.

(1) Does this make any sense at all?

I would put the turns on a bigger pipe and slide the ferrite into the bigger pipe. I am told that you can "fine tune" by sliding the ferrite bar. I am not sure what is being fine tuned, except maybe the inductance to get resonance with whatever cap is in the circuit.

If it does make sense, can I get this to work from 10kHz to 550kHz? 10kHz to 1500 kHz?

The vendor thinks so, but he is selling ferrite bars -- the bigger the better. He is recommending the 24" monster, with 300 turns and a 1 uF cap. However, using 27 ga magnet wire, I only need 5" to get 300 turns.

(2) Which ferrite bar should I use -- 12", 24" or 36" -- to get the result I need without overkill? See table at:
http://www.stormwise.com/vlf.htm

(3) Is there somthing I can read that will provide some guidance as to number of turns, cap value and expected frequency range?

Ken KC2JDY
Ken
(to reply via email
remove "zz" from address)

151. Re: ELF/VLF/LF/BCB ferrite bar antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 21:53:07 UTC
From: nospam <nospam@nospam.com>
Message-ID: <340hhbF42va39U1@individual.net>
Source record: 84289

"Ken" <cprstn54zz@att.net> wrote in message
news:a22mt0p19ickcievc59nsfs8fc6romt1gl@4ax.com...
> Having modded my Ten Tec RX-320 for VLF/LF (for no good reason other
> than I was in there anyway), I am looking for a cheap and easy low low
> band antenna. Two miles of wire is not practical for my QTH. Also,
> big loops are problematic. So I am considering antennas using huge
> ferrite bars and reasonable wire lengths.
>
> In particular, I am interested in the antenna entiled "Shortwave / AM
> / Longwave Radio Booster" shown at:
> http://www.stormwise.com/vfr12cproject.htm
>
> I would use the direct connect option, since my radio has no internal
> ferrite bar for coupling to.
>
> (1) Does this make any sense at all?
>
> I would put the turns on a bigger pipe and slide the ferrite into the
> bigger pipe. I am told that you can "fine tune" by sliding the
> ferrite bar. I am not sure what is being fine tuned, except maybe the
> inductance to get resonance with whatever cap is in the circuit.
>
> If it does make sense, can I get this to work from 10kHz to 550kHz?
> 10kHz to 1500 kHz?
>
> The vendor thinks so, but he is selling ferrite bars -- the bigger the
> better. He is recommending the 24" monster, with 300 turns and a 1 uF
> cap. However, using 27 ga magnet wire, I only need 5" to get 300
> turns.
>
> (2) Which ferrite bar should I use -- 12", 24" or 36" -- to get the
> result I need without overkill? See table at:
> http://www.stormwise.com/vlf.htm
>
> (3) Is there somthing I can read that will provide some guidance as
> to number of turns, cap value and expected frequency range?
>
> Ken KC2JDY
> Ken
> (to reply via email
> remove "zz" from address)

12"
Antenna will be very narrowband you will have to tune it.

Check Q with L/C
Rx is OK,
Tx can create harmonics as ferrite is non-linear.
Bigger diameter only keeps ther ferrite out of saturation/non linear region.

152. Re: What kind of antenna is this?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-04 21:59:31 UTC
From: jgboyles@aol.com
Message-ID: <20050104165931.11425.00002739@mb-m29.aol.com>
Source record: 84290

>A small transceiver in a wireless security system uses a small square spiral
>solid wire (3 turns?) as an antenna. The frequency is 315 MHz, I think.

Most of the remote control transmitters use a 1 transistor LC oscillator that is turned on and off by a digital pulse stream. The spiral on the circuit board does double duty as the frequency determining inductance for the oscillator, and acting as a small loop antenna.

73 Gary N4AST

153. Re: Center Fed " Zepp " with Coaxial Balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 00:28:55 UTC
From: jgboyles@aol.com
Message-ID: <20050104192855.11425.00002741@mb-m29.aol.com>
Source record: 84291

>a friend of mine has suggested for 80m on up a full size 80 meter
>"dipole" 66' X inches per leg, center fed with 300 Ohm twinlead

Hi Gary, A classical Zepp or Zepplin antenna is not center fed. I thought they were end fed and hanging down from the airships of WW2.
If you have the room for a full sized 80m dipole, use 300 ohm or 450 ohm ladder line with a choke balun (1:1 W2DU) and an antenna tuner. Will work great on all HF bands. Don't mess with a 4:1 balun. Doesn't provide enough benefit for this type of antenna.
The best "all band" antenna I have ever used was a 100' dipole, high as possible, fed with ladder line and a tuner. Don't know if the 1:1 balun I used did much.
73 Gary N4AST

154. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 01:45:18 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <s2gmt011f23qqdquavcm6jc4o7v21cqc3u@4ax.com>
Source record: 84292

On Tue, 04 Jan 2005 12:42:41 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>The law does *forbid* you from making a patented item even for your own
>use. (From
>http://www.uspto.gov/web/offices/pac/doc/general/index.html#patent: "The
>right conferred by the patent grant is, in the language of the statute
>and of the grant itself, ï¿½the right to exclude others from making,
>using, offering for sale, or sellingï¿½ the invention in the United States
>or ï¿½importingï¿½ the invention into the United States." Notice the word
>"making".)

Hi Roy,

Administrative offices are frequently the poorest source of legal
information - especially when worded as vaguely as above.

Instead, Court records show a vastly different interpretation:
"Even though infringement is found, one factor that may negate
willfulness is a bona fide attempt by the alleged infringer to
design around the patent. ... The Federal Circuit reversed,
stating:
This court has indicated that the incentive to "design around"
patents is a positive result of the patent system.... One of
the benefits of a patent system is its so called
"negative incentive" to "design around" a competitor's
products, even when they are patented, thus bringing a steady
flow of innovations to the marketplace. It should not be
discouraged by punitive damage awards except in cases where
conduct is so obnoxious as clearly to call for them."

The obnoxious conduct, in this case, was the licensing of a technology
to then develop patents that would then render the original useless as
a commodity (the only value of a patent). In other words "bad faith"
agreements.

The ruling is from one of many (883) articles on the web specifically
directed toward the State Indus., Inc. v. Mor-Flo Indus., Inc. case

More on willful infringement:

"Patent law encourages competitors to design or invent around
existing patents." See, WMS Gaming, Inc., 51 U.S.P.Q2d at 1396
(Fed. Cir. 1999). Thus, a good faith attempt to design around the
patent will generally negate a charge of willful infringement,
particularly if advice of counsel is sought during the design
process. See, Braun, Inc. v. Dynamics Corp. of Am., 975 F.2d 815,

823 (Fed. Cir. 1992); Read, 970 F.2d at 828 (Fed. Cir. 1992).
Indeed, even in the absence of advice of counsel, a sincere
attempt to design around the patent may negate willfulness. See,
Rolls-Royce Ltd. v. GTE Valeron Corp., 800 F.2d 1101, 1109-1110
(Fed. Cir. 1986).

By-and-large, it is overwhelmingly clear that all such cases brought
and LOST were against commercial interests and not lone individuals.

It seems to me that the raison d'ï¿½tre of this body of amateur radio
activity is to improve designs - at least Rhetorically.

I suppose suit for slander or defamation stands a better chance. ;-)

73's
Richard Clark, KB7QHC

155. Re: balun at resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 01:47:22 UTC
From: ml <m@di.net>
Message-ID: <m-55A7D6.20472404012005@news.verizon.net>
Source record: 84293
Body handling: HTML body converted to readable text

In article ,
"Reg Edwards" wrote:

> > my recomendations so far have been for 1:1 /4:1 and 9:1, got nearly a
> > equal tally of votes on each
> >
> > leaves me a bit confused however
> >
> ==========
>
> Dear m, Confusion is only to be expected.
>
> Its sometimes a good idea to take the average of the recommendations offered
> in this newsgroup.
>
> But in your case you should include in the offerings a 0-to-0 balun - ie.,
> no balun ar all.
<<
> So the most logical thing to begin with is NO balun (because it is the least
> expensive) which in all likelihood will probably do fine on 80 meters using
> a coax feedline.
<
> But, having an experimental mind, after that you could try an indeteminate
> impedance-to-indeterminate impedance choke balun. The sort wound with twin
> speaker cable on a ferrite ring. Which in some circumstances MIGHT work
> slightly better by doing what a balun is supposed to do but will certainly
> not make things worse.
>
> And whatever you use, a tuner will be essential for multi-band operation.
> Length of dipole is non-critical, whatever fits into your backyard. Prefer
> 450-ohm or open-wire transmission line for the best performing HF dipole
> antenna you will ever have. Unless you can make it even higher.
>
> Happy experimenting in 2005 !
> ----
> Reg, G4FGQ

156. Wireless Innovation Contest - Get your innovation noticed!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 02:26:39 UTC
From: Andrey <a8421@intergate.bc.ca>
Message-ID: <10tmk1sr8d53256@corp.supernews.com>
Source record: 84294

Get your innovation noticed! Submit it to Wireless Innovation Contest.

If you've created something that's really making a difference, then we want to hear about it. And, more importantly, we want to tell the World about it.

2005 Wireless Innovation Contest takes place in Vancouver, BC Canada. The 2005 Wireless Innovation Contest is out to prove how wireless is changing the world. It could be a successful product, an enterprise solution that saved your customer thousands of dollars, a government solution that helped save lives or enhanced education or an entertainment solution that has made the world a lot more fun.

Nokia, Telus Mobility and other Industry Partners throw Support Behind the Contest this year. A panel of industry leaders will judge each entry and decide on a winner and runner-ups. Winners of WIC 2005 are rewarded with targeted exposure in media and at trade shows, inclusion in a specialcase study publication and a one-hour mentor session with the panel of judges.

More information is available at www.winbc.org/contest

157. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 02:44:25 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10tml4f5rqq0f0a@corp.supernews.com>
Source record: 84295

Richard Clark wrote:
>
> Hi Roy,
>
> Administrative offices are frequently the poorest source of legal
> information - especially when worded as vaguely as above.

I submit that there's a poorer source of legal information than administrative offices -- interpretations of the law by people who aren't lawyers.

>
> Instead, Court records show a vastly different interpretation:
> "Even though infringement is found, one factor that may negate
> willfulness is a bona fide attempt by the alleged infringer to
> design around the patent. ... The Federal Circuit reversed,
> stating:
> This court has indicated that the incentive to "design around"
> patents is a positive result of the patent system.... One of
> the benefits of a patent system is its so called
> "negative incentive" to "design around" a competitor's
> products, even when they are patented, thus bringing a steady
> flow of innovations to the marketplace. It should not be
> discouraged by punitive damage awards except in cases where
> conduct is so obnoxious as clearly to call for them."
>
> The obnoxious conduct, in this case, was the licensing of a technology
> to then develop patents that would then render the original useless as
> a commodity (the only value of a patent). In other words "bad faith"
> agreements.
>
> The ruling is from one of many (883) articles on the web specifically
> directed toward the State Indus., Inc. v. Mor-Flo Indus., Inc. case
>
> More on willful infringement:
>
> "Patent law encourages competitors to design or invent around
> existing patents." See, WMS Gaming, Inc., 51 U.S.P.Q2d at 1396
> (Fed. Cir. 1999). Thus, a good faith attempt to design around the
> patent will generally negate a charge of willful infringement,
> particularly if advice of counsel is sought during the design
> process. See, Braun, Inc. v. Dynamics Corp. of Am., 975 F.2d 815,
> 823 (Fed. Cir. 1992); Read, 970 F.2d at 828 (Fed. Cir. 1992).
> Indeed, even in the absence of advice of counsel, a sincere
> attempt to design around the patent may negate willfulness. See,

> Rolls-Royce Ltd. v. GTE Valeron Corp., 800 F.2d 1101, 1109-1110
> (Fed. Cir. 1986).
>
> By-and-large, it is overwhelmingly clear that all such cases brought
> and LOST were against commercial interests and not lone individuals.
> . . .

So by your interpretion of the law, it's ok for anyone to make a copy of a patented item for personal use (which was the original statment)? That's not obvious to me from the short quotes you gave, and I'm surprised in any case that you can draw such a sweeping conclusion from a couple of paragraphs. But then, I'm not a lawyer. Are you?

Roy Lewallen, W7EL

158. Re: Plane of folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 04:17:17 UTC
From: PN2222A <bipolar@lithium.net>
Message-ID: <hTJCd.7371$yV1.4898@newssvr14.news.prodigy.com>
Source record: 84296

"Ken" <cprstn54zz@att.net> wrote in message
news:3vdit0l7abdt7t89flne3l59rbj3b395h7@4ax.com...
>I will be attaching a 33' folded dipole for RX (made from 300 ohm
> twinlead) to the underside of my wood deck. It will be horizontal.
> Does it matter if the parallel conductors are in the horizontal or
> vertical plane?
>
> If I just staple the twinlead to the joists (most convenient and
> invisible), the conductors will be in the horizontal plane.

So Ken

A couple years ago I wanted to cut a recieving dipole for a specific SWL frequency (somewhere in the 15MHz band). I calculated the length carefully, and then stapled the wire antenna to my fence (to be stealthy). Fed it with RG-58, it should have worked pretty good, I thought. (even though it was only abt 5 ft up).

After using it for a bit, I disconnected the coax shield at my reciever, and the recieved signal jumped by a couple S-units. Surprise!

Here's what I decided: If I were to transmit to that dipole nailed to the fence, I would do a lot of heating of the wood, and much less heating of the ionosphere. Recieving would work the same.

Conclusion: A wire antenna located near a lossy medium like your deck won't work like you want it to.

73,
PN2222A
(mildly saturated)

159. Need help rigging two poles

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 04:26:59 UTC
From: Bruce Wilson <b.e.wilson@usa.net>
Message-ID: <n0KCd.752277$mD.196592@attbi_s02>
Source record: 84297

Hi Gang.

Sometime in the distant past (in the 50's) my property was owned by a ham. He put in two poles, six inch pipes 50 feet high and 170 feet apart, to fly an antenna. They once had cables for hoisting the wire to the top, much like a flagpole, but they have weathered and fallen. There are pulleys at the top, and stanchions (where you tie the rope off) about midway down the pole.

I need to do two things:

Get the ropes back in place, and
Lower the stanchions to a more usable level.

And I have no idea how to do the former. How do I get ropes back on those pulleys? Are there flagpole-riggers who shimmy up the poles, or do I hire some brave local kid to risk his neck in the attempt? I really want to get a proper antenna up there, and don't mind paying someone who does this, I just don't know who to call.

Bruce Wilson KD7VEM
http://wilson.dynu.net

160. Re: Need help rigging two poles

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 04:48:46 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <41DB71E2.6B2EBF89@shaw.ca>
Source record: 84298

Bruce Wilson wrote:
>
> Hi Gang.
>
> Sometime in the distant past (in the 50's) my property was owned by a ham.
> He put in two poles, six inch pipes 50 feet high and 170 feet apart, to fly
> an antenna. They once had cables for hoisting the wire to the top, much like
> a flagpole, but they have weathered and fallen. There are pulleys at the
> top, and stanchions (where you tie the rope off) about midway down the pole.
>
> I need to do two things:
>
> Get the ropes back in place, and
> Lower the stanchions to a more usable level.
>
> And I have no idea how to do the former. How do I get ropes back on those
> pulleys? Are there flagpole-riggers who shimmy up the poles, or do I hire
> some brave local kid to risk his neck in the attempt? I really want to get a
> proper antenna up there, and don't mind paying someone who does this, I just
> don't know who to call.
>
> Bruce Wilson KD7VEM
> http://wilson.dynu.net

If I were going to have some kid shinny up the pole I'd have some friends
at the base with some form of guys which you cold slide up the pipe as
he climbs for stability. You might want to set one set of guys about
half way up. Assuming the poles are steel, and in good condition, you can
remove the guys as he comes back down.
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/index.html
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/index.htm
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/index.htm
---
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

161. Re: Antenna impedance analyzer comparison

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 05:00:36 UTC
From: Rick Karlquist N6RK <richard@karlquist.removethis.com>
Message-ID: <UvKCd.330237$HA.229892@attbi_s01>
Source record: 84299

I had a laptop a long time ago, and I couldn't
read the screen outdoors. Are the newer ones
better?

Rick N6RK

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:KVicMBD8rk2BFAfE@ifwtech.co.uk...
> Rick Karlquist N6RK wrote:
>
> Add an awning, a camping table, chair and cooler, and you're all set for
> accurate impedance measurements in the field.
>
>> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

162. Re: Need help rigging two poles

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 05:02:51 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10tmt827a0geua5@corp.supernews.com>
Source record: 84300

Hire somebody with a cherry picker? An arborist might be able to point
you in the right direction.

Roy Lewallen, W7EL

Bruce Wilson wrote:
> . . .
> And I have no idea how to do the former. How do I get ropes back on those
> pulleys? Are there flagpole-riggers who shimmy up the poles, or do I hire
> some brave local kid to risk his neck in the attempt? I really want to get a
> proper antenna up there, and don't mind paying someone who does this, I just
> don't know who to call.
>
> Bruce Wilson KD7VEM
> http://wilson.dynu.net
>
>

163. Re: Antenna impedance analyzer comparison

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 07:21:30 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <2ojDTJD6V52BFALS@ifwtech.co.uk>
Source record: 84301

Rick Karlquist N6RK wrote:
>I had a laptop a long time ago, and I couldn't
>read the screen outdoors. Are the newer ones
>better?
>
If the LCD that you remember was an old passive matrix type, you may be pleasantly surprised by a modern active matrix (TFT) display.

LCDs are still not as bright as a CRT, though, so I was more than half-serious in suggesting an awning for shade.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

164. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 07:41:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b55nt0hu6c24amh2q07lg40np7telugsn4@4ax.com>
Source record: 84302

On Tue, 04 Jan 2005 18:44:25 -0800, Roy Lewallen <w7el@eznec.com>
wrote:
>I submit that there's a poorer source of legal information than
>administrative offices -- interpretations of the law by people who
>aren't lawyers.
...
>So by your interpretion of the law, it's ok for anyone to make a copy of
>a patented item for personal use (which was the original statment)?

Whose making interpretations now? :-)
The findings already answered the matter with sufficient emphasis as
to intent. If you cannot distinguish intent, you should seek legal
counsel.

Your response reminds me of the satire in "Hitchhiker's Guide to the
Galaxy" where the planet Galafria suffered from serious continental
erosion from too many tourists. They were warned that visitors had to
weigh as much when they left as when they arrived, and were thus
warned under penalty of surgical balance to take care to obtain a
receipt each time they visited the 'loo.

73's
Richard Clark, KB7QHC

165. A very Popular Misconception

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 09:24:55 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <crgbp7$5db$1@titan.btinternet.com>
Source record: 84303

It is a very popular misconception that METAL in the vicinity of a ladder-line or open-wire line causes bad loss in the line.

It doesn't! Simply because metals have a very low resistance. Line conductors are made of it.

There IS an effect however, the magnitude of which depends on whether the foreign metal is in small pieces, as with staples or clamps, or continously distributed as when an insulated line is lying across a galvanised corrugated iron sheet, touching only at intervals.

Each of the two wires has a stray low-loss capacitance to the foreign metal. The pair of stray capacitances are in series which approximately halves the effect. The effect is a decrease in Zo.

Now line attenuation in dB per 100' is directly proportional to R / Zo where R is line conductor resistance. So the small extra capacitance does in fact result in a negligible increase in line loss. But even less loss is induced in the foreign metal especially if it is bulky or has a large surface area and is not resonant.

The small increase in capacitance is equivalent to an un-noticeable shift in tuner settings.

Where loss DOES occur is when the close-by foreign material is lossy such as the surface of damp garden soil. Loss falls off again when the material is an insulator such as dry sand although the increase in capacitance still occurs.

Maximum loss occurs when the foreign material has a resistivity which fortuitously "matches" into the line impedance.

But the existing rule still applies - avoid suspending twin-line nearer to ANY material less than 3 or 4 times conductor spacing over appreciable long distances. Even though copper sheet may be OK.

Reg, G4FGQ

166. Re: Need help rigging two poles

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 10:17:26 UTC
From: "Edward A. Feustel" <efeustel@direcway.com>
Message-ID: <41dbbe15$1_1@127.0.0.1>
Source record: 84304
Body handling: HTML body converted to readable text

"Bruce Wilson" wrote in message
news:n0KCd.752277$mD.196592@attbi_s02...
> Hi Gang.
>
> Sometime in the distant past (in the 50's) my property was owned by a ham.
> He put in two poles, six inch pipes 50 feet high and 170 feet apart, to
> fly an antenna. They once had cables for hoisting the wire to the top,
> much like a flagpole, but they have weathered and fallen. There are
> pulleys at the top, and stanchions (where you tie the rope off) about
> midway down the pole.
>
> I need to do two things:
>
> Get the ropes back in place, and
> Lower the stanchions to a more usable level.
>
> And I have no idea how to do the former. How do I get ropes back on those
> pulleys? Are there flagpole-riggers who shimmy up the poles, or do I hire
> some brave local kid to risk his neck in the attempt? I really want to get
> a proper antenna up there, and don't mind paying someone who does this, I
> just don't know who to call.
>
> Bruce Wilson KD7VEM
> http://wilson.dynu.net
>
>
>
Get a firm that cuts down trees from the top using a cherry picker. In NH we
have such firms that have
105 foot cherry pickers for taking down very large trees. 50 feet out to be
a snap.
Ed, N5EI

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

167. Re: Need help rigging two poles

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 12:15:41 UTC
From: Dee Flint <deeflint01@comcast.net>
Message-ID: <buOdnT0itILyR0bcRVn-tA@comcast.com>
Source record: 84305

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10tmt827a0geua5@corp.supernews.com...
> Hire somebody with a cherry picker? An arborist might be able to point you
> in the right direction.
>
> Roy Lewallen, W7EL
>

I also agree with cherry picker idea. If you are comfortable going up in them, you can even rent one of these and do the work yourself. Of course it is still always wise to have a safety man on the ground if you go up yourself. One of our local hams rents one whenever he needs antenna work done and gets one of the club members to go up in it as he is way to hefty to do this work.

Dee D. Flint, N8UZE

> Bruce Wilson wrote:
>> . . .
>> And I have no idea how to do the former. How do I get ropes back on those
>> pulleys? Are there flagpole-riggers who shimmy up the poles, or do I hire
>> some brave local kid to risk his neck in the attempt? I really want to
>> get a proper antenna up there, and don't mind paying someone who does
>> this, I just don't know who to call.
>>
>> Bruce Wilson KD7VEM
>> http://wilson.dynu.net
>>

168. Re: Center Fed " Zepp " with Coaxial Balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 12:21:58 UTC
From: Gary
Message-ID: <iqmnt090duk1gmvhsfpmvn5siq36q6ok1b@4ax.com>
Source record: 84306

On 05 Jan 2005 00:28:55 GMT, jgboyles@aol.com (JGBOYLES) wrote:

>>a friend of mine has suggested for 80m on up a full size 80 meter
>>"dipole" 66' X inches per leg, center fed with 300 Ohm twinlead
>
>Hi Gary, A classical Zepp or Zepplin antenna is not center fed. I thought they
>were end fed and hanging down from the airships of WW2.
> If you have the room for a full sized 80m dipole, use 300 ohm or 450 ohm
>ladder line with a choke balun (1:1 W2DU) and an antenna tuner. Will work
>great on all HF bands. Don't mess with a 4:1 balun. Doesn't provide enough
>benefit for this type of antenna.
> The best "all band" antenna I have ever used was a 100' dipole, high as
>possible, fed with ladder line and a tuner. Don't know if the 1:1 balun I used
>did much.
>73 Gary N4AST

Thanks Gary. I hadn't heard of a "center fed Zepp" before either and
your description of them being end fed and hanging down from airships
of WW2 correlates with what I'd heard.

73 Gary K8IQ

169. Re: Need help rigging two poles

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 14:21:03 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <10tntul1mb0cd73@corp.supernews.com>
Source record: 84307

Dee Flint wrote:

> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:10tmt827a0geua5@corp.supernews.com...
>
>>Hire somebody with a cherry picker? An arborist might be able to point you
>>in the right direction.
>>
>>Roy Lewallen, W7EL
>>
>
>
> I also agree with cherry picker idea. If you are comfortable going up in
> them, you can even rent one of these and do the work yourself. Of course it
> is still always wise to have a safety man on the ground if you go up
> yourself. One of our local hams rents one whenever he needs antenna work
> done and gets one of the club members to go up in it as he is way to hefty
> to do this work.
Current Federal requirements are for a 3 man crew when working above
ground. Two up one down.

Dave WD9BDZ

>
> Dee D. Flint, N8UZE
>
>
>>Bruce Wilson wrote:
>>
>>>. . .
>>>And I have no idea how to do the former. How do I get ropes back on those
>>>pulleys? Are there flagpole-riggers who shimmy up the poles, or do I hire
>>>some brave local kid to risk his neck in the attempt? I really want to
>>>get a proper antenna up there, and don't mind paying someone who does
>>>this, I just don't know who to call.
>>>
>>>Bruce Wilson KD7VEM
>>>http://wilson.dynu.net
>>>
>
>

170. Re: balun at resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 14:32:59 UTC
From: streamliner@aol.com
Message-ID: <41dbf4c8.758911@usenet.magma.ca>
Source record: 84308

On Tue, 4 Jan 2005 17:51:15 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

Just to add to the fray, here is my recent experience. My antenna is
a 200 foot dipole (flatop) at 45 feet center fed with about 50 feet of
450 ohm ladder line down to a balun then 20 feet of 72 ohm coax into a
homebrew L match tuner. It tunes 160 thru 10 meters and works very
well on all bands. I tried different balun configurations with varied
results. Settled on a 4:1 powdered iron (red) core 2 inch toroid of 8
bifilar turns number 12 wire, the center tap connected to the coax
shield and also to a separate ground rod 2 inches below the balun.
Good results on the air and no RFI in the shack. A 1:1 balun on the
same core tuned up OK, worked on the air OK but produced RFI. A
coiled up coax choke balun gave bad RFI into phone, sterio and TV.
Tried 6 mix43 ferrite sleves on the coax up near the ladder line with
no balun, this was worst of all grounded or ungrounded, producing
severe RFI, in fact the 600 watt linear was unusable on 80 meters due
to RF into the rig. So they all worked, but the 4:1 grounded balun is
best by far in my situation. Now if I was to put a half twist in the
ladder line and take up religion, that could all change.
73s VE3ELQ

>> my recomendations so far have been for 1:1 /4:1 and 9:1, got nearly a
>> equal tally of votes on each
>>
>> leaves me a bit confused however
>>
>==========
>
>Dear m, Confusion is only to be expected.
>
>Its sometimes a good idea to take the average of the recommendations offered
>in this newsgroup.
>
>But in your case you should include in the offerings a 0-to-0 balun - ie.,
>no balun ar all.
>
>So the most logical thing to begin with is NO balun (because it is the least
>expensive) which in all likelihood will probably do fine on 80 meters using
>a coax feedline.
>
>But, having an experimental mind, after that you could try an indeteminate
>impedance-to-indeterminate impedance choke balun. The sort wound with twin
>speaker cable on a ferrite ring. Which in some circumstances MIGHT work
>slightly better by doing what a balun is supposed to do but will certainly

>not make things worse.
>
>And whatever you use, a tuner will be essential for multi-band operation.
>Length of dipole is non-critical, whatever fits into your backyard. Prefer
>450-ohm or open-wire transmission line for the best performing HF dipole
>antenna you will ever have. Unless you can make it even higher.
>
>Happy experimenting in 2005 !
>----
>Reg, G4FGQ
>
>

171. Re: Need help rigging two poles

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 15:39:48 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncto2i4.id7.bit-bucket@shell.config.com>
Source record: 84309

On Wed, 05 Jan 2005 08:21:03 -0600, David G. Nagel wrote:
> Dee Flint wrote:
>> "Roy Lewallen" <w7el@eznec.com> wrote in message
>> news:10tmt827a0geua5@corp.supernews.com...
>>
>>>Hire somebody with a cherry picker? An arborist might be able to point you
>>>in the right direction.
>>
>> I also agree with cherry picker idea. If you are comfortable going up in
>> them, you can even rent one of these and do the work yourself. Of course it
>> is still always wise to have a safety man on the ground if you go up
>> yourself. One of our local hams rents one whenever he needs antenna work
>> done and gets one of the club members to go up in it as he is way to hefty
>> to do this work.
>
> Current Federal requirements are for a 3 man crew when working above
> ground. Two up one down.

This ain't a federal job.

<rant>
If it were, you'd have to file an Enviromental Imapct Statement before
ever modifying the existing 'structures, you'd have to file a Non-
Discrimination Certificate, you'd need to hire a Saftey Compliance
Office, you'd need to do Wetlands Mitigation, you'd need a review
by The Army Corps of Engineers, you'd be required to do a floodplain
study, you'd have to file I-9 forms for each member of the 3-man crew,
and for some vacuous reasoning du jour, you'd need to be strip-searched
by The Department of Homeland Hysteria, etc., u.s.w.

Thank gawd it ain't a federal job.
</rant>

Yes, of course, be safe! Think safety.
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

172. Re: Center Fed " Zepp " with Coaxial Balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 15:47:43 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <gc2ot0p0ciorrd45a0hkue0jfsur1o63qr@4ax.com>
Source record: 84310

On Tue, 04 Jan 2005 06:35:12 -0500, Gary <gdn50@@@@usol.com> wrote:

>I'm mulling over different antenna designs for this spring / summer
>and a friend of mine has suggested for 80m on up a full size 80 meter
>"dipole" 66' X inches per leg, center fed with 300 Ohm twinlead. He
>has this arrangement and the twinlead comes into his house and is
>connected to two 10' sections of RG-8X both rolled into a coil about
>6" in diameter. He then takes and connects the braid and shield of one
>of the coax coils to one leg of the twindlead and I'm not exactly
>certain how the other leg is connected. He claims it's a 4:1 coaxial
>balun. I wonder if some of the experts here are familiar with this
>type of arrangement. He claims it has lower losses than connecting it
>to the 4:1 balun in his tuner. Any thoughts on the subject ?
>
>Thanks in advance
>
>73 Gary K8IQ
>
>Remove extra @'s to reply directly

Gary, I have a kit #835 from the Wireman that is a 4-1 balun -- it
uses two pieces of paralleled coax with ferrite beads. That is the
closest I've heard to the twin coax deal you describe above. Don't
know that you really need such a balun -- a standard single coil of
coax, or a W2DU type with ferrite beads on a short length of coax, or
the 4-1 balun that comes with your tuner -- any of these should work
with your center-fed dipole. Right now, my 130 foot dipole with
ladderline works best with my tuner's built-in 4-1 balun.

I'd just put the antenna up, and then experiment with different ways
of feeding it to your tuner -- I imagine every installation will work
a little differently depending on how high your antenna is and how
long your ladderline is.

bob
k5qwg

173. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 15:48:41 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <s%TCd.69080$uM5.5319@bgtnsc05-news.ops.worldnet.att.net>
Source record: 84311

Richard,

You have significantly misinterpreted the concept incorporated in "State Indus., Inc. v. Mor-Flo Indus., Inc".

The issue in this case, and the others that reference it, is the question of "willful" infringement. The infringement by itself is not the issue.

Willful infringement allows for punitive damages and other monetary claims. Non-willful infringement would generally carry only "cease and desist" type of remedies.

"Willful" means that one knows about the existing patent, or should have known about it.

The whole issue of "design-around" relates to the case where the infringer knew about the patent, attempted to design around it, and failed to sufficiently differentiate the new item, thereby infringing on the patent. The infringement stands, but since an effort was made to design around the original patent the infringement is deemed to be not "willful". The second party is not granted permission by the courts to continue to infringe on a valid patent.

I believe Roy is completely correct in his statement of the wording of the patent law, and court interpretations to do not appear to change the basic concept.

In a practical sense it is unlikely that anyone would want to sue an individual one-time infringer making an item for his own use. It is still a violation of the patent law to infringe, however.

73,
Gene
W4SZ

Richard Clark wrote:
> On Tue, 04 Jan 2005 18:44:25 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
>>I submit that there's a poorer source of legal information than
>>administrative offices -- interpretations of the law by people who
>>aren't lawyers.
>
> ...
>
>>So by your interpretion of the law, it's ok for anyone to make a copy of

>>a patented item for personal use (which was the original statment)?
>
>
> Whose making interpretations now? :-)
> The findings already answered the matter with sufficient emphasis as
> to intent. If you cannot distinguish intent, you should seek legal
> counsel.
>
> Your response reminds me of the satire in "Hitchhiker's Guide to the
> Galaxy" where the planet Galafria suffered from serious continental
> erosion from too many tourists. They were warned that visitors had to
> weigh as much when they left as when they arrived, and were thus
> warned under penalty of surgical balance to take care to obtain a
> receipt each time they visited the 'loo.
>
> 73's
> Richard Clark, KB7QHC

174. Re: Need help rigging two poles

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 15:53:59 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41dc0988.1755003671@news.galilei.com>
Source record: 84312

Hi Bruce

Are you familiar with the way Pony Clamps work?

It would save a lot of time in telling you how to make a pair of metal pole climbing dogs.

Mine are just twin steel plates with an angle iron welded under them for added support. 1/2 way open they form what looks like a heart, closed they form a hole shaped like an elipse.
You open them and slip them around the pole and close them, one on each side. There is a small iron strap the toe of your shoe slips under. As you lift your foot, you lift the dog, keeping it level. Before you put your weight on it, it tilts downward slightly, locking it to the pole. Once it's seated firmly you lift the other foot, sliding that dog upward keeping it horizontal until it touches the first then let it tilt downward slightly, locking it to the pole. Keep repeating this process until you get to the height you want. Coming down works the same way, lift your foot to unlock it, hold it horizontal and move it back down the pole, locking it each step of the way. It locks automatically and easily to the pole.

There is only one axle bolt in each unit that passes through the angle iron. This allows the top sheet of steel to swing open and shut for installing it on the pole. Being I'm the nervous type, I drilled two holes on the outbound side and use a short bungee cord to make sure it stays shut. But, once around the pole, the heart shape keeps it shut. Mine is sized for 3-1/2 inch OD down to 2-1/2 inch OD poles.
They CANNOT be used on push-poles or thinwalled pipe needless to say.

TTUL
Gary

175. Re: A very Popular Misconception

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 16:04:01 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41dc0cea.1755869406@news.galilei.com>
Source record: 84313

Hi Reg

Thanks for the post!

I just wanted to add something that has never made sense to me.

I had a section of ladder line that I affixed to the roof joists under the eaves using thumb tacks. Three of these thumb tacks kept coming out on me, the rest held just fine. It was always the same three.
The last time I used three push-pins with plastic heads and found the heads missing from the push-pins shortly thereafter.
It wasn't until I discovered the puddles of plastic on the ground that I realized that they had melted. Yet the ladder line itself seemed unharmed.
So I picked up a small box of nylon screws at the hobby shop and replaced all of the thumb tack and the three push-pins with these nylon screws.
After doing same, I had to make adjustments to my tuner on a few bands.

After that I never had a problem again!

I never noticed a change in transmission or reception before or after. But feel the RF is what caused these thumbtacks to keep coming out, probably burning the hole in the rafter larger and larger each time and that could be what melted the heads of the push-pins off.

The three thumbtacks that kept coming out were equal distance from each other, about 64 inches apart. There was a thumbtack every 16 inches along the part of the ladder line that ran under the eaves.

TTUL
Gary

176. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 17:17:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bi6ot0dc6jjrpf796d911nacdr4ommc9va@4ax.com>
Source record: 84315

On Wed, 05 Jan 2005 15:48:41 GMT, Gene Fuller <W4SZzzzzzz@att.net>
wrote:

>Richard,
>
>You have significantly misinterpreted the concept incorporated in "State
>Indus., Inc. v. Mor-Flo Indus., Inc".
>
>The issue in this case, and the others that reference it, is the
>question of "willful" infringement. The infringement by itself is not
>the issue.

Hi Gene,

As I pointed out that very term, and it is included in every quote, it
hardly constitutes my having missed the issue. I even commented on
the distinction as it applies to the pursuit of Amateur Radio, in that
our service is in improving design. These Cassandra appeals to the
contrary rather misses the mandate of our privilege.

73's
Richard Clark, KB7QHC

177. Re: discone or scantenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 17:35:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <r28ot0tfjes6tj6lfhn71o9h0g5dguakq8@4ax.com>
Source record: 84316

On Tue, 4 Jan 2005 14:53:35 -0400, "redrum" <ninguna> wrote:

>Which is better?
>
>is scantenna really omnidirectional? is it built for a better reception on
>the most used frequencies or is really multiband?
>
>who sells the better implementation of discone?
>
>my needs on scanning are 25Mhz to 1.3 Ghz.
>
>I own a uniden bc-796d and a bc-246t
>
>Thanks for any help.
>
>Greetings from Chile!

Hello OM,

There are many omnidirectional designs. There are many multi band
designs. There are very few that accomplish both successfully for a
wide variety of signals over a wide variety of frequencies.

Wide band antennas like a Discone are really only useful over roughly
2 or 3 octaves (doublings of the base frequency). They are often
specified by impedance match; and as correct as this specification is,
it is not complete. You also need to consider the angles that it is
most sensitive to. For the first 2 or 3 octaves, this would be toward
the horizon. For the 4th and higher octaves, the most sensitive
regions for listening begin to climb higher into the sky. Who do you
want to listen to? Where are they? This is the meaningful relation
you should seek to optimize.

73's
Richard Clark, KB7QHC

178. Re: A very Popular Misconception

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 18:01:26 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <crha1m$8ok$1@hercules.btinternet.com>
Source record: 84317

"Gary V. Deutschmann, Sr." wrote
> Hi Reg
>
> Thanks for the post!
>
> I just wanted to add something that has never made sense to me.
>
> I had a section of ladder line that I affixed to the roof joists under
> the eaves using thumb tacks. Three of these thumb tacks kept coming
> out on me, the rest held just fine. It was always the same three.
> The last time I used three push-pins with plastic heads and found the
> heads missing from the push-pins shortly thereafter.
> It wasn't until I discovered the puddles of plastic on the ground that
> I realized that they had melted. Yet the ladder line itself seemed
> unharmed.
> So I picked up a small box of nylon screws at the hobby shop and
> replaced all of the thumb tack and the three push-pins with these
> nylon screws.
> After doing same, I had to make adjustments to my tuner on a few
> bands.
>
> After that I never had a problem again!
>
> I never noticed a change in transmission or reception before or after.
> But feel the RF is what caused these thumbtacks to keep coming out,
> probably burning the hole in the rafter larger and larger each time
> and that could be what melted the heads of the push-pins off.
>
> The three thumbtacks that kept coming out were equal distance from
> each other, about 64 inches apart. There was a thumbtack every 16
> inches along the part of the ladder line that ran under the eaves.
>
> TTUL
> Gary

==========

Hi Gary,

Very peculiar. But what it wasn't due to was I-squared R losses in tiny metal objects such as thumb tacks. You were not working in the GHz range.

Always the same set of tacks could have had something to do with voltage standing waves on your most-used favourite band.

The structural material was timber which has a highish dielectric constant and a poor power factor.

A thin insulating material on the metal pins would not make much difference.

Tacks and pins are very small and pointed. The voltage stress would be very high in a very small volume of timber. Arcing could possibly, but need not occur. But only a small amount of energy is needed to take the tacks and timber up to a high enough temperature to dry out the timber, contract the timber, and allow the tacks to fall out under weight of the line and gravity.

And as mentioned in my first message, the poor power factor or resistivity of the timber at HF could have resulted in an impedance match between the timber and line Zo.

You didn't burn the house down because of your gravity-operated safety precaution. ;o)

I would guess you were using more than 100 watts.

Reg, G4FGQ

179. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 19:36:43 UTC
From: dplatt@radagast.org
Message-ID: <10togebr20t81f9@corp.supernews.com>
Source record: 84318

In article <b55nt0hu6c24amh2q07lg40np7telugsn4@4ax.com>,
Richard Clark <kb7qhc@comcast.net> wrote:

>>So by your interpretion of the law, it's ok for anyone to make a copy of
>>a patented item for personal use (which was the original statment)?
>
>Whose making interpretations now? :-)
>The findings already answered the matter with sufficient emphasis as
>to intent. If you cannot distinguish intent, you should seek legal
>counsel.

As I read the findings, they seem to state that one cannot be held culpable of "willful infringement" of a patent if one builds a version of the patented invention *and* makes a good-faith effort to modify it so that it does not actually infringe on the patent claims. If the changes aren't actually sufficient to avoid infringement, the fact that you *tried* to avoid this is enough to keep your infringment from being "willful".

I didn't see anything in the findings which absolves anyone from infringement (willful or otherwise) if one reproduces a patented invention for personal use and does *not* make a good-faith effort to change it to avoid patent infringement.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

180. Re: Very pleased with Hustler 5-BTV - photos

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 19:40:29 UTC
From: Simon Smith <s.Smith@btinternet.com>
Message-ID: <crhfrc$9l7$1@sparta.btinternet.com>
Source record: 84319

Charlie ....
Wonderful Site.
I hope I can get a Hustler and all the Bits and pieces like a tilt over
plate and a plate for the Radials here in the UK ... it looks absolutely
superb.
I,m a new licencee to Ameture Radio and at the point of choosing an antenna
subject to planning permission - this is the one I have chosen.
John in UK..... 73's
M3IIV
"Charlie" <charlie@aol.com> wrote in message
news:CvvCd.13676$6i.5689@bignews6.bellsouth.net...
> I've had my new station on the air now for nearly 2 weeks. The Hustler
> 5-BTV is working really well ground mounted with 72 radials.
> I'm using the DX Engineering stainless steel radial plate and their
> tilt-over mount which is so sweet. Got a couple dozen antenna
> installation photos at this link.
> 1. http://www.ad5th.com/5-BTV.html
>
> 73 / DX
>
> --
>
> Charlie
> Ham Radio - AD5TH
> www.ad5th.com
> Live Blues Music
> www.492acousticblues.com
>
>
>
>
>

181. Re: AM radio reception inside passenger planes?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 19:45:56 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <_N-dnfB8FZVo3kHcRVn-sA@comcast.com>
Source record: 84320
Cross-posted to: rec.travel.air,rec.radio.amateur.antenna,sci.electronics.equipment

"Dave VanHorn" <dvanhorn@dvanhorn.org> wrote in message
news:MtidnfyW_MfQ507cRVn-ow@comcast.com...
> The other devices may have circuits that incidentally radiate a little
> noise in the aircraft VHF band.
> A broadcast FM receiver almost certainly has an oscillator running by
> design, in the band.
> Where it lands in the aircraft band, is determined by where it's tuned to.

Ah... you're thinking... FM broadcast range is 88-108MHz... with a 10.7MHz
IF... a high side LO is at ~98-118MHz, easily landing within the aircraft
band (which is... 108-??? MHz, right?).

182. Re: What's the deal? (was: Re: AM radio reception inside passenger ...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 19:59:13 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <p6Odnf8W_veS2kHcRVn-vw@comcast.com>
Source record: 84321

"Airy R. Bean" <me@privacy.net> wrote in message
news:33kr5fF405qkgU1@individual.net...
> We have to spend so much time during our own time
> in education learning the achievements of past heroes, that
> perhaps when our own time comes, we are intellectually
> exhausted?

Nah, we're all just becoming specialists. Colleges today have their various 'electrical engineering tracks' where you choose between, e.g., power, communications, digital logic, etc. -- I think that change come about some 20? years ago now.

> We can do our bit in the world of Ham Radio by encouraging
> our fellows to dabble in the innards of radios (rather than
> by visiting the local emporium in order to buy a rice box
> and then returning to the emporium when the "snap crackle
> and pop" has gone out of it)

Unfortuately it can be difficult to motivate people to study the innards of radio when you have to explain to them that a modern cell phone has perhaps some 100 man years of engineering work in it -- and that any attempt to apply some of this same technology to amateur radio is going to be met by protest as well!

---Joel Kolstad

183. Re: What's the deal? (was: Re: AM radio reception inside passenger ...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 20:03:37 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <SbGdnSIr6tKK1UHcRVn-jQ@comcast.com>
Source record: 84222

"Ed Price" <edprice@cox.net> wrote in message
news:gAdBd.6143$yW5.2@fed1read02...
> We spend a lot of time now arguing about how well the computer model
> replicates reality, and whether the math has enough variables accounted
> for. Working models seem so old fashioned.

That's because they're so expensive to build. You'd probably never finish designing something like a modern RF IC if all you could do was design it on paper, build it, probe around a little to figure out what it 'really' does, and repeat.

Likewise, few companies can afford to design the autopilot for a jet without a great deal of simulation first. :-)

184. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 20:12:17 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <BSXCd.69494$uM5.2884@bgtnsc05-news.ops.worldnet.att.net>
Source record: 84223

Dave,

With reference to your last sentence:

Did you see anything in the findings which absolves anyone from
infringement (willful or otherwise) if one reproduces a patented
invention for personal use and *does* make a good-faith effort to
change it to avoid patent infringement?

I found nothing that says infringement itself is somehow canceled. Only "willful" infringement is negated. Otherwise virtually all patents would be useless. One could always claim some good-faith attempt to change the patented item.

Again, in practical terms for an individual radio amateur it is unlikely that there will be any *legal* consequence from making a single copy of a patented item for personal use. However, it is still an infringement. The morality is up to the individual.

73,
Gene
W4SZ

Dave Platt wrote:

> As I read the findings, they seem to state that one cannot be held
> culpable of "willful infringement" of a patent if one builds a version
> of the patented invention *and* makes a good-faith effort to modify it
> so that it does not actually infringe on the patent claims. If the
> changes aren't actually sufficient to avoid infringement, the fact
> that you *tried* to avoid this is enough to keep your infringment from
> being "willful".
>
> I didn't see anything in the findings which absolves anyone from
> infringement (willful or otherwise) if one reproduces a patented
> invention for personal use and does *not* make a good-faith effort to
> change it to avoid patent infringement.
>

185. Source tracking with dish antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 20:15:33 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <cdydnYfnJJZ-10HcRVn-vg@comcast.com>
Source record: 84224

Hi guys,

I saw the Australian movie, "The Dish" over the holidays. It's about the Parkes Observatory and the large dish antenna used to relay video, audio, and telemetry feeds from Apollo 11 in 1969 back to NASA.

At one point in the movie, they lose track of where Apollo 11 is and have to scramble to manually point the dish to get a signal again. However, once they DO manage to get a signal, they flip a switch and the dish continues to automatically track Apollo 11.

I'm curious... how is this down? 3 or 4 slightly offset (from the dish's central feedpoint) receivers, the outputs of which are compared to determine which way the transmitting source is 'drifting' (then feed back to the motion control system to move the dish that way)? Or is there a simpler means?

Thanks,
---Joel Kolstad

186. Re: Very pleased with Hustler 5-BTV - photos

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 20:16:19 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10toip3aaqee5c5@news.supernews.com>
Source record: 84225

Thx John and best of DX to you !!!!

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"Simon Smith" <s.Smith@btinternet.com> wrote in message
news:crhfrc$9l7$1@sparta.btinternet.com...
> Charlie ....
> Wonderful Site.
> I hope I can get a Hustler and all the Bits and pieces like a tilt over
> plate and a plate for the Radials here in the UK ... it looks absolutely
> superb.
> I,m a new licencee to Ameture Radio and at the point of choosing an
> antenna subject to planning permission - this is the one I have chosen.
> John in UK..... 73's
> M3IIV
> "Charlie" <charlie@aol.com> wrote in message
> news:CvvCd.13676$6i.5689@bignews6.bellsouth.net...
>> I've had my new station on the air now for nearly 2 weeks. The Hustler
>> 5-BTV is working really well ground mounted with 72 radials.
>> I'm using the DX Engineering stainless steel radial plate and their
>> tilt-over mount which is so sweet. Got a couple dozen antenna
>> installation photos at this link.
>> 1. http://www.ad5th.com/5-BTV.html
>>
>> 73 / DX
>>
>> --
>>
>> Charlie
>> Ham Radio - AD5TH
>> www.ad5th.com
>> Live Blues Music
>> www.492acousticblues.com
>>
>>
>>
>>
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>

>

187. Re: AM radio reception inside passenger planes?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 20:35:03 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <WbYCd.40181$8e5.20740@fed1read07>
Source record: 84226
Cross-posted to: rec.travel.air,rec.radio.amateur.antenna,sci.electronics.equipment

```
"Joel Kolstad" <JKolstad71HatesSpam@Yahoo.Com> wrote in message
news:_N-dnfB8FZVo3kHcRVn-sA@comcast.com...
> "Dave VanHorn" <dvanhorn@dvanhorn.org> wrote in message
> news:MtidnfyW_MfQ507cRVn-ow@comcast.com...
>> The other devices may have circuits that incidentally radiate a little
>> noise in the aircraft VHF band.
>> A broadcast FM receiver almost certainly has an oscillator running by
>> design, in the band.
>> Where it lands in the aircraft band, is determined by where it's tuned
>> to.
>
> Ah... you're thinking... FM broadcast range is 88-108MHz... with a 10.7MHz
> IF... a high side LO is at ~98-118MHz, easily landing within the aircraft
> band (which is... 108-??? MHz, right?).
>
>
>
The original poster is long gone -- refused any info and advice we gave him
including a list of airlines that prohibit AM/FM radios and other devices
And the FAA stance on the matter
Must have been 50+ responses
So I guess we can put this to bed

--
Caveat Lector
```

188. hustler antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 20:45:50 UTC
From: Roger Adam <roger.adam@remove_this.virgin.net>
Message-ID: <2mYCd.525$Mw3.252@newsfe6-gui.ntli.net>
Source record: 84227

Andy,

check out this site, it may you/someone else,

regards

http://www.ad5th.com/5-BTV.html

http://www.ad5th.com/5-BTV.html

I choose Polesoft Lockspam to fight spam, and you?
http://www.polesoft.com/refer.html

189. Re: Source tracking with dish antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 20:50:40 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnctokp0.19n3.bit-bucket@shell.config.com>
Source record: 84228

On Wed, 5 Jan 2005 12:15:33 -0800, Joel Kolstad wrote:
> Hi guys,
>
> I saw the Australian movie, "The Dish" over the holidays. It's about the
> Parkes Observatory and the large dish antenna used to relay video, audio,
> and telemetry feeds from Apollo 11 in 1969 back to NASA.
>
> At one point in the movie, they lose track of where Apollo 11 is and have to
> scramble to manually point the dish to get a signal again. However, once
> they DO manage to get a signal, they flip a switch and the dish continues to
> automatically track Apollo 11.
>
> I'm curious... how is this down?

By counting on the gulibility and limited education of movie audiences. :-)

> 3 or 4 slightly offset (from the dish's
> central feedpoint) receivers, the outputs of which are compared to determine
> which way the transmitting source is 'drifting' (then feed back to the
> motion control system to move the dish that way)? Or is there a simpler
> means?

The way a Hughes Radar system I once worked on did it was to spin the
horn in the dish focal point. The horn was E V E R S O S L I G H T L Y
off center in its axial alignment. The receive signal strength was
constantly compared against a servo feedback from the horn assy. to
determine which way (what angle) the signal source was drifting.

In a system that was polarization sensitive, I guess one could "joggle"
the position of the horn assy. and achieve much the same results.

HNY
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

190. Re: N8WWM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 21:03:58 UTC
From: David Lawson <"David Lawson"@Yahoo.com>
Message-ID: <41dc5249$0$9589$8f2e0ebb@news.shared-secrets.com>
Source record: 84229
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

"Psychiatrist to keyclowns"

Aren't you n8wwm, Psychiatrist to keyclowns?

Magic NetTrace results.
Target :205.162.217.3
Date:1/5/2005

Domain Name: BUCKEYE-EXPRESS.COM

Administrative Contact:
Shryock, Paul (30011447I)
Buckeye Cablevision, Inc.
5566 Southwyck Blvd
Toledo, OH 43614-1576
US
(419) 724-9802 fax: (419) 724-7074

191. Re: N8WWM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 21:06:52 UTC
From: David Lawson <"David Lawson"@Yahoo.com>
Message-ID: <41dc52f7$0$14548$8f2e0ebb@news.shared-secrets.com>
Source record: 84230
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

"Psychiatrist to keyclowns"

Aren't you n8wwm, "Psychiatrist to keyclowns"?

Magic NetTrace results.
Target :205.162.217.3
Date:1/5/2005

Domain Name: BUCKEYE-EXPRESS.COM

Administrative Contact:
Shryock, Paul (30011447I)
Buckeye Cablevision, Inc.
5566 Southwyck Blvd
Toledo, OH 43614-1576
US
(419) 724-9802 fax: (419) 724-7074

192. Re: --------GET A LIFE, DOUGAY... YOU AKC's ARE NITWITS---------

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 21:10:03 UTC
From: David Lawson <"David Lawson"@Yahoo.com>
Message-ID: <41dc53b7$0$14514$8f2e0ebb@news.shared-secrets.com>
Source record: 84231
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

"Psychiatrist to keyclowns"

Aren't you n8wwm, "Psychiatrist to keyclowns"?

Magic NetTrace results.
Target :205.162.217.3
Date:1/5/2005

Domain Name: BUCKEYE-EXPRESS.COM

Administrative Contact:
Shryock, Paul (30011447I)
Buckeye Cablevision, Inc.
5566 Southwyck Blvd
Toledo, OH 43614-1576
US
(419) 724-9802 fax: (419) 724-7074

193. HF antenna and Power line ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 21:14:45 UTC
From: Thierry <"See LUXORION website">
Message-ID: <41dc58c6@news.vo.lu>
Source record: 84232

Hi,

With a friend we have to install a beam near a HV Power line (we ignore its power) located 300 m from the QTH.

Has someone among you a chart or table listing the EM field and Electric field of various HV power lines ?
I know that a HV power line (I don't know its power) displays e.g. an EF of 10 kV/m and an EM flux density of 10 microT.
and that the field decreases like 1/r^2 and that there is a epidemiological risk from 2 miligauss.
I also know that the administation denies any construction in the 50m around such HV line due to the risk for the health
But these are all data I have. Not enough to appreciate to risk of this specific installation.

My questions are :
- Is there a risk that this HV power line disturbs DX QSOs in HF bands (and QSO in VHF, but here I doubt much)
- What is the risk for the health at such a distance according to the voltage ?

Thanks in advance

Thierry, ON4SKY
http://www.astrosurf.com/lombry

194. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 21:30:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vmlot0dcpff0r064uh2jtd1tugtugjgs4e@4ax.com>
Source record: 84233

On Wed, 05 Jan 2005 20:12:17 GMT, Gene Fuller <W4SZzzzzzz@att.net>
wrote:

>Did you see anything in the findings which absolves anyone from
>infringement (willful or otherwise) if one reproduces a patented
>invention for personal use and *does* make a good-faith effort to
>change it to avoid patent infringement?
>
Hi Gene,

"Patent law encourages competitors to design or invent around
existing patents." See, WMS Gaming, Inc., 51 U.S.P.Q2d at 1396
(Fed. Cir. 1999). Thus, a good faith attempt to design around the
patent will generally negate a charge of willful infringement,
particularly if advice of counsel is sought during the design
process. See, Braun, Inc. v. Dynamics Corp. of Am., 975 F.2d 815,
823 (Fed. Cir. 1992); Read, 970 F.2d at 828 (Fed. Cir. 1992).
Indeed, even in the absence of advice of counsel, a sincere
attempt to design around the patent may negate willfulness. See,
Rolls-Royce Ltd. v. GTE Valeron Corp., 800 F.2d 1101, 1109-1110
(Fed. Cir. 1986).

>I found nothing that says infringement itself is somehow canceled. Only
>"willful" infringement is negated.

Common infringement cases, as they occur, are ruled upon their merits.

>Otherwise virtually all patents would
>be useless. One could always claim some good-faith attempt to change the
>patented item.

This marks the issue of protection offered, but NOT GUARANTEED. And
again, if it goes to court, it will invariably be between
manufacturers (or the patent holder and a manufacturer). The courts
are quite competent to smoke out the rats.

There is a special case whereby a manufacturer (or anyone for that
matter) CAN build and SELL a patented item irrespective of the patent
holder's wish IFF such a product was available before the issuance of
the patent, and the manufacturer does not diverge from that prior
issue design. This, in itself, proves the poor quality of
bureaucratic interpretations of the law that tar the subject with a
large brush.

73's
Richard Clark, KB7QHC

195. Re: N8WWM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 22:05:26 UTC
From: David Lawson <"David Lawson"@Yahoo.com>
Message-ID: <41dc60b1$0$14469$8f2e0ebb@news.shared-secrets.com>
Source record: 84234
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

"Psychiatrist to keyclowns" <keyklonzrnutjobs@yahoo.com> wrote in message
news:1104505115.301150.163660@z14g2000cwz.googlegroups.com...
> Stick a rubber tube in your ass, suck on the other end, and disappear,
> gayboy.
>
Aren't you n8wwm, "Psychiatrist to keyclowns"?

Magic NetTrace results.
Target :205.162.217.3
Date:1/5/2005

Domain Name: BUCKEYE-EXPRESS.COM

Administrative Contact:
Shryock, Paul (30011447I)
Buckeye Cablevision, Inc.
5566 Southwyck Blvd
Toledo, OH 43614-1576
US
(419) 724-9802 fax: (419) 724-7074

196. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 22:07:16 UTC
From: dplatt@radagast.org
Message-ID: <10top8kfavr0k69@corp.supernews.com>
Source record: 84235

>>Did you see anything in the findings which absolves anyone from
>>infringement (willful or otherwise) if one reproduces a patented
>>invention for personal use and *does* make a good-faith effort to
>>change it to avoid patent infringement?
>>
>Hi Gene,
>
> "Patent law encourages competitors to design or invent around
> existing patents." See, WMS Gaming, Inc., 51 U.S.P.Q2d at 1396
> (Fed. Cir. 1999). Thus, a good faith attempt to design around the
> patent will generally negate a charge of willful infringement,
> particularly if advice of counsel is sought during the design
> process. See, Braun, Inc. v. Dynamics Corp. of Am., 975 F.2d 815,
> 823 (Fed. Cir. 1992); Read, 970 F.2d at 828 (Fed. Cir. 1992).
> Indeed, even in the absence of advice of counsel, a sincere
> attempt to design around the patent may negate willfulness. See,
> Rolls-Royce Ltd. v. GTE Valeron Corp., 800 F.2d 1101, 1109-1110
> (Fed. Cir. 1986).

As I understand the situation from my reading (and I am by no means a lawyer, hence my understanding bears no legal weight at all), there are two issues involved:

[1] Does it infringe? Are you, in fact, actually reproducing an invention which is patented?

If you are, then you can be subject to penalties (e.g. the original manufacturer's loss of profits due to the infringement), and/or become the subject of a court judgement which forbids you to continue manufacturing the infringed invention.

[2] Was the infringement "willful"? Was it a knowing and deliberate infringment?

If so, the court can increase the amount of damages awarded to the inventor(s), up to the point of treble damages.

As I read the rulings cited above, they have to do with the issue of whether an infringement is willful (and thus subject to increased damage awards) if the infringer had made a good-faith effort to "design around" the patent. The rulings above, as summarized, don't seem to deal with whether *infringement* itself occurred... only whether the infringement was *willful*.

So - if you start out in an attempt to "design around" someone else's patent (creating a similar invention which does not actually

infringe), and you use good faith in this attempt (which would
probably mean a competent engineering approach, plus advice from
competent counsel), and you think you've modified the invention
enough to avoid infringing, and a court rules otherwise, then:

- You'd still be infringing, and
- The court would probably rule that your infringement was not willful,
and would decline to levy any increased penalties.

http://www.mmmlaw.com/articles/article_234.pdf describes one such
case... Polaroid vs. Kodak.

>>Otherwise virtually all patents would
>>be useless. One could always claim some good-faith attempt to change the
>>patented item.

>This marks the issue of protection offered, but NOT GUARANTEED. And
>again, if it goes to court, it will invariably be between
>manufacturers (or the patent holder and a manufacturer). The courts
>are quite competent to smoke out the rats.

Very probably.

Oh... back on the original question of "building for personal use."
It appears that this question depends on where you are. The U.S.
doesn't have a "for personal use" exemption, but it seems that most
E.U. countries do, and that in these countries a patent infringement
doesn't exist unless the infringing products are actually being
offered for sale. Quite a sensible approach, I think.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

197. Re: Very pleased with Hustler 5-BTV - photos

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 22:54:26 UTC
From: Rob <roblitespeed@hotmail.com>
Message-ID: <Ce_Cd.12548$iC4.7784@newssvr30.news.prodigy.com>
Source record: 84236

"Charlie" <charlie@earthlink.com> wrote in message
news:10toip3aaqee5c5@news.supernews.com...
> Thx John and best of DX to you !!!!
>
> --
>
> Charlie
> Ham Radio - AD5TH
> www.ad5th.com
> Live Blues Music
> www.492acousticblues.com

Hi Charlie,
Great set up on the 5-BTV, I have the same antenna, but roof mounted. How does it do on DX, have you had a chance to work with it much? I've had fair success but am not completely satisfied. I think I need more radials (20 right now). I have a fan dipole set up for 20, 17, 15 and 10 meters and switch back and forth between them. Sometimes they seem about the same and other times one will be much better than the other. I've got a lot to learn about antennas. Congratulations on upgrading to Extra, I'm AD5SM just 21 letters ahead of you. I upgraded in October, so you must have upgraded very recently. Hope to work you on the air someday.
Rob

198. Re: Hustler 5-BTV vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-05 23:27:52 UTC
From: w9gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <bcKdnb6hlo5n6kHcRVn-uw@comcast.com>
Source record: 84237

"Roger Adam" <roger.adam@remove_this.virgin.net> wrote in message
news:2mYCd.525$Mw3.252@newsfe6-gui.ntli.net...
> Andy,
>
> Check out this site, it may you/someone else,
>
> Regards
>
> http://www.ad5th.com/5-BTV.html>
> AD5TH

Roger,

Since you selected the Hustler 75 meter Super Resonator to make your Hustler 4-BTV into a 5-BTV model, I would add guys (as recommended in the Hustler installation manual) due to the weight at top and overall length of antenna. 3 or 4 guy wires should work well.

Greg
w9gb

199. TS-850S Auto Tuner capability?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 00:00:26 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <xc%Cd.14977$ph.7357@okepread01>
Source record: 84238

My primary HF antenna is a trap 80/160 meter dipole.
It works good for those bands with no need for a tuner.

I'm shopping for a new HF rig, a TS-850SAT and I was
wondering how good the built in tuner would work with
the 80/160 antenna on higher bands, mainly 40/30/20m.

Anyone know?

Ken KG0WX

200. Re: Very pleased with Hustler 5-BTV - photos

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 00:05:53 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10tp07kh3c0hp3f@news.supernews.com>
Source record: 84239

Hi Rob,
As far as DX goes I keep my DX Logbook online at www.ad5th.com/logbook.html
I have been having a ball working DX on 75M at night. No..I did not
recently upgrade to Extra. I got my No-Code Tech in May 1995 and upgraded to
Extra in November 1995 so I have been an Extra over 9 years. I did recently
move to 5 land and so when I updated FCC I asked for a 5 land call.

Thanks for your remarks and I hope to catch you on the bands

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"Rob" <roblitespeed@hotmail.com> wrote in message
news:Ce_Cd.12548$iC4.7784@newssvr30.news.prodigy.com...
>
> "Charlie" <charlie@earthlink.com> wrote in message
> news:10toip3aaqee5c5@news.supernews.com...
>> Thx John and best of DX to you !!!!
>>
>> --
>>
>> Charlie
>> Ham Radio - AD5TH
>> www.ad5th.com
>> Live Blues Music
>> www.492acousticblues.com
>
> Hi Charlie,
> Great set up on the 5-BTV, I have the same antenna, but roof mounted. How
> does it do on DX, have you had a chance to work with it much? I've had
> fair
> success but am not completely satisfied. I think I need more radials (20
> right now). I have a fan dipole set up for 20, 17, 15 and 10 meters and
> switch back and forth between them. Sometimes they seem about the same
> and
> other times one will be much better than the other. I've got a lot to
> learn
> about antennas. Congratulations on upgrading to Extra, I'm AD5SM just 21
> letters ahead of you. I upgraded in October, so you must have upgraded
> very

> recently. Hope to work you on the air someday.
> Rob
>
>

201. Re: Very pleased with Hustler 5-BTV - photos

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 00:33:08 UTC
From: Rob <roblitespeed@hotmail.com>
Message-ID: <8H%Cd.12622$iC4.3995@newssvr30.news.prodigy.com>
Source record: 84240

"Charlie" <charlie@earthlink.com> wrote in message
news:10tp07kh3c0hp3f@news.supernews.com...
> Hi Rob,
> As far as DX goes I keep my DX Logbook online at
www.ad5th.com/logbook.html
> I have been having a ball working DX on 75M at night. No..I did not
> recently upgrade to Extra. I got my No-Code Tech in May 1995 and upgraded
to
> Extra in November 1995 so I have been an Extra over 9 years. I did
recently
> move to 5 land and so when I updated FCC I asked for a 5 land call.
>
> Thanks for your remarks and I hope to catch you on the bands
>
> --
>
> Charlie
> Ham Radio - AD5TH
> www.ad5th.com
> Live Blues Music
> www.492acousticblues.com

Sorry for assuming you were a new Extra. I'll take a look at your log.
Welcome to 5 land. :-)
Rob

202. Re: Source tracking with dish antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 00:39:40 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <es1pt0h1jnjtgt7c0d4q28pfpdidi82m11@4ax.com>
Source record: 84241

On Wed, 5 Jan 2005 12:15:33 -0800, "Joel Kolstad"
<JKolstad71HatesSpam@Yahoo.Com> wrote:

>I'm curious... how is this down?

Hi Joel,

This may not answer your question, but you can always contact the
author of:

>To: "Richard Clark" <kb7qhc@home.com>
>Subject: RE: The Dish
>From: "Gary Peach" <xcg34@dial.pipex.com>
>Date: Thu, 12 Apr 2001 08:42:21 +0100
>
>> Subject: The Dish
>>
>> Something that I've wanted to ask, and it relates to the subject line.
>>
>> "The Dish" is a movie about a NASA communications link in Australia.
>> I remember your file you sent me about calibrating S-Meters (something
>> I still consider and ruminate on, it was excellent writing). However,
>> that file is on another machine and my recollection insists that you
>> might be a participant in the story that is being told in this movie.
>
>I did go up to Parkes before the Mission. Parkes is 50Hz and the Resdel
>Receivers were 60 Hz. Thus a standards converter was necessary. The Yanks
>supplied a fancy crystal controlled box of tricks about a metre cube. This
>unit was distinctly unreliable and overly complex for the task which would
>be more reliably done by having a 50 Hz motor connected to a generator
>through a belt drive system with pulleys whose diameter were in the ratio
>5/6 . This type of device could be duplicated easily so as to have a stand
>by unit and the technology within the skills of the local electrician to
>fix. More in a moment about what eventually happened.
>
>
>> You may wonder about this all. "The Dish" has just been released, so
>> you may be unaware of the plot line (which I cut and paste from the
>> net):
>>
>> Synopsis: On July 20, 1969, six hundred million people sat glued to
>> their televisions for man's first steps on the moon. It is an image
>> permanently ingrained in our collective consciousness, but one that
>> almost didn't make it to the airwaves. Based on true-life events, The
>> Dish is a waggish homage to the small-town heroes responsible for a

>> historically almost calamitous blunder. Outside the small, sleepy town
>> of Parkes, a team of laid-back astro-technicians led by project
>> director Cliff Buxton and NASA agent Al Burnett ready the Southern
>> Hemisphere's largest satellite dish to transmit the historic
>> broadcast. But amidst a swirling media frenzy and overly effusive
>> civic pride, things start to go awry; the team has lost the signal and
>> must scramble to find the astronauts before NASA discovers their
>> grievous error.. And you thought Sydney 2000 was the first time we
>> showed the world!
>
>I sent this on to the two guys detached from Tidbinbilla to Parkes for the
>actual Mission. Both close friends. The man in charge was so upset that he
>refuses to discuss the issue. I know him to be a fine Technician, and the
>other guy is similarly trained. Both EX RAF Radio and RADAR trades, so not
>only good technically, (they really trained us in those days), (Now they do
>not train the technical people further than board jockeys and the training
>facility at RAF Cosford is run as a private college and personnel may take
>courses to any level including degree level. Private persons may attend the
>college and many overseas persons now attend, (As did foreign military
>personnel attend or training facilities back in the 50s)
>The guy in charge had completed a number of years as a senior instructor
>with the RAF. When I forwarded this bit of nonsense to him he was indignant
>about it and said that what he'd heard of the film had made him sick and he
>refused to see it.
>Some how or other they had got the power monster going buy substituting
>transistors of a beefier type in the power output stages. As far as they
>have said it performed well.
>Of course Parkes did not have a MASER so their system temperatures could not
>approach those that we had at Tidbinbilla, we were therefore Prime at
>Tidbinbilla and Parkes despite its much larger Dish at that time it was only
>back up.
> The famous moon landing was handled at Tidbinbilla because of our superior
>technical performance. superior for two main reasons, 1. we had a MASER
>which permitted us a system temperature of 40ï¿½K and 2. I had tuned the
>waveguide distribution system to very fine standards such that we could
>switch between two high power transmitter (20 kW) in less than 3 seconds. In
>fact I used to do it at the touch of a button The huge waveguide switches
>have to have a finite time to change over as the stored mechanical energy in
>the rotors is so great that if the time taken to switch is reduced (without
>my modification) the switches after a few operations would tear themselves
>to pieces. If you take a butcher's at my Web page you will see a picture of
>me working on my home brew Waveguide reflectometer that permitted me to tune
>the wave guide over the entire bandwidth of interest (2,110 - 2,295 MHz) The
>lower frequency is the up link and the higher is the downlink. Of course
>diplexers and filters are used as the signal is a phase modulated carrier
>therefore CW full power at all times. It is not a practical measure to work
>simplex to a spacecraft that might be changing attitude quite violently and
>at a distance from Earth such that even at the speed of light the signal
>takes 20 Minutes to do the round trip when out at Mars distances. Even to
>the moon a 3 sec delay is incurred.

>
>Anyway enough of my digression "The Dish" is a pure fiction, and both of my
>friends consider it an insult.
>As I was at Tidbinbilla and apart from some sabotage three days before
>launch which made the front page of Newspapers around the world we performed
>to specification without a hitch.
>The power supply problem was the three phase input to the power supply for
>one of the klystrons. The grub screws to all three cables in the circuit
>breaker bringing in the 60 Hz power that we generated on site with huge mega
>watt Caterpillar generators. The cable connections arced and vaporised the
>circuit breaker and the arc continued from the remaining wires and the
>intense heat melted a hole about 18" diameter through the 3/16" steel
>casing. Teams of our volunteer technicians worked night and day in shifts
>non stop to rebuild the very complex power supply. The vaporised circuit
>breaker had coated the surfaces of all components with a carbon layer. With
>45 kV plus floating around at several amps that is not a good situation.
>However the work was completed on time and I was able to hear Neil Armstrong
>use my words, "One small step...", a few days later.
>
>PS Sorry for the delay, I bin a bit under the weather and I wanted my
>friends reactions before I made any comment, as Apart from the Power
>converter week up there I really had nothing to do with the operational side
>of Parkes. I did meet the famous astronomer Bart Bok. When we arrived there
>was a doubtful looking character up in the dish surface dressed in shorts
>and an open brown shop coat. In his hand a bucket of tar and in the other a
>scrubby little brush. He was up doing some repairs. As our car pulled
>alongside the Dish he came down and I taking him for a labourer asked him
>where we could find the person in charge. He was a very kid and approachable
>person. Later he took me on a guided tour of the structure and I was most
>impressed. That was a goodish week up in Parkes and the locals were very
>hospitable. I guess for much of the week I was inebriated in the evenings.
>And mainly entertained in private homes of the local aristorinocracy. But
>that is quite another story:)
>--
>73 de Gary7SLL
>NEWBURY IO91ij
>RAFARS 2757

73's
Richard Clark, KB7QHC

203. Re: What's the deal? (was: Re: AM radio reception inside passenger ...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 00:42:40 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <512pt0187f98bbfof0fj2njl5k36jmvajs@4ax.com>
Source record: 84242

On Wed, 5 Jan 2005 12:03:37 -0800, "Joel Kolstad"
<JKolstad71HatesSpam@Yahoo.Com> wrote:

>"Ed Price" <edprice@cox.net> wrote in message
>news:gAdBd.6143$yW5.2@fed1read02...
>> We spend a lot of time now arguing about how well the computer model
>> replicates reality, and whether the math has enough variables accounted
>> for. Working models seem so old fashioned.
>
>That's because they're so expensive to build. You'd probably never finish
>designing something like a modern RF IC if all you could do was design it on
>paper, build it, probe around a little to figure out what it 'really' does,
>and repeat.
>
>Likewise, few companies can afford to design the autopilot for a jet without
>a great deal of simulation first. :-)
>

Hi Guys,

Back when I designed the UFDR for the 757/767, they were the first
airplanes designed entirely in software (conventional drafting went
the way of the Dodo). Today's 7E7 was entirely modeled in software if
I'm not mistaken.

73's
Richard Clark, KB7QHC

204. Re: HF antenna and Power line ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 00:48:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nf2pt0tt7nebjau7i364u7q8octb21j9mm@4ax.com>
Source record: 84243

On Wed, 5 Jan 2005 22:14:45 +0100, "Thierry" <See LUXORION website>
wrote:

>With a friend we have to install a beam near a HV Power line (we ignore its
>power) located 300 m from the QTH.

Hi Thierry,

It never bothered me or my buddies.

73's
Richard Clark, KB7QHC

205. Re: Center Fed " Zepp " with Coaxial Balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 00:57:56 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <1104973076.512961.283040@f14g2000cwb.googlegroups.com>
Source record: 84244

Gary wrote:
> Thanks Gary. I hadn't heard of a "center fed Zepp" before either and
> your description of them being end fed and hanging down from airships
> of WW2 correlates with what I'd heard.

The Zepp is an end-fed 1/2WL antenna. The Double Zepp is a center-fed
one wavelength antenna. An Extended Zepp is a 5/8WL end fed antenna. An
Extended Double Zepp is a 10/8WL center-fed antenna.
--
73, Cecil http://www.qsl.net/w5dxp

206. EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 01:07:51 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <1104973671.404637.15500@z14g2000cwz.googlegroups.com>
Source record: 84245

Slightly off topic - I've seen a couple of new automobiles with
time-multiplexed LED taillights. What would be the advantage of such a
design in an automobile?
--
73, Cecil, W5DXP

207. Re: HF antenna and Power line ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 01:13:50 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <1104974030.856256.39750@z14g2000cwz.googlegroups.com>
Source record: 84246

Thierry wrote:
> Is there a risk that this HV power line disturbs DX QSOs in HF bands
...

At my QTH, the power lines render a vertical virtually useless. I
suspect it is the vertical ground wire on a pole-mounted capacitor that
is the culprit as it is close to 1/4WL on 40m.
--
73, Cecil http://www.qsl.net/w5dxp

208. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 01:15:42 UTC
From: TimPerry <timperry@noaspamadelphia.net>
Message-ID: <4s2dnT58Hp7bDEHcRVn-iQ@adelphia.com>
Source record: 84247

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:1104973671.404637.15500@z14g2000cwz.googlegroups.com...
> Slightly off topic - I've seen a couple of new automobiles with
> time-multiplexed LED taillights. What would be the advantage of such a
> design in an automobile?
> --
> 73, Cecil, W5DXP
>

longer mean time between failure?

209. Re: N8WWM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 01:18:05 UTC
From: Psychiatrist to keyclowns <keyklonzrnutjobs@yahoo.com>
Message-ID: <1104974285.792275.57200@z14g2000cwz.googlegroups.com>
Source record: 84248
Cross-posted to: rec.radio.cb, rec.radio.amateur.antenna, alt.ham-radio.vhf-uhf

Arent you Jane Gayer?

210. Re: Source tracking with dish antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 01:31:59 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <41dc98cd_1@news1.prserv.net>
Source record: 84249

Joel:

Go look up a tutorial on monopulse radar. It should include the methodology for deriving tracking information from the
signal phase and amplitude at the horn(s) or other antenna at the focus. I would try to explain it, but every time I do
I get something wrong.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Joel Kolstad" <JKolstad71HatesSpam@Yahoo.Com> wrote in message
news:cdydnYfnJJZ-10HcRVn-vg@comcast.com...
> Hi guys,
>
> I saw the Australian movie, "The Dish" over the holidays. It's about the
> Parkes Observatory and the large dish antenna used to relay video, audio,
> and telemetry feeds from Apollo 11 in 1969 back to NASA.
>
> At one point in the movie, they lose track of where Apollo 11 is and have to
> scramble to manually point the dish to get a signal again. However, once
> they DO manage to get a signal, they flip a switch and the dish continues to
> automatically track Apollo 11.
>
> I'm curious... how is this down? 3 or 4 slightly offset (from the dish's
> central feedpoint) receivers, the outputs of which are compared to determine
> which way the transmitting source is 'drifting' (then feed back to the
> motion control system to move the dish that way)? Or is there a simpler
> means?
>
> Thanks,
> ---Joel Kolstad
>
>

211. tower update

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 03:52:31 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10tpdfvjjq0l3e7@corp.supernews.com>
Source record: 84250

Hi gang
I've been trading insults with many of you for more than a few years and I value you all, even Cecil.
Us Teasips need Aggies, and they need us, they just won't admit it.

Last week I dug the hole for the tower I promised myself 42 years ago.

Monday the backhoe truck broke down.

Tuesday another backhoe showed up but the operator didn't have the key.

Wednesday the hole got dug. It turned out a bit big, but you can't have too much concrete.
-It's a 48' Trylon self-supporting tower.

Thursday I waited all day.

Friday afternoon, after waiting all day Thursday, the rebar and tower base were installed and welded together.
-The tower base was plumbed with a laser transit.

Monday, 7AM, poured the concrete, done by noon.

After the two week cure, the crane comes.

More then.
73
H.

212. Re: Source tracking with dish antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 04:33:08 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <4lrua2-0nd.ln1@p400bob.lse.com.au>
Source record: 84255

I would suspect that once the signal is found, good old well defined
celestial/orbital mechanics takes over. Even good quality optical
telescopes have a drive that keeps the instrument pointed in the right
direction.

Of course the moon travels on its own orbit buts its path would also be
well known.

Cheers Bob VK2YQA
(Who has been into the Parkes Radiotelescope numerous times)

Joel Kolstad wrote:
> Hi guys,
>
> I saw the Australian movie, "The Dish" over the holidays. It's about the
> Parkes Observatory and the large dish antenna used to relay video, audio,
> and telemetry feeds from Apollo 11 in 1969 back to NASA.
>
> At one point in the movie, they lose track of where Apollo 11 is and have to
> scramble to manually point the dish to get a signal again. However, once
> they DO manage to get a signal, they flip a switch and the dish continues to
> automatically track Apollo 11.
>
> I'm curious... how is this down? 3 or 4 slightly offset (from the dish's
> central feedpoint) receivers, the outputs of which are compared to determine
> which way the transmitting source is 'drifting' (then feed back to the
> motion control system to move the dish that way)? Or is there a simpler
> means?
>
> Thanks,
> ---Joel Kolstad
>
>

213. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 04:40:48 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <1104986448.421706.13450@c13g2000cwb.googlegroups.com>
Source record: 84251

TimPerry wrote:
> "Cecil Moore" <w5dxp@hotmail.com> wrote:
> > Slightly off topic - I've seen a couple of new automobiles with
> > time-multiplexed LED taillights. What would be the advantage of
> > such a design in an automobile?

> longer mean time between failure?

Does a time-multiplexed LED have a longer MTBF than a constant current
LED?
--
73, Cecil, W5DXP

214. PERSONAL SEXUAL SATISFACTION IS AMAZING !!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 04:43:13 UTC
From: cuttiger3@yahoo.com
Message-ID: <1104986593.605340.298860@z14g2000cwz.googlegroups.com>
Source record: 84252

AND WE HAVE EVERYTHING YOU WOULD NEED TO FULFILL THAT FANTASY OF YOURS,
EITHER WITH A PARTNER, A GROUP OR BY YOURSELF. BEST SELECTION AND
DISCREET.
JUST CHECK IT OUT IT'S WORTH IT.
http://www.sinbuffet.com/index.html

215. PERSONAL SEXUAL SATISFACTION IS AMAZING !!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 04:43:17 UTC
From: cuttiger3@yahoo.com
Message-ID: <1104986597.656029.23820@c13g2000cwb.googlegroups.com>
Source record: 84253

AND WE HAVE EVERYTHING YOU WOULD NEED TO FULFILL THAT FANTASY OF YOURS,
EITHER WITH A PARTNER, A GROUP OR BY YOURSELF. BEST SELECTION AND
DISCREET.
JUST CHECK IT OUT IT'S WORTH IT.
http://www.sinbuffet.com/index.html

216. Re: tower update

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 04:46:14 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <1104986774.808532.262390@f14g2000cwb.googlegroups.com>
Source record: 84254

H. Adam Stevens, NQ5H wrote:
> Us Teasips need Aggies, and they need us, they just won't admit it.

Did you know, when I was at Texas A&M in the 50's, Texas University was
a branch of the Texas A&M system?
--
73, Cecil, W5DXP

217. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 05:29:00 UTC
From: TimPerry <timperry@noaspamadelphia.net>
Message-ID: <qpOdnbVmitg3UUHcRVn-sA@adelphia.com>
Source record: 84256

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:1104986448.421706.13450@c13g2000cwb.googlegroups.com...
> TimPerry wrote:
> > "Cecil Moore" <w5dxp@hotmail.com> wrote:
> > > Slightly off topic - I've seen a couple of new automobiles with
> > > time-multiplexed LED taillights. What would be the advantage of
> > > such a design in an automobile?
>
> > longer mean time between failure?
>
> Does a time-multiplexed LED have a longer MTBF than a constant current
> LED?
> --
> 73, Cecil, W5DXP
>

longer then an incadecent lamp at any rate

218. Re: tower update

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 05:55:16 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <mkkpt0579v82k2kcifmkv3hvp24b6tgk66@4ax.com>
Source record: 84257

On Wed, 5 Jan 2005 21:52:31 -0600, "H. Adam Stevens, NQ5H"
<NQ5H@ARRL.net> wrote:

|Hi gang
|I've been trading insults with many of you for more than a few years and I
|value you all, even Cecil.
|Us Teasips need Aggies, and they need us, they just won't admit it.
|
|Last week I dug the hole for the tower I promised myself 42 years ago.
|
|Monday the backhoe truck broke down.
|
|Tuesday another backhoe showed up but the operator didn't have the key.
|
|Wednesday the hole got dug. It turned out a bit big, but you can't have too
|much concrete.
|-It's a 48' Trylon self-supporting tower.
|
|Thursday I waited all day.
|
|Friday afternoon, after waiting all day Thursday, the rebar and tower base
|were installed and welded together.
|-The tower base was plumbed with a laser transit.
|
|Monday, 7AM, poured the concrete, done by noon.
|
|After the two week cure, the crane comes.
|
|More then.
|73
|H.
|

You welded the rebar???

219. Re: tower update

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 06:13:58 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10tplp5rtm3a63b@corp.supernews.com>
Source record: 84258

"Wes Stewart" <n7ws_@_yahoo.com> wrote in message
news:mkkpt0579v82k2kcifmkv3hvp24b6tgk66@4ax.com...
> On Wed, 5 Jan 2005 21:52:31 -0600, "H. Adam Stevens, NQ5H"
> <NQ5H@ARRL.net> wrote:
>
> |Hi gang
> |I've been trading insults with many of you for more than a few years and
> I
> |value you all, even Cecil.
> |Us Teasips need Aggies, and they need us, they just won't admit it.
> |
> |Last week I dug the hole for the tower I promised myself 42 years ago.
> |
> |Monday the backhoe truck broke down.
> |
> |Tuesday another backhoe showed up but the operator didn't have the key.
> |
> |Wednesday the hole got dug. It turned out a bit big, but you can't have
> too
> |much concrete.
> |-It's a 48' Trylon self-supporting tower.
> |
> |Thursday I waited all day.
> |
> |Friday afternoon, after waiting all day Thursday, the rebar and tower
> base
> |were installed and welded together.
> |-The tower base was plumbed with a laser transit.
> |
> |Monday, 7AM, poured the concrete, done by noon.
> |
> |After the two week cure, the crane comes.
> |
> |More then.
> |73
> |H.
> |
>
> You welded the rebar???
>

Some, not all.
Electrically desirable, but the main concern was making the base stable
during the pour.

Now I'm sinking an array of ground rods.

These guys build power lines, for God's sake, they're moonlighting.

Ever see how many frickin' towers power line engineers build?

Get a life.

This is a child's fantasy that's come to fruition after 42 years.

And if I save one sailor's life on the Maritime Net it's worth it all.

73

H.

Check in to the Spiderwebnet Mornings 14.347.

220. Re: discone or scantenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 06:24:05 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns95D5E3E783156spectrumhogstarbandn@207.106.92.175>
Source record: 84259

Can't say which is better.... but I've always been happy with the Diamond D130J discone antenna. It might be your best choice if you really want to put your scanner frequency range to full use.

sample info can be found at: http://www.grove-ent.com/ANT9.html

Ed K7AAT

221. Re: discone or scantenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 06:51:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <c7npt0d5k89q4e55650pde4fprrumif8et@4ax.com>
Source record: 84260

On Thu, 06 Jan 2005 06:24:05 GMT, Ed
<Huckleberry_REMOVE_@bigvalley.net> wrote:
> sample info can be found at: http://www.grove-ent.com/ANT9.html

This is a case in point of specs-manship:
>Designed for use with wide-frequency coverage VHF/UHF scanners
>and receivers, the Diamond D130J Discone consists of 16 rugged,
>stainless steel elements and is capable of transmitting up to 200
>watts in the amateur 50, 144, 220, 432, 900, and 1200 MHz bands.
>
>As a receiving antenna, the D130J is omni-directional for continuous
> 25-1000 MHz (and above) coverage. A base-loaded, vertical top
>element is used as a low band (30-50 MHz) frequency extender.

In the 1200 MHz band (to which it will faithfully match), this antenna
is going on 4 or 5 wavelengths tall. This gives it strong gain -
STRAIGHT UP. If you want to work satellites overhead, great; if you
want to work a signal across town, deaf.

73's
Richard Clark, KB7QHC

222. NEW RADIO HOBBY FOR 2005

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 07:26:02 UTC
From: dx440@webtv.net
Message-ID: <20650-41DCE80A-653@storefull-3277.bay.webtv.net>
Source record: 84261

10 METER FREE BAND IS HOTTER THAN EVER SO PASS IT OWN

223. Re: Source tracking with dish antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 07:37:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10tpu6elu6cvafa@corp.supernews.com>
Source record: 84262

Is that the dish that's northwest of Sydney, oh, a couple hundred miles or so? About 20 years ago I snapped a picture of a very impressive dish from a helicopter I was riding between Sydney and Charleville (west of Brisbane, in Qld.) Never knew what it was for, but sure looks like a radiotelescope.

Roy Lewallen, W7EL

Bob Bob wrote:
> I would suspect that once the signal is found, good old well defined
> celestial/orbital mechanics takes over. Even good quality optical
> telescopes have a drive that keeps the instrument pointed in the right
> direction.
>
> Of course the moon travels on its own orbit buts its path would also be
> well known.
>
>
> Cheers Bob VK2YQA
> (Who has been into the Parkes Radiotelescope numerous times)

224. Re: Source tracking with dish antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 09:26:54 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <vrcva2-dvg.ln1@p400bob.lse.com.au>
Source record: 84264

Hi Roy

Yep that was probably it. It is some way north out of Parkes near a
place called Alectown.

If you go to http://topoweb.lpi.nsw.gov.au/run.htm and zoom up on about
148.2639E 32.9975S, thats where the dish is. Its about 300km WNW of
Sydney so it isnt exactly in line with a trip to Charleville.

There is a smaller comms dish in a place called Moree. About 400km NNW
of Sydney. Nowhere near as big as Parkes tho. I think the only other big
dishes are south of Canberra. There is however one or two Mills Cross
arrays out there but they of course arent disk shaped!

Amd there is another dish array (6 of 22m dia) at a place called Narrabri.

http://www.parkes.atnf.csiro.au/ is the dishes actual website c/w
pictures to check out.

Cheers Bob

Roy Lewallen wrote:
> Is that the dish that's northwest of Sydney, oh, a couple hundred miles
> or so? About 20 years ago I snapped a picture of a very impressive dish
> from a helicopter I was riding between Sydney and Charleville (west of
> Brisbane, in Qld.) Never knew what it was for, but sure looks like a
> radiotelescope.
>
> Roy Lewallen, W7EL
>

225. Re: Center Fed " Zepp " with Coaxial Balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 09:43:52 UTC
From: Gary
Message-ID: <102qt0161hceaknq81u52499pr7cnubgl7@4ax.com>
Source record: 84263

On 5 Jan 2005 16:57:56 -0800, "Cecil Moore" <w5dxp@hotmail.com> wrote:

>Gary wrote:
>> Thanks Gary. I hadn't heard of a "center fed Zepp" before either and
>> your description of them being end fed and hanging down from airships
>> of WW2 correlates with what I'd heard.
>
>The Zepp is an end-fed 1/2WL antenna. The Double Zepp is a center-fed
>one wavelength antenna. An Extended Zepp is a 5/8WL end fed antenna. An
>Extended Double Zepp is a 10/8WL center-fed antenna.

Thanks Cecil and to all who responded, I think I'll just put up a
center fed dipole and feed it with twinlead or ladder line and then
use the 4:1 balun in my antenna tuner.

73 Gary

226. Re: Source tracking with dish antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 11:07:54 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10tqagu9hf0er7f@corp.supernews.com>
Source record: 84266

Hah! I remember Moree. One of the folks in the helicopter (Aerospatiale Ecureuil -- very nice machine) had a friend who lived there, and we stopped there to refuel. After we took off, the fellow with the friend gave the pilot regular car-driving-type directions ("go down three blocks and turn left. . .") as we followed the road at a low altitude. When we got to the friend's farmhouse, we circled to make sure there were no hazards, and landed in the farmer's front yard. You should have seen the look on his kids' faces! We went in for coffee, came back out in a few minutes, and continued our trip. As a funny-talking Yank, I was the novelty of the group.

Anyway, the dish I saw wasn't directly on our path, but off to one side a bit. I'll have to dig out my notes and see if it might have been the one at Moree. I might be able to estimate the diameter if I can find the picture. Small world!

Roy Lewallen, W7EL

Bob Bob wrote:
> Hi Roy
>
> Yep that was probably it. It is some way north out of Parkes near a
> place called Alectown.
>
> If you go to http://topoweb.lpi.nsw.gov.au/run.htm and zoom up on about
> 148.2639E 32.9975S, thats where the dish is. Its about 300km WNW of
> Sydney so it isnt exactly in line with a trip to Charleville.
>
> There is a smaller comms dish in a place called Moree. About 400km NNW
> of Sydney. Nowhere near as big as Parkes tho. I think the only other big
> dishes are south of Canberra. There is however one or two Mills Cross
> arrays out there but they of course arent disk shaped!
>
> Amd there is another dish array (6 of 22m dia) at a place called Narrabri.
>
> http://www.parkes.atnf.csiro.au/ is the dishes actual website c/w
> pictures to check out.
>
> Cheers Bob
>
> Roy Lewallen wrote:
>
>> Is that the dish that's northwest of Sydney, oh, a couple hundred
>> miles or so? About 20 years ago I snapped a picture of a very
>> impressive dish from a helicopter I was riding between Sydney and

>> Charleville (west of Brisbane, in Qld.) Never knew what it was for,
>> but sure looks like a radiotelescope.
>>
>> Roy Lewallen, W7EL
>>

227. Re: 10 watt limit for ducky?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 11:51:10 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <FC9Dd.14638$yW5.9406@fed1read02>
Source record: 84265

"garigue" <garigue@comcast.net> wrote in message
news:jSjCd.19888$wu4.13273@attbi_s52...
>
> "Jim - NN7K" <nn7kexk7zfg@NOSPAMsbcglobal.net> wrote in message
> news:zfdCd.5727$wZ2.4358@newssvr13.news.prodigy.com...
>> Not to mention safty concerns- like those FCC rules for hams in the KW
>> class- minimum safty standards - and those at 100 FEET, not in front of
>> your face ! Also, those have rarely had great swr readings when
>> measured. Most likely a combonation of these concerns-- Jim NN7K
>
>
> Years ago there was a very interesting letter from a real old timer who
> put
> a telephone element across the output of his transmitter .. He was having
> a
> voice QSO with another ham for the first time.. He does not remember
> what
> happened but woke up on the floor. The RF had caused some intercranial
> changes and this fellow was fortunate enough to make it alive. I remember
> years ago giving SW diathermy transcranial for Alzheimer's with capacity
> plates at either ear. I would not want to do that again but it was
> standard
> practice. It is really amazing what tissue heating feels like with those
> RF
> fields ..... adds a new meaning to the phrase ..."a warm feeling within".
>
> 73 Tom Popovic KI3R Belle Vernon Pa
>
>

A couple of anecdotal experiences.

Back about 15 years ago, I was doing some high-power RF exposure testing on a cruise missile. I had a 300 watt TWT amplifier feeding an X-band pyramidal horn antenna through waveguide. I went into the chamber to rotate the antenna polarization, and put my left hand across the antenna aperture. I immediately thought it was strange, as warm air was blowing out of the horn. But that was impossible, since the horn had a mica window across the throat! Duh, I had left the amplifier turned on! So I can report that tissue heating is an almost pleasant experience (very short term!), quite akin to the warm-air hand dryers found in some washrooms.

I also recall reading a letter to an RF trade journal, where an experimenter was relating his experience on a WWII research project. His team of four was working on waveguide hardware design, observing high-altitude, high-power

breakdown problems. He related that the team had set up a horn antenna within a large glass bell-jar (so that they could pump it down to altitude). The horn faced horizontally out of the jar, and the team set up a small telescope just outside the jar so that they could look down into the horn throat and feed to observe arcing. He said that they would change observers when their face got too hot!

Ed
wb6wsn

228. Re: What's the deal? (was: Re: AM radio reception inside passenger ...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 12:21:19 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <V2aDd.14640$yW5.11875@fed1read02>
Source record: 84267

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:512pt0187f98bbfof0fj2njl5k36jmvajs@4ax.com...
> On Wed, 5 Jan 2005 12:03:37 -0800, "Joel Kolstad"
> <JKolstad71HatesSpam@Yahoo.Com> wrote:
>
>>"Ed Price" <edprice@cox.net> wrote in message
>>news:gAdBd.6143$yW5.2@fed1read02...
>>> We spend a lot of time now arguing about how well the computer model
>>> replicates reality, and whether the math has enough variables accounted
>>> for. Working models seem so old fashioned.
>>
>>That's because they're so expensive to build. You'd probably never finish
>>designing something like a modern RF IC if all you could do was design it
>>on
>>paper, build it, probe around a little to figure out what it 'really'
>>does,
>>and repeat.
>>
>>Likewise, few companies can afford to design the autopilot for a jet
>>without
>>a great deal of simulation first. :-)
>>
>
> Hi Guys,
>
> Back when I designed the UFDR for the 757/767, they were the first
> airplanes designed entirely in software (conventional drafting went
> the way of the Dodo). Today's 7E7 was entirely modeled in software if
> I'm not mistaken.
>
> 73's
> Richard Clark, KB7QHC

There's nothing wrong with doing a lot of modeling. OTOH, Boeing didn't go from the computer model directly to production. Computer models don't do very well in predicting the unexpected; things like digital designers discovering the concept of parasitics ("There's nothing in my design that generates 832 MHz!") or mechanical designers exploring the wonders of RF stray coupling paths ("The RF gets from this compartment to that compartment through a BOLT?!"

My initial point was that wondrous and amazing things can be proven through software being pushed to the outer edges of its parameters. Before you invest in several years of modeling, someone needs to take a whack at a brassboard model to calibrate the sanity of the software.

Ed
wb6wsn

229. Re: NEW RADIO HOBBY FOR 2005

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 12:43:24 UTC
From: fractenna@aol.com
Message-ID: <20050106074324.14202.00002390@mb-m13.aol.com>
Source record: 84268

>10 METER FREE BAND IS HOTTER THAN EVER SO PASS IT OWN
>

I'm sure the FCC will love to hear about your 'hotter' activities, and reward you with fines, up to and able to exceed $10,000 per violation.

I think this would be a wonderful way of gathering additional gov't revenue: clears out the illegal riff raff also!

You play, and you'll r-e-a-l-l-y pay!

ARS N1IR

230. Re: 10 watt limit for ducky?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 13:41:44 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <crjf6o$be3$1@hercules.btinternet.com>
Source record: 84269

A few years back I opened the highish-level kitchen microwave oven door and felt what seemed to be a warm breeze of air on my face and especially round my eyes.

I immediately recognised the sensation felt when standing in the beam from the non-rotating dish of a 3 GHz, 50 Kwatt radar equipment during WW2, some 50 years before.

I very fast switched all power OFF. The safely mechanism must have been defective. It may have been a good thing my XYL had not opened it.

There were no after-effects except on my bank balance for a new oven of different make.

Reg.

231. Re: Center Fed " Zepp " with Coaxial Balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 13:55:05 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <1105019705.667940.199340@c13g2000cwb.googlegroups.com>
Source record: 84270

Gary wrote:
> Thanks Cecil and to all who responded, I think I'll just put up a
> center fed dipole and feed it with twinlead or ladder line and then
> use the 4:1 balun in my antenna tuner.

That is a very popular configuration and works for a lot of hams. You may need to change the length of the feedline for optimum operation. Some ideas and information are available on my web page at http://www.qsl.net/w5dxp/notuner.htm

One case where a 4:1 balun doesn't function well is on dipoles that are less than 1/2WL long. For instance, the impedance looking into the feedline for a 102 ft. dipole used on 80m may range down to 10 ohms. A 4:1 balun tries to take that 10 ohms down to 2.5 ohms. Antenna tuners are inefficient when trying to match such low impedance values.
--
73, Cecil http://www.qsl.net/w5dxp

232. Re: discone or scantenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 13:58:30 UTC
From: glc1173@aol.com
Message-ID: <20050106085830.21692.00002425@mb-m11.aol.com>
Source record: 84271
Body handling: HTML body converted to readable text

Redrum wrote:
>my needs on scanning are 25Mhz to 1.3 >Ghz.

Nothing is as wide-band as a discone. That's why military airfields use
them so much.

~~~~~~~~~~~~~~~~~~~~
Dissident news - plus immigration, gun rights, weather, Internet Gun Show
ALAMANCE INDEPENDENT:
official newspaper of the Vast Right Wing Conspiracy
~~~~~~~~~~~~~~~~~~~~

233. Re: 10 watt limit for ducky?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 14:06:43 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <1105020403.653191.230130@z14g2000cwz.googlegroups.com>
Source record: 84172

Reg Edwards wrote:
> There were no after-effects ...
... that you are aware of. :-)
--
73, Cecil http:www.qsl.net/w5dxp

234. Re: discone or scantenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 14:11:44 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <1105020704.131282.250670@z14g2000cwz.googlegroups.com>
Source record: 84173

GLC1173 wrote:
> Nothing is as wide-band as a discone.

Nothing? I'll bet my Bird Termaline is wider-banded. :-)
--
73, Cecil, W5DXP

235. Re: Stainless steel elements.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 14:14:21 UTC
From: stryped@hotmail.com
Message-ID: <1105020861.212650.260880@z14g2000cwz.googlegroups.com>
Source record: 84174

How do I determine the length of elements for a stainless steel element beam antenna?

What about the length of using stainless steel in a j pole?

In making a beam, if I wanted to use a metal boom, how could I insulate the elements from the boom?
Please forgive me if these are elementary questions.

236. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 14:18:08 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <1105021088.172112.276510@z14g2000cwz.googlegroups.com>
Source record: 84175

Bill Turner wrote:
> Multiplexed at what rate? Faster or slower than human eye
perception?

The rate is hard to estimate - maybe 60-200 Hz? You know how - if one sweeps one's eyes from side to side when looking at a time multiplexed light source, it looks like a dotted line? Well, on two occasions at night, I was shifting my eyes when I noticed the taillights on certain new models of automobiles are time multiplexed. I'm just wondering if anyone knows anything about them - like what is the advantage over constant current LEDs? Am I the only person in the world who notices such trivia? :-)
--
73, Cecil http://www.qsl.net/w5dxp

237. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 14:42:37 UTC
From: stryped@hotmail.com
Message-ID: <1105022557.217443.257660@f14g2000cwb.googlegroups.com>
Source record: 84176

That is a good idea. How would I test them?

238. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 14:46:07 UTC
From: stryped@hotmail.com
Message-ID: <1105022767.581557.68980@z14g2000cwz.googlegroups.com>
Source record: 84177

How wxpensive is it? WOuld anyone be able to do the calculations for me?

239. Best j pole design and questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 14:54:32 UTC
From: stryped@hotmail.com
Message-ID: <1105023272.609514.123730@c13g2000cwb.googlegroups.com>
Source record: 84178

Can anyone tell me where I can find plans for building a great jpole that is dual band and has a low swr?

Also, do you have to ground or use a balun with a jpole? I have seen some plans that say you dont on their design.

240. Re: discone or scantenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 14:54:55 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <3jcDd.19101$622.797@lakeread02>
Source record: 84180

"redrum" <ninguna> wrote
> Which is better?
>
> is scantenna really omnidirectional? is it built for a better reception on
> the most used frequencies or is really multiband?
>
> who sells the better implementation of discone?
>
> my needs on scanning are 25Mhz to 1.3 Ghz.
>
> I own a uniden bc-796d and a bc-246t
>
> Thanks for any help.
>
> Greetings from Chile!
>

You will find that your scanning needs are probably quite narrower than the capabilities of either receiver or antenna. The stolen trademark "Scantenna" which is widely produced (although no longer by Radio Shack, who was forced to discontinue marketing this design) has been highly favored by scanner enthusiasts for it's confirmed superior performance over Diamond or any other standard discone antenna. It is not better than a standard discone in a few narrow bands, but in bands most popular for scanner receivers (118 Mhz - 860 Mhz) it is vastly superior. Other limitations of the Scantenna design are it's lack of transmit capability, and weak open-rolled aluminum tubing design, which fold over in winds >50kts. At least one hobbyist I know personally claims it is slightly directional, and he has it mounted on a channel-master rotator for this reason. I have owned several and confirm the significant extended reception in most vhf and uhf bands over various standard discone antennas.

73,
Jack Painter
Virginia Beach Virginia

241. Best j pole design and questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 14:55:21 UTC
From: stryped@hotmail.com
Message-ID: <1105023321.784569.107790@z14g2000cwz.googlegroups.com>
Source record: 84179

Can anyone tell me where I can find plans for building a great jpole that is dual band and has a low swr?

Also, do you have to ground or use a balun with a jpole? I have seen some plans that say you dont on their design.

242. Re: TS-850S Auto Tuner capability?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 15:14:44 UTC
From: nm5k@wt.net
Message-ID: <1105024484.472664.215200@c13g2000cwb.googlegroups.com>
Source record: 84181

Ken Bessler wrote:
> My primary HF antenna is a trap 80/160 meter dipole.
> It works good for those bands with no need for a tuner.
>
> I'm shopping for a new HF rig, a TS-850SAT and I was
> wondering how good the built in tuner would work with
> the 80/160 antenna on higher bands, mainly 40/30/20m.
>
> Anyone know?
>
> Ken KG0WX

It would probably tune, but it's not really meant to feed "all band"
antennas.
I wouldn't plan on that myself...Those tuners cost too much to abuse in
that
manner...They are really meant to be used as line flatteners. IE: give
you a
wider usable bandwidth with the solid state finals. Your load should be
in
the ballpark to begin with...IE under maybe 5:1 or so??? MK

243. Re: Center Fed " Zepp " with Coaxial Balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 15:27:51 UTC
From: Jim Leder <k8cxm@spam.fuse.net>
Message-ID: <TNcDd.1514$7k5.380@fe37.usenetserver.com>
Source record: 84182

After reading numerous posts, I built an EDZ for 20 using the '450 ohm' ladder line and coax balun approach. Maybe I got lucky, I don't know but when I hooked up the antenna analyzer I was surprised to see an SWR of 1.3:1 at 14.030 and the impedance was around 51 ohms. So far it does outperform my old G5RV by a fair amount to it's favored direction (SW or NE). The antenna is at 35 feet (wish my trees were higher, but they aren't). The only downside I can see is this antenna has a very narrow beamwidth and the nulls are quite pronounced, but that's what the G5RV is now for.

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:1105019705.667940.199340@c13g2000cwb.googlegroups.com...
> Gary wrote:
>> Thanks Cecil and to all who responded, I think I'll just put up a
>> center fed dipole and feed it with twinlead or ladder line and then
>> use the 4:1 balun in my antenna tuner.
>
> That is a very popular configuration and works for a lot of hams. You
> may need to change the length of the feedline for optimum operation.
> Some ideas and information are available on my web page at
> http://www.qsl.net/w5dxp/notuner.htm
>
> One case where a 4:1 balun doesn't function well is on dipoles that are
> less than 1/2WL long. For instance, the impedance looking into the
> feedline for a 102 ft. dipole used on 80m may range down to 10 ohms. A
> 4:1 balun tries to take that 10 ohms down to 2.5 ohms. Antenna tuners
> are inefficient when trying to match such low impedance values.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>

244. Re: tower update

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 15:29:16 UTC
From: jake <jake@nospam.com>
Message-ID: <41DD5949.EE3B2580@nospam.com>
Source record: 84183

Read an article about welding rebar and also had a chat
with one of the workers on our building site about it.

Welding different type of rebar is not good idea but
if you have the same type you can do so.

The problem they have is the stuff just gets dropped
off the truck and can come from different lots and
you don't know what you have.

Have you decided on what you'll put on the tower ?

73 jake

>
> >
> > You welded the rebar???
> >

245. Re: Best j pole design and questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 15:39:04 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <vYcDd.19102$622.11501@lakeread02>
Source record: 84184

<stryped@hotmail.com> wrote
> Can anyone tell me where I can find plans for building a great jpole
> that is dual band and has a low swr?
>
> Also, do you have to ground or use a balun with a jpole? I have seen
> some plans that say you dont on their design.
>

I use the design found at : http://www.hamuniverse.com/jpole.html
Standard 1/2" copper pipe with acid-free solder, no balun, no choke, and approximately 70' of Belden 9913 feedline. Grounded roof top mast uses #4 bare copper lightning down conductors in two directions, coax is shield grounded at ground level, then to an I.C.E lightning surge arrestor, then to a 25w marine vhf transceiver. The J-Pole is bench centered on 156.800 Mhz and allows 18-23w output (at the transceiver) across the vhf-marine band. Very experienced antenna builders on this group have explained that my results without a balun/choke at the feedpoint is a combination of luck concerning feedline length and operating bandwidth. Accordingly, your results would most likely vary, but the design is a confirmed performer.

73,
Jack Painter
Virginia Beach, Virginia

246. Re: Center Fed " Zepp " with Coaxial Balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 15:55:49 UTC
From: "JimK2TL@gmail.com" <JimK2TL@gmail.com>
Message-ID: <1105026949.882862.237940@f14g2000cwb.googlegroups.com>
Source record: 84185

This is an excellent antenna that will serve you well over all HF bands, including 6 meters. I use this antenna with good 300 ohm line purchased from Davis RF, and a Radio Works Remote Current Balun. From there I use about 4 feet or so of LMR400UF low loss coax to the rig. The autotuner in my FT-920 will tune this antenna flat on most bands. I do need to use an external tuner on 30 and 10 meters, but this is easily acomplished by a 2 position coax switch. This system has produced the best results of any setup I have had in 40+ years as a Ham.
Unless you are real certain about the behavior of that coax balun, I would invest in either a Radio Works, or DX Engineering balun of known repute. Then get on the air and be amazed.
Jim/K2TL

247. Re: What's the deal? (was: Re: AM radio reception inside passenger ...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 16:08:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <85oqt0lnfu9amhr64mp5otb9bk1tikq7e4@4ax.com>
Source record: 84186

On Thu, 6 Jan 2005 04:21:19 -0800, "Ed Price" <edprice@cox.net> wrote:

>OTOH, Boeing didn't go from the computer model directly to production.

Hi Ed,

That is arguably the goal if not the actual reality:

> "As computers have become faster and more powerful in recent years,
>we have been able to do a better job in modeling the entire airplane and
>predicting the three-dimensional effects of the airflow around it,"
>Cogan said. "The codes we have developed allow us to look at more
>potential design options faster than ever before."
>
>Indeed, Cogan said the process for developing airplanes today begins
>with the computer model. The coding is so accurate that designers can
>evaluate miniscule changes in a design to determine impacts on
>aerodynamic efficiency, he added.
>
>In fact, the accuracy of the coding has also focused the application of
>another aerodynamics tool: wind tunnel testing.
>
>In the '80s, the Boeing 767 team took more than 50 wing designs into
>the wind tunnel to verify their designs, Cogan said. In the '90s, the
>Boeing 777 team took 18 designs into the tunnel. "We were really not
>verifying the designs as much as we were verifying that our computation
>tools were accurate and looking at performance at the extreme operating
>conditions, which the coding couldn't do," Cogan said.
>
>"With the 7E7, we will take fewer than 12 wings into the tunnel," Cogan said.
>"We are still proving our coding and testing the extremes.
>The tunnel is a great tool but it's not very cost-effective.
>So, being able to really focus on a few designs to get the data we need
>is helping us be more cost-effective."

73's from Jet City,
Richard Clark, KB7QHC

248. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 16:12:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7foqt0lfv102i5g40j4tlldr36cva13gt4@4ax.com>
Source record: 84187

On 6 Jan 2005 06:18:08 -0800, "Cecil Moore" <w5dxp@hotmail.com> wrote:
>like what is the advantage over constant current LEDs?
>Am I the only person in the world who notices such trivia?
It's been known for quite a long time: pulsed light looks brighter.
Being imperceptible flicker has to do with the Stroud Moment.

249. Re: Best j pole design and questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 16:32:00 UTC
From: stryped@hotmail.com
Message-ID: <1105029120.848557.205250@z14g2000cwz.googlegroups.com>
Source record: 84188

Jack Painter wrote:
> <stryped@hotmail.com> wrote
> > Can anyone tell me where I can find plans for building a great
jpole
> > that is dual band and has a low swr?
> >
> > Also, do you have to ground or use a balun with a jpole? I have
seen
> > some plans that say you dont on their design.
> >
>
> I use the design found at : http://www.hamuniverse.com/jpole.html
> Standard 1/2" copper pipe with acid-free solder, no balun, no choke,
and
> approximately 70' of Belden 9913 feedline. Grounded roof top mast
uses #4
> bare copper lightning down conductors in two directions, coax is
shield
> grounded at ground level, then to an I.C.E lightning surge arrestor,
then to
> a 25w marine vhf transceiver. The J-Pole is bench centered on 156.800
Mhz
> and allows 18-23w output (at the transceiver) across the vhf-marine
band.
> Very experienced antenna builders on this group have explained that
my
> results without a balun/choke at the feedpoint is a combination of
luck
> concerning feedline length and operating bandwidth. Accordingly, your
> results would most likely vary, but the design is a confirmed
performer.
>
> 73,
> Jack Painter
> Virginia Beach, Virginia

How do you "adjust" this antenna for optimum swr? Would it change the
results using "qwick connect" fittings instead of welding/soldering?

Are the end caps that are soldered on included in calculating the
length?

250. Re: TS-850S Auto Tuner capability?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 16:46:26 UTC
From: Guido <guidoted@tiscali.it>
Message-ID: <3458csF45gs04U1@individual.net>
Source record: 84189

"Ken Bessler" <kg0wx@NOSPAMyahoo.com> wrote in message
news:xc%Cd.14977$ph.7357@okepread01...
> I'm shopping for a new HF rig, a TS-850SAT and I was
> wondering how good the built in tuner would work with
> the 80/160 antenna on higher bands, mainly 40/30/20m.
>

I've tried many rigs and the tuner of TS-850SAT is one of the best internal
tuner I've ever seen, but you can not be sure that it will tune the high SWR
of your antenna+cable until you will try it...
Ciao and 73
Guido, ik2bcp

251. Re: Center Fed " Zepp " with Coaxial Balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 17:00:24 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41dd6a99$1_3@127.0.0.1>
Source record: 84190

Jim Leder wrote:
> After reading numerous posts, I built an EDZ for 20 using the '450 ohm'
> ladder line and coax balun approach. Maybe I got lucky, I don't know but
> when I hooked up the antenna analyzer I was surprised to see an SWR of 1.3:1
> at 14.030 and the impedance was around 51 ohms.

Odds are that your feedline is a multiple of half-wavelengths
plus 0.2 wavelength. If you know the VF and length, it would
be interesting to calculate how close you came to N.2 wavelengths.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

252. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 17:03:10 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41dd6b40$1_3@127.0.0.1>
Source record: 84191

Richard Clark wrote:

> "Cecil Moore" <w5dxp@hotmail.com> wrote:
>>like what is the advantage over constant current LEDs?
>>Am I the only person in the world who notices such trivia?
>
> It's been known for quite a long time: pulsed light looks brighter.

I know that but am I the only person in the world who has
noticed that it is now being used on automobiles.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

253. Re: NEW RADIO HOBBY FOR 2005

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 17:07:02 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41dd6c27$1_3@127.0.0.1>
Source record: 84192

Bill Turner wrote:

> fractenna@aol.com (Fractenna) wrote:
>>I think this would be a wonderful way of gathering additional gov't revenue:
>>clears out the illegal riff raff also!
>
> I wonder if the FCC has thought of setting up a "bounty hunter" system
> to catch these guys. Say 50% of any fine collected? I bet lotsa guys
> would join up for that.

How about if the reward is the same for "Wanted: Dead or Alive"? :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

254. Re: Stainless steel elements.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 17:38:21 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <arsqt0pundi7cj1nf1opdj36fpblpp0jag@4ax.com>
Source record: 84193

On 6 Jan 2005 06:14:21 -0800, stryped@hotmail.com wrote:
>Please forgive me if these are elementary questions.

Hi OM,

We can forgive the questions, but they are far from elementary. In fact, there are so many variables to consider, that it often makes such questions hard to answer without going into a considerable length of constraints.

One simple response, however, is that for VHF/UHF, stainless steel is hardly the most complex issue - this has already been noted here in discussion. The remaining characteristics of length, size, and distribution of elements has as many answers as answerersï¿½.

To put it bluntly, you should put some effort into coming to terms with modeling software to appreciate the variety of answers and their ramifications. Getting this same education through single one-off questions could take many, many years.

Another way is to simply pick a design, and build it. When you discover what's good or bad about it, THEN discussion could more easily respond to what you have and what you need to do. Experience is the great leveler against "what-if." One notable aspect of this past time is you are NOT going to do this once! So you may as well do something and expect you will do some more (and more...).

73's
Richard Clark, KB7QHC

255. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 17:42:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cstqt0djhaa6bdgsi7an3ej53rjc44n7dr@4ax.com>
Source record: 84194

On Thu, 06 Jan 2005 11:03:10 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:
>> It's been known for quite a long time: pulsed light looks brighter.
>I know that but am I the only person in the world who has
>noticed that it is now being used on automobiles.
Just as I figured.... another sucker ball.

256. Re: Center Fed " Zepp " with Coaxial Balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 17:57:06 UTC
From: AaronJ <noemail@noemail.com>
Message-ID: <49tqt0tss16ne6b97q16non5tf7shkh43v@4ax.com>
Source record: 84195

"JimK2TL@gmail.com" <JimK2TL@gmail.com> wrote:

>The autotuner in my FT-920 will tune this antenna flat on most bands.
>I do need to use an external tuner on 30 and 10 meters, but this is
>easily acomplished by a 2 position coax switch.

Just wondered why you needed the coax switch. If you put the external tuner between the FT920 and the antenna couldn't you just bypass the FT920 tuner and switch in the external tuner for 30 and 10 and visa versa for the other bands?

I do this with 2 external tuners. I have an antenna with a similar situation to yours. My TS870 will autotune ok on 40 thru 10 but not on 80 or 160. I just daisy chained two external tuners (one pretuned to 160 and the other to 80) between the TS870 and the balun feeding the open wire feedline. I simply switch in the needed tuner and bypass the other two. Why *2* external tuners? It makes for quick band hopping. You switch bands, hear em, push a few switches, and work em... ;)

257. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 17:57:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <tutqt0h3skaat4gb05ibl2psqsmm3lkjrj@4ax.com>
Source record: 84196

On Thu, 06 Jan 2005 08:25:29 -0800, Bill Turner <noway@nohow.com>
wrote:
>What other reason could there be?

Hi Bill,

The usual reasons: Brighter; Lower Power; Longer Life; Lower Loss - as long as the added complexity is offset by the economic gain. If they were dual diodes connected parallel and reverse polarity driven by AC, then the advantage would be reduced cathodic reduction of contacts exposed to water (for years I noted how the poorly built US cars went through tail lights that burnt out due to corrosion). AC systems also extend lifetime to conventional filament lights.

Now, by Brighter, this is not due to higher peak currents. LEDs don't really peak as well as other devices. Their overdrive capacity is somewhat limited. Rather, the Brighter is a physiological response. It is actually the same brightness, except we perceive it as brighter (although, if the period exceeds the Stroud Moment this may no longer hold). Light can be frustrating to compare to measurements, because impartial measurements will reveal little difference to what we perceive to be dramatic change. One of those tricks of the brain.

73's
Richard Clark, KB7QHC

258. Re: Best j pole design and questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 18:03:36 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <Z3fDd.19105$622.15568@lakeread02>
Source record: 84197

<stryped@hotmail.com> wrote
news:1105029120.848557.205250@z14g2000cwz.googlegroups.com...
>
> Jack Painter wrote:
> > <stryped@hotmail.com> wrote
> > > Can anyone tell me where I can find plans for building a great
> jpole
> > > that is dual band and has a low swr?
> > >
> > > Also, do you have to ground or use a balun with a jpole? I have
> seen
> > > some plans that say you dont on their design.
> > >
> >
> > I use the design found at : http://www.hamuniverse.com/jpole.html
> > Standard 1/2" copper pipe with acid-free solder, no balun, no choke,
> and
> > approximately 70' of Belden 9913 feedline. Grounded roof top mast
> uses #4
> > bare copper lightning down conductors in two directions, coax is
> shield
> > grounded at ground level, then to an I.C.E lightning surge arrestor,
> then to
> > a 25w marine vhf transceiver. The J-Pole is bench centered on 156.800
> Mhz
> > and allows 18-23w output (at the transceiver) across the vhf-marine
> band.
> > Very experienced antenna builders on this group have explained that
> my
> > results without a balun/choke at the feedpoint is a combination of
> luck
> > concerning feedline length and operating bandwidth. Accordingly, your
> > results would most likely vary, but the design is a confirmed
> performer.
> >
> > 73,
> > Jack Painter
> > Virginia Beach, Virginia
>
> How do you "adjust" this antenna for optimum swr? Would it change the
> results using "qwick connect" fittings instead of welding/soldering?
>
> Are the end caps that are soldered on included in calculating the
> length?

>

Yes the caps are part of the electrical length. Tuning is accomplished by adjusting the tuning bar (dimension "C" up or down between the two vertical elements. Very little adjustment is required from the design dimensions for "bench" swr. Of course that would need to be tested as installed is you want to know the actual output in watts at the antenna. Mine required no field adjustment.

73,
Jack Painter
Virginia Beach, Virginia

259. Re: Best j pole design and questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 18:15:43 UTC
From: stryped@hotmail.com
Message-ID: <1105035343.164963.8480@z14g2000cwz.googlegroups.com>
Source record: 84198

Jack Painter wrote:
> <stryped@hotmail.com> wrote
> news:1105029120.848557.205250@z14g2000cwz.googlegroups.com...
> >
> > Jack Painter wrote:
> > > <stryped@hotmail.com> wrote
> > > > Can anyone tell me where I can find plans for building a great
> > jpole
> > > > that is dual band and has a low swr?
> > > >
> > > > Also, do you have to ground or use a balun with a jpole? I have
> > seen
> > > > some plans that say you dont on their design.
> > > >
> > >
> > > I use the design found at : http://www.hamuniverse.com/jpole.html
> > > Standard 1/2" copper pipe with acid-free solder, no balun, no
choke,
> > and
> > > approximately 70' of Belden 9913 feedline. Grounded roof top mast
> > uses #4
> > > bare copper lightning down conductors in two directions, coax is
> > shield
> > > grounded at ground level, then to an I.C.E lightning surge
arrestor,
> > then to
> > > a 25w marine vhf transceiver. The J-Pole is bench centered on
156.800
> > Mhz
> > > and allows 18-23w output (at the transceiver) across the
vhf-marine
> > band.
> > > Very experienced antenna builders on this group have explained
that
> > my
> > > results without a balun/choke at the feedpoint is a combination
of
> > luck
> > > concerning feedline length and operating bandwidth. Accordingly,
your
> > > results would most likely vary, but the design is a confirmed
> > performer.
> > >
> > > 73,

> > > Jack Painter
> > > Virginia Beach, Virginia
> >
> > How do you "adjust" this antenna for optimum swr? Would it change
the
> > results using "qwick connect" fittings instead of
welding/soldering?
> >
> > Are the end caps that are soldered on included in calculating the
> > length?
> >
>
> Yes the caps are part of the electrical length. Tuning is
accomplished by
> adjusting the tuning bar (dimension "C" up or down between the two
vertical
> elements. Very little adjustment is required from the design
dimensions for
> "bench" swr. Of course that would need to be tested as installed is
you want
> to know the actual output in watts at the antenna. Mine required no
field
> adjustment.
>
> 73,
> Jack Painter
> Virginia Beach, Virginia
I am having trouble understanding the "building" of the tuning part.

260. Re: Best j pole design and questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 18:18:52 UTC
From: stryped@hotmail.com
Message-ID: <1105035532.103602.190340@f14g2000cwb.googlegroups.com>
Source record: 84199

Is there a formula for determining the required length of elements if one was to use a different material such as metal or use a different diameter than 1/2 inch?

261. Re: What's the deal? (was: Re: AM radio reception inside passenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 18:21:25 UTC
From: richardharrison@webtv.net
Message-ID: <5899-41DD81A5-804@storefull-3253.bay.webtv.net>
Source record: 84201

Jack Painter wrote:
"An awful lot of engineers have accepted the findings already, and
specify blunt-tipped rods on new construction.:

They should specify what works.

Suppose a charged cloud arrives overhead and no lightning immediately flashes. If the charge is positive, it attracts electrons in the earth ond other conductors nearby. These electrons strain to reach the cloud, runnibg through conducting bodies to get closer to the positive charges overhead. The blanket of air insulates between the charges of opposite polarity. The field grows faster than these charges are neutralized. Sooner or later, the air at a high point starts to ionize (form a conductive plazma). Then, current flow starts with a flash and a bang. Thunder rolls as air rushes in to fill the void left by burnt atmosphere.

Suppose that a lightning rod is at a high point beneath the positively charged cloud as it arrives. Electrons are pulled up to its sharp point (electrons repel each other, ao they tend to concentrate on the outside of the rod and find the least outside opposing forces at the tip of the rod.

To avoid corona formation, some transmitting antennas are fitted with "corona balls" on their tips. This reduces the strain from a pointed tip.

On a lucky day, the cloud is discharged without lightning. On an ublucky day, your lightning rod may get pitted.

Best regards, Richard Harrison, KB5WZI

262. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 18:49:36 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41dd8431$1_1@127.0.0.1>
Source record: 84200

Richard Clark wrote:
> Cecil Moore <w5dxp@hotmail.com> wrote:
>>I know that but am I the only person in the world who has
>>noticed that it is now being used on automobiles?
>
> Just as I figured.... another sucker ball.

Zero probability that you simply misunderstood my original
question? Did you know it is now being used on automobiles?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

263. Re: A very Popular Misconception

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 19:00:12 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41dd8a86.1853557625@news.galilei.com>
Source record: 84202

Thanks Reg

Never saw any damage to the ladder line, but figured it must be the
points along the line these particular thumbtacks were placed.

No power other than what the TS-830Sugar puts out.
But I was using a Tuner if that made any difference on the line.

TTUL
Gary

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> verbositized:

>
>"Gary V. Deutschmann, Sr." wrote
>> Hi Reg
>>
>> Thanks for the post!
>>
>> I just wanted to add something that has never made sense to me.
>>
>> I had a section of ladder line that I affixed to the roof joists under
>> the eaves using thumb tacks. Three of these thumb tacks kept coming
>> out on me, the rest held just fine. It was always the same three.
>> The last time I used three push-pins with plastic heads and found the
>> heads missing from the push-pins shortly thereafter.
>> It wasn't until I discovered the puddles of plastic on the ground that
>> I realized that they had melted. Yet the ladder line itself seemed
>> unharmed.
>> So I picked up a small box of nylon screws at the hobby shop and
>> replaced all of the thumb tack and the three push-pins with these
>> nylon screws.
>> After doing same, I had to make adjustments to my tuner on a few
>> bands.
>>
>> After that I never had a problem again!
>>
>> I never noticed a change in transmission or reception before or after.
>> But feel the RF is what caused these thumbtacks to keep coming out,
>> probably burning the hole in the rafter larger and larger each time
>> and that could be what melted the heads of the push-pins off.
>>
>> The three thumbtacks that kept coming out were equal distance from
>> each other, about 64 inches apart. There was a thumbtack every 16
>> inches along the part of the ladder line that ran under the eaves.
>>

>> TTUL
>> Gary
>
>=======================================
>
>Hi Gary,
>
>Very peculiar. But what it wasn't due to was I-squared R losses in tiny
>metal objects such as thumb tacks. You were not working in the GHz range.
>
>Always the same set of tacks could have had something to do with voltage
>standing waves on your most-used favourite band.
>
>The structural material was timber which has a highish dielectric constant
>and a poor power factor.
>
>A thin insulating material on the metal pins would not make much difference.
>
>Tacks and pins are very small and pointed. The voltage stress would be very
>high in a very small volume of timber. Arcing could possibly, but need not
>occur. But only a small amount of energy is needed to take the tacks and
>timber up to a high enough temperature to dry out the timber, contract the
>timber, and allow the tacks to fall out under weight of the line and
>gravity.
>
>And as mentioned in my first message, the poor power factor or resistivity
>of the timber at HF could have resulted in an impedance match between the
>timber and line Zo.
>
>You didn't burn the house down because of your gravity-operated safety
>precaution. ;o)
>
>I would guess you were using more than 100 watts.
>----
>Reg, G4FGQ
>
>

264. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 19:04:50 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3c2rt09fjilj392fk6auqs49bs2mgpd91j@4ax.com>
Source record: 84203

On Thu, 06 Jan 2005 12:49:36 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:
>Zero probability that you simply misunderstood my original question?
More to the point, did you? Aside from its sucker spin, then why ask?
>Did you know it is now being used on automobiles?
LEDs have been in general illumination for quite a few years - even
for headlights. If they are new to you, you can't afford them.

265. Re: What's the deal? (was: Re: AM radio reception inside passenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 19:11:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ir2rt0h3udo8fc8i1s6k0h8gl4det0ta6k@4ax.com>
Source record: 84204

On Thu, 6 Jan 2005 12:21:25 -0600, richardharrison@webtv.net (Richard Harrison) wrote:
>On a lucky day, the cloud is discharged without lightning. On an ublucky
>day, your lightning rod may get pitted.

Hi Richard,

So much of this breathless science of rounded tips alludes to the legitimacy of rare publications equal in scope and stature to those that announced the proofs of cold fusion.

Did Pons and Fleishman turn their hands to designing Lightning protection systems to redeem their credentials?

73's
Richard Clark, KB7QHC

266. Re: Best j pole design and questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 19:11:50 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <0r1rt0ta366ms2dncu4kd4ascd7iulv2rp@4ax.com>
Source record: 84205

On 6 Jan 2005 06:54:32 -0800, stryped@hotmail.com wrote:

>Can anyone tell me where I can find plans for building a great jpole
>that is dual band and has a low swr?
>
>Also, do you have to ground or use a balun with a jpole? I have seen
>some plans that say you dont on their design.

http://www.qsl.net/ares_d24/jpole450.jpg has plans for a 450-ohm ladderline j-pole which is designed for 2 meters, but also works on 440 mhz with low swr, probably at reduced efficiency, but mine still works there, okay. (I don't use a balun.)

Do a Google search -- there's no shortage of plans for j-poles.

You can ground the "crook" of the j-pole if you wish, or not; works either way.

You might also go to the web site for Arrow Antennas, and look at their dual bander j-pole diagram, if you're handy with metal...

bob
k5qwg

267. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 19:30:37 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41dd8dce$1_1@127.0.0.1>
Source record: 84206

Richard Clark wrote:
> LEDs have been in general illumination for quite a few years - even
> for headlights.

I know that. The question was and is: WHEN DID THEY START
TIME MULTIPLEXING AUTOMOBILE TAILLIGHTS? I am asking for
information and it's perfectly OK if you don't know.

Constant current LEDs have been in use for years. But it's
just over the last couple of months that I have noticed
the pulse-width modulation on some automobile taillights.
I suspect it's only one or two manufacturers so far.
--
73, Cecil http://www.qsl.net/w5dxp

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268. Re: Best j pole design and questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 19:45:56 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41dd9165$1_3@127.0.0.1>
Source record: 84207

Bob Miller wrote:

> On 6 Jan 2005 06:54:32 -0800, stryped@hotmail.com wrote:
>>Also, do you have to ground or use a balun with a jpole? I have seen
>>some plans that say you dont on their design.

A lot of hams just coil up a few turns of coax beneath the
J-Pole as a choke to keep the feedline from radiating (much).

> http://www.qsl.net/ares_d24/jpole450.jpg has plans for a 450-ohm
> ladderline j-pole which is designed for 2 meters, but also works on
> 440 mhz with low swr, probably at reduced efficiency, but mine still
> works there, okay. (I don't use a balun.)

A 2m J-Pole used on 70 cm has a takeoff angle of about 47 degrees.
The gain at 15 degrees is more than 3 dB down. It works, but a lot
of the RF is lost at the higher radiation angles.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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269. The planning permission

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 19:48:39 UTC
From: Simon Smith <s.Smith@btinternet.com>
Message-ID: <crk4mm$n48$1@titan.btinternet.com>
Source record: 84208

Well, I today decided to make a start in trying to obtain planning permission for my new Antenna - even though the "Permitted Development Rights" have been removed from our small Village in the middle of nowhere on Bodmin Moor in Cornwall -
First step was to fill in all four sets of application forms - the truth - the whole truth and nothing but the truth !! Then out in the wind and rain with a tape measure and try to measure up the length of the garden - distance from the house to the proposed site of the Antenna - Height of the house in relation to the height of the Antenna - and then go back indoors and start to draw it all up into a meaning full set of drawing. Four copies were needed. Next step. Try to find the digital Camera and wait for the rain to stop before taking a photo of the intended site. Lunch. Proceed to print photos - run out of ink. Install new print cartridge - and finally manage to get the whole lot ready for the "Council"
Proceed to Bodmin Council offices - where a nice young girl offered to view my drawings before accepting them for consideration. The first mistake I made was in using feet and inches. "Sorry - we only take metric" So I now have to re-do them all again. Next mistake "We Don't take them on graph paper" Third mistake was
"We need a picture of the "Ariel" Forth mistake was: "We need the drawings to be to scale"
Did Marconi have all this trouble with the "Council" ?
Here I am - now trying to re-do everything - to some sort of Scale. Wife moaning - Kids Moaning - cat climbing over all the drawings - Dog waiting to be walked..... TV blaring out .... Ohhh happy days .... I think I am going Crazy..... Beam me up Scottie.....
To be Continued.....
John M3IIV

270. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 20:02:21 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ju5rt0luib0cmgvrp1gc1db61ji3eck0e7@4ax.com>
Source record: 84209

On Thu, 06 Jan 2005 13:30:37 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:
> WHEN DID THEY START TIME MULTIPLEXING AUTOMOBILE TAILLIGHTS?
Who is THEY? This still sounds like a sucker posting.
Anyway, 5 years ago. Why don't you try rec.philosophy.automotive for
this topic?

271. Re: The planning permission

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 20:12:17 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnctr6t1.11s4.bit-bucket@shell.config.com>
Source record: 84210

On Thu, 6 Jan 2005 19:48:39 +0000 (UTC), Simon Smith wrote:
> Well, I today decided to make a start in trying to obtain planning
> permission for my new Antenna - even though the "Permitted Development
> Rights" have been removed from our small Village in the middle of nowhere on
> Bodmin Moor in Cornwall -
> First step was to fill in all four sets of application forms - the truth -
> the whole truth and nothing but the truth !! Then out in the wind and rain
> with a tape measure and try to measure up the length of the garden -
> distance from the house to the proposed site of the Antenna - Height of the
> house in relation to the height of the Antenna - and then go back indoors
> and start to draw it all up into a meaning full set of drawing. Four copies
> were needed. Next step. Try to find the digital Camera and wait for the rain
> to stop before taking a photo of the intended site. Lunch. Proceed to print
> photos - run out of ink. Install new print cartridge - and finally manage to
> get the whole lot ready for the "Council"
> Proceed to Bodmin Council offices - where a nice young girl offered to view
> my drawings before accepting them for consideration. The first mistake I
> made was in using feet and inches. "Sorry - we only take metric" So I now
> have to re-do them all again. Next mistake "We Don't take them on graph
> paper" Third mistake was
> "We need a picture of the "Ariel" Forth mistake was: "We need the drawings
> to be to scale"
> Did Marconi have all this trouble with the "Council" ?
> Here I am - now trying to re-do everything - to some sort of Scale. Wife
> moaning - Kids Moaning - cat climbing over all the drawings - Dog waiting to
> be walked..... TV blaring out .... Ohhh happy days .... I think I am going
> Crazy..... Beam me up Scottie.....
> To be Continued.....
> John M3IIV

'Tis easier to get forgiveness, than to get permission.

73
Jonesy W3DHJ
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

272. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 20:30:24 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41dd9bd1$1_3@127.0.0.1>
Source record: 84211

Richard Clark wrote:

> Cecil Moore <w5dxp@hotmail.com> wrote:
>>WHEN DID THEY START TIME MULTIPLEXING AUTOMOBILE TAILLIGHTS?
>
> Who is THEY?

Shirley, you jest.

> Anyway, 5 years ago.

Doubt it. I would have noticed long before now.
--
73, Cecil http://www.qsl.net/w5dxp

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273. Re: What's the deal? (was: Re: AM radio reception inside passenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 20:30:48 UTC
From: richardharrison@webtv.net
Message-ID: <1018-41DD9FF8-269@storefull-3254.bay.webtv.net>
Source record: 84212

Richard Clark, KB7QHC wrote:
"So much of this breathless science of rounded tips alludes to the legitimacy of publications equal in scope to those that announced the proofs of cold fusion."

Well, I`ll give the rounded tips one advantage, less likely impalements and resulting lawsuits. But, I don`t know of any such cases on the sharp lightning rods.

As for cold fusion, I`ll believe it when I see it. I really hope it happens. The price of fossil fuels and their cleanup is excessive.

Best regards, Richard Harrison, KB5WZI

274. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 20:54:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10trct8b6ccv2e3@corp.supernews.com>
Source record: 84214

Bill Turner wrote:
>
> How interesting. I wonder if they are pulse width modulated to
> compensate for day/night? What other reason could there be?
>

That might be it. It would be a convenient and efficient way of adjusting brightness. They also might be compensating for voltage and temperature by changing the pulse width.

Roy Lewallen, W7EL

275. More j poll questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 21:47:57 UTC
From: stryped@hotmail.com
Message-ID: <1105048077.619759.162180@f14g2000cwb.googlegroups.com>
Source record: 84213

Is there a way to tune a j pole besides moving the coax up or down?

276. Re: 10 watt limit for ducky?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 22:07:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10trh6ierfgqrba@corp.supernews.com>
Source record: 84218

I looked into the hazards of microwave energy quite a while back (mid-60s), when I was a radar technician. Some of the old-timers in Alaska had routinely warmed their hands by putting them in front of the feedhorn, but enlightenment had taken place by the time I was involved, and systems were interlocked to prevent accidental exposure. (I worked on heavy ground radar, with peak output power of about 5 MW, and average power of several kW.)

As far as I could determine, plain heating was the only bad effect that had been found. The main potential for damage was the eyes, where there are apparently not enough blood vessels to carry away the heat very fast. Internal organs were vulnerable to very high rate doses, because of the relative lack of nerves to communicate the problem before it got serious. They hadn't found any cases of permanent sterility, in spite of the pervasive fear. Heat can kill any sperm present at the time of the exposure, leading to temporary sterility, which is likely the source of the belief. Otherwise, all it was found to do is warm you up. As long as the heat doesn't build up too much, there was no lasting harm.

I'm sure there's been a great deal of research since then -- both microwave ovens and cell phones have become ubiquitous in the intervening years. I believe some research has shown potential harm in long-term cell phone use with the antenna very close to the head, but don't know if anyone knows the mechanism -- or how good the research is.

So my view of microwave energy is that it's something to take care with, but not to irrationally fear.

Roy Lewallen, W7EL

Reg Edwards wrote:
> A few years back I opened the highish-level kitchen microwave oven door and
> felt what seemed to be a warm breeze of air on my face and especially round
> my eyes.
>
> I immediately recognised the sensation felt when standing in the beam from
> the non-rotating dish of a 3 GHz, 50 Kwatt radar equipment during WW2, some
> 50 years before.
>
> I very fast switched all power OFF. The safely mechanism must have been
> defective. It may have been a good thing my XYL had not opened it.
>
> There were no after-effects except on my bank balance for a new oven of
> different make.
> ----
> Reg.

>
>

277. Re: More j poll questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 22:34:40 UTC
From: Allodoxaphibia <bit-bucket@config.com>
Message-ID: <slrnctrf80.2va8.bit-bucket@shell.config.com>
Source record: 84215

On 6 Jan 2005 13:47:57 -0800, stryped@hotmail.com wrote:
> Is there a way to tune a j pole besides moving the coax up or down?

Well, errr, Bub, you ain't "tuning" a J-Pole by "...moving the coax up or down".

You 'tune' a J-Pole by whacking off, or whacking on 'calculated' lengths
of the 2 parallel pieces.

There be a difference between "tuning" and "Matching".

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

278. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 22:37:03 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnctrfcf.2va8.bit-bucket@shell.config.com>
Source record: 84216

On Thu, 06 Jan 2005 14:30:24 -0600, Cecil Moore wrote:
> Richard Clark wrote:
>> Cecil Moore <w5dxp@hotmail.com> wrote:
>>>WHEN DID THEY START TIME MULTIPLEXING AUTOMOBILE TAILLIGHTS?
>>
>> Who is THEY?
>
> Shirley, you jest.
>
>> Anyway, 5 years ago.
>
> Doubt it. I would have noticed long before now.

Do you mean that the subliminal CW messages have had no effect on you? :-)

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

279. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 23:03:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <j5grt05ogo3i0j1q8itv5vac946djb0or0@4ax.com>
Source record: 84217

On 6 Jan 2005 22:37:03 GMT, Allodoxaphobia <bit-bucket@config.com>
wrote:
>> Doubt it. I would have noticed long before now.
>Do you mean that the subliminal CW messages have had no effect on you? :-)

Hi Jonesy,

Like I figured, another sucker posting. Cadillac was doing this for
its 2000 model:

" The 2000 Cadillac DeVille was the first vehicle to go into
production that utilizes HB LEDs for its rear combination lamps
(RCLs) as well as for its CHMSL. Many of the benefits here are
intangible-examples are the "jewel like" appearance of the RCL and
the ability to provide the tail light function with a particular
shape associated with the DeVille line. There are several tangible
benefits that can be measured, however, including reduced
electrical load, reduced mass, warranty savings, and mass
production quality improvements.

Although the Cadillac DeVille is the only production vehicle with
a complete LED rear combination lamp assembly, several other
recent car makes and models have incorporated LEDs into various
signal functions. These are primarily limited production luxury
cars, such as the Mercedes S-Class, BMW 5-Series, and Nissan
Gloria."

On the Lincoln Town Car:

"light-emitting diode array on the rear of this vehicle in a
research project at California Partners for Advanced Transit and
Highways takes data from the wheels and brakes and sends a signal
to following cars indicating the acceleration and velocity of the
vehicle."

which, of course, fulfills your anticipation of subliminal CW
messages. ;-)

As the old adage goes "if you have to ask, you can't afford it."
rec.philosophy.automotive may provide more details - this is clearly
beyond the pale of electromagnetic anything from anywhere.

73's
Richard Clark, KB7QHC

280. Re: The planning permission

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 23:38:31 UTC
From: Tom <noname@noprovider.nodomain>
Message-ID: <XZjDd.33645$L7.21064@trnddc05>
Source record: 84219

The good news is, the clerk is actually being rather helpful.
A less useful situation occurs when the clerk accepts anything
you deliver and then the council rejects the proposal due to
improper formatting.

-- Tom

"Simon Smith" <s.Smith@btinternet.com> wrote in message
news:crk4mm$n48$1@titan.btinternet.com...
> Well, I today decided to make a start in trying to obtain planning
> permission for my new Antenna - even though the "Permitted Development
> Rights" have been removed from our small Village in the middle of nowhere
> on Bodmin Moor in Cornwall -
> First step was to fill in all four sets of application forms - the truth -
> the whole truth and nothing but the truth !! Then out in the wind and rain
> with a tape measure and try to measure up the length of the garden -
> distance from the house to the proposed site of the Antenna - Height of
> the house in relation to the height of the Antenna - and then go back
> indoors and start to draw it all up into a meaning full set of drawing.
> Four copies were needed. Next step. Try to find the digital Camera and
> wait for the rain to stop before taking a photo of the intended site.
> Lunch. Proceed to print photos - run out of ink. Install new print
> cartridge - and finally manage to get the whole lot ready for the
> "Council"
> Proceed to Bodmin Council offices - where a nice young girl offered to
> view my drawings before accepting them for consideration. The first
> mistake I made was in using feet and inches. "Sorry - we only take metric"
> So I now have to re-do them all again. Next mistake "We Don't take them on
> graph paper" Third mistake was
> "We need a picture of the "Ariel" Forth mistake was: "We need the
> drawings to be to scale"
> Did Marconi have all this trouble with the "Council" ?
> Here I am - now trying to re-do everything - to some sort of Scale. Wife
> moaning - Kids Moaning - cat climbing over all the drawings - Dog waiting
> to be walked..... TV blaring out .... Ohhh happy days .... I think I am
> going Crazy..... Beam me up Scottie.....
> To be Continued.....
> John M3IIV
>

281. Re: The planning permission

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-06 23:46:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10trmv22o49vpcf@corp.supernews.com>
Source record: 84220

Do you get to vote for the council members who come up with all these rules, or are they appointed by the Queen or something? If the former, it sounds like it might be time to become a bit involved with your local government. If the latter, well, God save 'er. And you.

Roy Lewallen, W7EL

282. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 01:00:31 UTC
From: jgboyles@aol.com
Message-ID: <20050106200031.21939.00002896@mb-m06.aol.com>
Source record: 84221

>That might be it. It would be a convenient and efficient way of
>adjusting brightness. They also might be compensating for voltage and
>temperature by changing the pulse width.

Hi Roy, You can do all the above with a regular light bulb. I think the reason they use multiple LED's is to reduce the mean time between failures. If a regular bulb fails, you are dark. If half of the LED's fail you still have light. They generally have 20 plus LED's. in the stuff I have seen. Also, LED's tend to last than bulbs (I think)
73 Gary N4AST

283. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 01:11:43 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41dde1de$1_2@127.0.0.1>
Source record: 84122

Richard Clark wrote:
> Like I figured, another sucker posting. Cadillac was doing this for
> its 2000 model:
>
> " The 2000 Cadillac DeVille was the first vehicle to go into
> production that utilizes HB LEDs for its rear combination lamps
> (RCLs) as well as for its CHMSL. Many of the benefits here are
> intangible-examples are the "jewel like" appearance of the RCL and
> the ability to provide the tail light function with a particular
> shape associated with the DeVille line. There are several tangible
> benefits that can be measured, however, including reduced
> electrical load, reduced mass, warranty savings, and mass
> production quality improvements.
>
> Although the Cadillac DeVille is the only production vehicle with
> a complete LED rear combination lamp assembly, several other
> recent car makes and models have incorporated LEDs into various
> signal functions. These are primarily limited production luxury
> cars, such as the Mercedes S-Class, BMW 5-Series, and Nissan
> Gloria."

Uhhhhhh Richard, like I figured, you have no clue. The subject is NOT LEDs used in automobiles. The subject is ***TIME-MULTIPLEXING*** of LEDs used in automobiles and there is absolutely no mention of time-multiplexing of the LEDs in your above posting, i.e. it is irrelevant to my question.

> On the Lincoln Town Car:
>
> "light-emitting diode array on the rear of this vehicle in a
> research project at California Partners for Advanced Transit and
> Highways takes data from the wheels and brakes and sends a signal
> to following cars indicating the acceleration and velocity of the
> vehicle."

Again, absolutely no mention of any time-multiplexing of the LED currents so your posting is completely irrelevant to my original question which continues to be: WHEN DID AUTO MANUFACTURERS START MULTIPLEXING THEIR AUTOMOBILE TAILLIGHTS. I suspect it was on the 2005 models and certainly not five years ago as you mistakenly assert.

I first saw a time-multiplexed LED taillight on my 2004 Thanksgiving trip to Memphis. I simply do not believe your assertion that time-multiplexed taillights have been around for five years. The

onus of proof is upon you and your above posting is certainly NOT
proof of time-multiplexed LED taillights.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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284. Re: Wireless Innovation Contest - Get your innovation noticed!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 02:23:03 UTC
From: ml <m@di.net>
Message-ID: <m-D99157.21225706012005@news.verizon.net>
Source record: 84123

In article <10tmk1sr8d53256@corp.supernews.com>,
"Andrey" <a8421@intergate.bc.ca> wrote:

> Get your innovation noticed! Submit it to Wireless Innovation
> Contest.
>
> If you've created something that's really making a difference,
> then we want to hear about it. And, more importantly, we want
> to tell the World about it.
>
> 2005 Wireless Innovation Contest takes place in Vancouver,
> BC Canada. The 2005 Wireless Innovation Contest is out to
> prove how wireless is changing the world. It could be a
> successful product, an enterprise solution that saved your
> customer thousands of dollars, a government solution that
> helped save lives or enhanced education or an entertainment
> solution that has made the world a lot more fun.
>
> Nokia, Telus Mobility and other Industry Partners throw Support
> Behind the Contest this year. A panel of industry leaders will
> judge each entry and decide on a winner and runner-ups.
> Winners of WIC 2005 are rewarded with targeted exposure in
> media and at trade shows, inclusion in a specialcase study
> publication and a one-hour mentor session with the panel of
> judges.
>
> More information is available at www.winbc.org/contest

sounds cool, if you just got your patient or don't care if your idea
nets you any salablilty

285. Re: hustler antenna resonant radials???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 02:40:57 UTC
From: N4LQ <n4lq@iglou.com>
Message-ID: <41ddf6b3$1_1@news.iglou.com>
Source record: 84124

Why do hams persist on using "tuned" radials on the ground? They cut them to "resonance" which means nothing. A wire cut for resonance on 40 meters and buried under 2 inches of soil is no where near resonant 7mhz. It would be much more effective if they just made all the radials as long as possible and forget this resonance stuff but no one listens.

--
Steve N4LQ
"Roger Adam" <roger.adam@remove_this.virgin.net> wrote in message news:2mYCd.525$Mw3.252@newsfe6-gui.ntli.net...
> Andy,
>
> check out this site, it may you/someone else,
>
> regards
>
> http://www.ad5th.com/5-BTV.html
>
>
>
> http://www.ad5th.com/5-BTV.html
>
>
>
>
>
> I choose Polesoft Lockspam to fight spam, and you?
> http://www.polesoft.com/refer.html
>

286. BEST automatic antenna tuner = ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 02:45:58 UTC
From: "C. J. Clegg" <answer.to.newsgroup@nospam.com>
Message-ID: <vqtrt0t9olkisrlccmbohiejlcor4g5fc6@4ax.com>
Source record: 84125

Which is the best amateur-band automatic antenna tuner made, for use with a 160-meter inverted V with open wire feeders, to cover 160 through 6 meters?

Also, is there much perceptible difference in performance, loss, signal strength, etc. between the best of the best and the ones that are only average in quality, assuming that both will properly tune the antenna?

287. Re: NEW RADIO HOBBY FOR 2005

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 03:01:49 UTC
From: Steveo <moparholic@hotmail-nospam.com>
Message-ID: <20050106220149.629$2f@newsreader.com>
Source record: 84126

Bill Turner <noway@nohow.com> wrote:
> On Thu, 6 Jan 2005 01:26:02 -0600, dx440@webtv.net (Free radio) wrote:
>
> >10 METER FREE BAND IS HOTTER THAN EVER SO PASS IT OWN
> --
>
> I'll let the FCC know, thanks!
>
Does that webtv hook in your mouth hurt much? :D

288. Tool for flat antenna wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 03:46:06 UTC
From: Dhakala <NoPoliticalCalls@gmail.com>
Message-ID: <1105069566.617343.144480@z14g2000cwz.googlegroups.com>
Source record: 84127

I'm designing a thingie that requires 20 to 24 ga 300 ohm flat antenna wire. I find it's a real PITA to separate the ends of the wire, trim that 1/4" of insulation out from between them, and strip the ends. Is there a tool that simplifies this job? If so, what is it called and where might I find it?

Thanks!

289. Re: HF antenna and Power line ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 03:50:29 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <9GnDd.2628$v76.1256@newsread3.news.pas.earthlink.net>
Source record: 84128

"Thierry" <See LUXORION website> wrote in message
news:41dc58c6@news.vo.lu...
> Hi,
>
> With a friend we have to install a beam near a HV Power line (we ignore
> its
> power) located 300 m from the QTH.
>
> Has someone among you a chart or table listing the EM field and Electric
> field of various HV power lines ?
> I know that a HV power line (I don't know its power) displays e.g. an EF
> of
> 10 kV/m and an EM flux density of 10 microT.
> and that the field decreases like 1/r^2 and that there is a
> epidemiological
> risk from 2 miligauss.
> I also know that the administation denies any construction in the 50m
> around
> such HV line due to the risk for the health
> But these are all data I have. Not enough to appreciate to risk of this
> specific installation.
>
> My questions are :
> - Is there a risk that this HV power line disturbs DX QSOs in HF bands
> (and
> QSO in VHF, but here I doubt much)
> - What is the risk for the health at such a distance according to the
> voltage ?
>
> Thanks in advance
>
> Thierry, ON4SKY
> http://www.astrosurf.com/lombry

By microT I assume you mean microTesla. One Tesla is 10,000 gauss. So 10 uT
is 100 milliGauss, 50 times more than your statement about epidemiological
risk.

But I can't answer your questions. Sorry.

John

290. Re: Tool for flat antenna wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 03:56:39 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <XLnDd.27811$2X6.6061@trnddc07>
Source record: 84129

"Dhakala" <NoPoliticalCalls@gmail.com> wrote in message
news:1105069566.617343.144480@z14g2000cwz.googlegroups.com...
> I'm designing a thingie that requires 20 to 24 ga 300 ohm flat antenna
> wire. I find it's a real PITA to separate the ends of the wire, trim
> that 1/4" of insulation out from between them, and strip the ends. Is
> there a tool that simplifies this job? If so, what is it called and
> where might I find it?
>
> Thanks!
>
A good pair of scissors and a wire stripper

291. Re: Tool for flat antenna wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 04:03:57 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41de0a3c$1_4@127.0.0.1>
Source record: 84130

Dhakala wrote:
> I'm designing a thingie that requires 20 to 24 ga 300 ohm flat antenna
> wire. I find it's a real PITA to separate the ends of the wire, trim
> that 1/4" of insulation out from between them, and strip the ends. Is
> there a tool that simplifies this job? If so, what is it called and
> where might I find it?

Use 300 ohm ladder-line (window-line). Remove the inside dielectric
with an Exacto knife and treat the remaining wires normally.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

292. Re: BEST automatic antenna tuner = ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 04:28:06 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <rdoDd.9448$B95.6140@lakeread02>
Source record: 84131

"C. J. Clegg" <answer.to.newsgroup@nospam.com> wrote
>
> Which is the best amateur-band automatic antenna tuner made, for use
> with a 160-meter inverted V with open wire feeders, to cover 160
> through 6 meters?

Most ATU's could tune your rain gutter with about equally bad performance
that you would get on any single antenna that you asked to service that
entire bandwidth.

> Also, is there much perceptible difference in performance, loss,
> signal strength, etc. between the best of the best and the ones that
> are only average in quality, assuming that both will properly tune the
> antenna?

I have never read reviews that compared them against each other.
http://www.eham.net/reviews/ will display the comments you're looking for.
After eight months of use, I am completely pleased with my MFJ-994 600w ATU.

Jack Painter
Virginia Beach, Virginia

293. Re: What's the deal? (was: Re: AM radio reception insidepassenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 06:17:07 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <EPpDd.9452$B95.4639@lakeread02>
Source record: 84132

"Richard Harrison" <richardharrison@webtv.net> wrote

> Jack Painter wrote:
> "An awful lot of engineers have accepted the findings already, and
> specify blunt-tipped rods on new construction.:
>
> They should specify what works.
>
> Suppose a charged cloud arrives overhead and no lightning immediately
> flashes. If the charge is positive, it attracts electrons in the earth
> ond other conductors nearby. These electrons strain to reach the cloud,
> runnibg through conducting bodies to get closer to the positive charges
> overhead. The blanket of air insulates between the charges of opposite
> polarity. The field grows faster than these charges are neutralized.
> Sooner or later, the air at a high point starts to ionize (form a
> conductive plazma). Then, current flow starts with a flash and a bang.
> Thunder rolls as air rushes in to fill the void left by burnt
> atmosphere.
>
> Suppose that a lightning rod is at a high point beneath the positively
> charged cloud as it arrives. Electrons are pulled up to its sharp point
> (electrons repel each other, ao they tend to concentrate on the outside
> of the rod and find the least outside opposing forces at the tip of the
> rod.
>
> To avoid corona formation, some transmitting antennas are fitted with
> "corona balls" on their tips. This reduces the strain from a pointed
> tip.
>
> On a lucky day, the cloud is discharged without lightning. On an ublucky
> day, your lightning rod may get pitted.
>
> Best regards, Richard Harrison, KB5WZI
>

Hi Richard,

Your example of lightning was the opposite, and very rare, from the normal occurrence of lightning which is not positive-charged. You can read about the discovery of this rare form of positive-charged lightning at: http://www.ee.nmt.edu/~thomas/nyt/nytimes_lightning.html

As a thunderstorm approaches, preceding its arrival there is a "wave" of positively charged ions that roll over the landscape like a wave. Buildups of these positive charged ions do gather on objects, and there is little

favoritism that describes their formation on pointy or rounded objects, they attach to everything. Upward-flowing streamers are emitted from these objects as a negatively charged cloud adds its powerful attraction to these ions. This occurs from human heads, shoulders, lightning rods (of any shape) and your so-called corona balls that offer no protection from positive-ion streamer emission whatsoever. I would suggest that in this area, your recollections of early lightning theory require major updating, since it seems based in part on radio theory that never applied to lightning in the first place, however well intentioned many engineers in that field may have thought it so. Corona balls are examples of the antenna being in the bathtub and not influencing lightning in the least bit. Some things persist because people want them too, whether scientific support for them remains or not. Now, once lightning has broken down and been divided, lessened, etc, then it begins to take on a shape that fits in the bathtub. Be corona-ball happy then if you like.

The junk-science of early-streamer-emission (and prevention of sufficient formation of same to attract a stepped-leader) relies on theories that you would find can work in the bathtub but have no relevance at all to lightning, for you see my friend, there are indeed great differences in the way electricity behaves when it has exponential power behind it. It would take thousands of Charge-Transfer-Systems (the ESE models) in a single location to effect a measurable favoritism of attracting or avoiding a single lightning charge. Yet in the bathtub (which is a very accurate example of how water does not behave the same as in the ocean) sized experiments, pointed-tip objects do attract charges. Too bad lightning doesn't actually behave that way, it would fit those classroom models so nicely!

A good example of draining a pitifully weak thunderstorm cloud without experiencing an actual strike, is the St Elmo's fire (and lesser but physically noticeable yellow air-coloring and even wet skin hair standing up) that happen on sailboats in a storm. I have experienced the latter several times, and while lightning struck the water close around, did not strike the mast by great luck we could say. It was NOT a grounded sail boat (Morgan, Out Island-41) and the potential from chainplates to waterline would have been explosive had we been struck. There is no model that I am aware of in thirty years of reading about this, that explains why a 65' aluminum (but ungrounded) mast alone on the water in the middle of a thunderstorm is not struck. And the boat was never struck in countless exposure to such storms. I add this just to allude to the fact that while we have learned a lot more about lightning in the last twenty years than we knew in all of history up to that time, much remains a mystery. I still find myself out on the water in thunderstorms, and also operate a communications station without securing during storms, so it is certainly a field that I have a vested interest in learning more about. I probably learned more from your brilliant explanations of lightning protection experience than any fifty other people I have talked with. And although he lives in a area practically void of lightning, I include Richard Clark in this category also because he is so well versed in the annals of common mode, transmission theory, and a very well read liberal indeed. ;-)

In case you're wondering, I have indeed added blunt-tipped lightning rods to the roofs of my residence. But I am also quite sure that the safety factor of impalement-avoidance is much more likely than the chances that my roof will ever be struck, with or without lightning rods. As there are now only four of the twelve pines which surround my home that have *not* been struck, somehow the odds seem to be approaching me! Four HF antenna systems are suspended or attached to three of those "virgin" trees ;-)

73,
Jack Painter
Virginia Beach Virginia

294. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 06:17:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4a9st0dqtm9c02o3bqltghhjs3qdhndl3b@4ax.com>
Source record: 84133

On 07 Jan 2005 01:00:31 GMT, jgboyles@aol.com (JGBOYLES) wrote:

>LED's tend to last than bulbs (I think)
Only if the bulbs are in American cars.

Hi Gary,

The filament lightbulb lifetime increases at the inverse 12th power of its reduction from the "suggested" operating voltage. This curve actually holds only for about the first 5 to 10% of voltage depression (otherwise they would last forever at half power). This is one reason to buy industrial bulbs (rated at 130V).

The benefit of LEDs is lowered current consumption for the same brightness (which I will warn is another one of those tricks of the brain). This is also a deficit for turn signals because it has a tendency to change the tempo of the flashing which can be mistaken as multiplexing. :-) The suggested fix is placing a resistor in parallel to return the circuit current demand to the original level.

73's
Richard Clark, KB7QHC

295. Re: 10 watt limit for ducky?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 06:25:14 UTC
From: richardharrison@webtv.net
Message-ID: <8423-41DE2B4A-816@storefull-3252.bay.webtv.net>
Source record: 84135

Reg, G4FGQ wrote:
"A few years back I opened the highish-level kitchen microwave oven door and felt what seemed to be a warm breeze of air on my face and especially around my eyes."

I coincidentally happened across a couple of related stories. First, Louis N.Ridenour wrote in "Radar System Engineering":
"A British Technical Mission arrived in Washington in September 1940 and mutual disclosures were made of British and American accomplishments in radar up to that time." Seems the British had invented a magnetron. America thought it important. On board my ship during WW-2, we kept the spare for our Raytheon SO radar in the ship`s safe!

Second is from IEEE`s June 2003 edition of "The Institute":
"In 1946, Percy Spencer, an engineer and inventor who held more than 120 patents, was conducting radar-related research for Raytheon Corp. While testing a new type of vacuum tube - the magnetron - he noticed that the chocolate bar he had been carrying in his pocket had melted. Intrigued, Spencer began conducting more experiments. He watched popcorn "pop" and bounce around the room when he held a bag of uncooked kernals up to the tube. Next, Spencer observed a raw egg placed next to the magnetron explode from the pressiure that had built up inside.

Spencer concluded that each of the items had "cooked" when exposed to low density microwave energy emitted by the magnetron. Raytheon engineers quickly adapted his discovery, and the first commercial microwave oven, the "Radarange" began to move into household kutchens the following year.

Best regards, Richard Harrison, KB5WZI

296. Re: Tool for flat antenna wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 06:30:30 UTC
From: Dhakala <NoPoliticalCalls@gmail.com>
Message-ID: <1105079430.943676.250770@z14g2000cwz.googlegroups.com>
Source record: 84134

I'm afraid scissors and wire stripper are what's taking so long. I'm hoping to find something that will chop out 1-2" of flat insulation at a pull of a lever or something, leaving the insulation-wrapped wires ready for stripping.

297. Re: Tool for flat antenna wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 06:45:56 UTC
From: Dhakala <NoPoliticalCalls@gmail.com>
Message-ID: <1105080356.457589.314660@z14g2000cwz.googlegroups.com>
Source record: 84136

Thanks for the advice. Why would it be easier to cut the insulation
from the inside of 300 ohm ladder-line wire than from flat antenna wire?

298. Re: What's the deal? (was: Re: AM radio reception inside passenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 06:53:00 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <glqDd.9453$B95.3036@lakeread02>
Source record: 84137

"Richard Clark" <kb7qhc@comcast.net> wrote

> So much of this breathless science of rounded tips alludes to the
> legitimacy of rare publications equal in scope and stature to those
> that announced the proofs of cold fusion.
>
> Did Pons and Fleishman turn their hands to designing Lightning
> protection systems to redeem their credentials?

Interested in your comments *after* you have read the study.
http://lightning-protection-institute.com/Documents/air-terminals.pdf

73,
Jack Painter
Virginia Beach, Virginia

299. Re: Source tracking with dish antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 07:50:04 UTC
From: Mike <km6ab@REMOVETHIS.pacbell.net>
Message-ID: <MarDd.8934$5R.6954@newssvr21.news.prodigy.com>
Source record: 84138

The Satellite industry tracks Satellites by monitoring a beacon
transmitter on the Satellite and moving the dish very slightly in a
predetermined pattern at prescribed intervals to keep the antenna
peaked. Depending on the speed of the motors and other factors, you can
track an object with an RF source as it moved fairly quickly across the
sky with this simple method.
Mike

Joel Kolstad wrote:
> Hi guys,
>
> I saw the Australian movie, "The Dish" over the holidays. It's about the
> Parkes Observatory and the large dish antenna used to relay video, audio,
> and telemetry feeds from Apollo 11 in 1969 back to NASA.
>
> At one point in the movie, they lose track of where Apollo 11 is and have to
> scramble to manually point the dish to get a signal again. However, once
> they DO manage to get a signal, they flip a switch and the dish continues to
> automatically track Apollo 11.
>
> I'm curious... how is this down? 3 or 4 slightly offset (from the dish's
> central feedpoint) receivers, the outputs of which are compared to determine
> which way the transmitting source is 'drifting' (then feed back to the
> motion control system to move the dish that way)? Or is there a simpler
> means?
>
> Thanks,
> ---Joel Kolstad
>
>

300. Re: 10 watt limit for ducky?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 08:05:42 UTC
From: Roger <Delete-Invallid.stuff.groups@tm.net>
Message-ID: <pbgst0lirnkiq3getpl5r85bt1912amvrm@4ax.com>
Source record: 84139

On Mon, 03 Jan 2005 15:10:23 GMT, Jim - NN7K
<nn7kexk7zfg@NOSPAMsbcglobal.net> wrote:

>Not to mention safty concerns- like those FCC rules for hams in the KW
>class- minimum safty standards - and those at 100 FEET, not in front of
>your face ! Also, those have rarely had great swr readings when
>measured. Most likely a combonation of these concerns-- Jim NN7K

If you do the calcs you will find the exposure level for a 2-meter HT
held close to the head is probably an order or two magnatitudes higher
than you can get from standing 100 feet from an array running the
legal limit. The array would have far more than the allowable limit.

Now they say it's the exposure time, but most of the hams I see using
HTs make transmissions long enough for the HT to get down right hot.

OTOH you can stand within a few feet of a 180 meter dipole running the
legal limit and still be well within the safe limits.

I'm running a stacked pair of 12s on 144 MHz at 130 feet. The maximum
I can run into those antennas is 380 watts. That is measured at the
antennas.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com
>
>
>Richard Clark wrote:
>
> The reasons may be manifold, but I would figure issues of
>> loss would be found in the soft tissues of the antenna mast (a
>> hand/arm) or nearby obstructions (skull/torso).
>>
> The dual banders would undoubtedly contain components
>> that were designed to feed or present a Hi-Z antenna, and would thus
>> face a rather stiff voltage - hence the limits on power.
>>
>> 73's
>> Richard Clark, KB7QHC

301. Re: What's the deal? (was: Re: AM radio reception inside passenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 08:14:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <a0dst0dtb7n06nbv9bqssrdd75urtbkteo@4ax.com>
Source record: 84140

On Fri, 7 Jan 2005 01:53:00 -0500, "Jack Painter" <223bthp@cox.net>
wrote:
>Interested in your comments *after* you have read the study.
>http://lightning-protection-institute.com/Documents/air-terminals.pdf

Hi Jack,

"It is quite obvious from these plots
that the experimentally determined electric field
strength is less than the "simple-minded" V/d value."

Interesting brush-off so early in the paper begs for real editorial control. As very few would experience lighting sourced from a grid of wire 5M overhead this paper seems an example of the "laboratory factor" it set out to examine and yields a paper confined to laboratory arcana. All fine and well, but what is the point?

"There is an urgent need for detailed theoretical
modelling which can quantify the space charge
effects around air terminals, particularly in
relation to upleader development."

Which seems at odds with your statement:
On Fri, 7 Jan 2005 01:17:07 -0500, "Jack Painter" <223bthp@cox.net>
wrote:
>The junk-science of early-streamer-emission
but I'm not terribly interested. I wasn't particularly intrigued by Pons and Fleishman either, beyond the hubris of their closet drama.

It would seem some have a desperate need to topple Franklin from a pedestal of their own building. (Theirs is called the fallacy of "present mindedness.") I'm satisfied that contemporary Europeans held him in high esteem for many noble achievements. Reductionists are measured against their own few of baser metal.

Hope you found that interesting, but I doubt it - rather banal stuff.

73's
Richard Clark, KB7QHC

302. Re: What's the deal? (was: Re: AM radio reception inside passenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 09:13:51 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <8IPRQaGPLI3BFADR@ifwtech.co.uk>
Source record: 84141

Jack Painter wrote:
>
>"Richard Clark" <kb7qhc@comcast.net> wrote
>
>> So much of this breathless science of rounded tips alludes to the
>> legitimacy of rare publications equal in scope and stature to those
>> that announced the proofs of cold fusion.
>>
>> Did Pons and Fleishman turn their hands to designing Lightning
>> protection systems to redeem their credentials?
>
>Interested in your comments *after* you have read the study.
>http://lightning-protection-institute.com/Documents/air-terminals.pdf

Yes, let's have more technical discussion and less name-calling, please.

There seem to be three observations that need to be understood.

1. The electric field gradient near a sharp point is greater than the field gradient near a blunt point. This is basic physics and should be completely beyond dispute. But that is the field gradient IMMEDIATELY LOCAL to the point... and that's not what lightning protection is about.

The whole point of lightning protection is to make a strike attach specifically to the installed "terminal' and lightning conductor, and not to any other part of the structure that the installation is aiming to protect.

So what we want to know is: when a lightning probe leader (the column of ionized air coming down from the cloud) approaches the structure, how does the lightning protection terminal attract it from a distance of many feet away? How does it say "Hey, come over here"?

2. According to Moore et al (the source of the USA Today story that Jack quoted earlier) a very high field gradient immediately local to tip may actually be counter-productive, because it can produce corona discharge which *reduces* the field gradient at a greater distance; and this may make the probe leader attach somewhere else where there isn't a corona.

At least, that's my reading of Moore's papers (following the trail of references from the USA Today page, back to the institute in NM where Moore and colleagues are based). They have a lightning observatory on top of a mountain, but there only seem to be three short guyed masts with a different type of terminal on each. Instruments in a small underground lab collect the data from lightning strikes.

Going back through the paper trail, they have been operating this facility for more than 10 years, and occasionally produce a paper to one of the lightning-related journals accompanied by a press release (the latest of which was picked up by USA Today). However, lightning only strikes when it feels like it, so the statistical data only build up very slowly... and if they change the setup on the mountain-top, they'd effectively have to start again.

Moore's conjecture that you can make the tip of the terminal *too* sharp is interesting, but his type of "live lightning" experiment doesn't provide any specific backup for what he's saying. It only produces the raw observations that he's trying to explain.

Then there is:
3. The paper that Jack quotes above, which reports experiments in a large 'lightning lab'. The experimental setup is big enough to investigate effects over a range of several feet, so controlled lab experiments could bring us a lot closer to the basic physics.

Unfortunately these particular experiments don't seem to help. Same as with Moore's work, the experiments are heavily biased towards commercially available lightning terminals which (rather like TV antennas) come in a variety of weird and wonderful shapes. The performance of commercial off-the-shelf terminals may be what the lightning protection industry wants to hear about, but these complex shapes (with their faint odor of snake oil) make it impossible to understand what's happening at a basic level.

So it's still wide open for speculation and experiments. Moore's conjecture - that you *don't* want a corona discharge, so the optimum tip radius is the one that produces the highest possible field gradient but *without* inducing corona - looks attractive, but as yet it doesn't have much theoretical or laboratory backup.

We have to be missing something here in this discussion. There has to be a whole range of scientific papers, in much more respectable physics journals that are far removed from the lightning industry, that we're not aware of.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

303. Re: The planning permission

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 09:26:02 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <712QEwHqWl3BFAjA@ifwtech.co.uk>
Source record: 84142

Roy Lewallen wrote:
>Do you get to vote for the council members who come up with all these
>rules, or are they appointed by the Queen or something? If the former,
>it sounds like it might be time to become a bit involved with your
>local government. If the latter, well, God save 'er. And you.
>
Unfortunately, none of the above. The rules are made by bureaucrats at national level, and implemented by bureaucrats at local level.

John - if you haven't got hold of the RSGB Planning booklet, get it NOW! There are several pitfalls in this process, so talk to an expert and get detailed advice before you set foot back inside that planning office.

I am not one of those experts, just one of their "satisfied customers". Being just about to go through the whole thing again in a different location, I will definitely be following my own advice!

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

304. Re: tower update

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 11:34:38 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10tssucdqtujmbc@corp.supernews.com>
Source record: 84143

"jake" <jake@nospam.com> wrote in message
news:41DD5949.EE3B2580@nospam.com...
> Read an article about welding rebar and also had a chat
> with one of the workers on our building site about it.
>
> Welding different type of rebar is not good idea but
> if you have the same type you can do so.
>
> The problem they have is the stuff just gets dropped
> off the truck and can come from different lots and
> you don't know what you have.
>
> Have you decided on what you'll put on the tower ?
>
> 73 jake
>
>
Jake
We bought all the rebar at once.
The beam is a 4 element SteppIR.
The crane arrives Thursday morning.
73, H.
>>
>> >
>> > You welded the rebar???
>> >
>

305. Re: What's the deal? (was: Re: AM radio reception inside passenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 12:38:46 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <NvvDd.14984$yW5.1400@fed1read02>
Source record: 84144

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:8lPRQaGPLl3BFADR@ifwtech.co.uk...
> Jack Painter wrote:
>>
>>"Richard Clark" <kb7qhc@comcast.net> wrote
>>
>>> So much of this breathless science of rounded tips alludes to the
>>> legitimacy of rare publications equal in scope and stature to those
>>> that announced the proofs of cold fusion.
>>>
>>> Did Pons and Fleishman turn their hands to designing Lightning
>>> protection systems to redeem their credentials?
>>
>>Interested in your comments *after* you have read the study.
>>http://lightning-protection-institute.com/Documents/air-terminals.pdf
>
> Yes, let's have more technical discussion and less name-calling, please.
>
> There seem to be three observations that need to be understood.
>
> 1. The electric field gradient near a sharp point is greater than the
> field gradient near a blunt point. This is basic physics and should be
> completely beyond dispute. But that is the field gradient IMMEDIATELY
> LOCAL to the point... and that's not what lightning protection is about.

I would think that lightning protection should begin with the safe equalization of charges. If one could prevent localization of charge, there wouldn't be anything to discharge. Failing that, if one could provide a controlled discharge mechanism, that drains charge without a massive discharge channel, that would also be good. Failing that, you fall back to a point <g> defense; first dissuading the creation of a conductive channel to the protected area, or, failing at that, providing a specific, perhaps sacrificial path for the massive discharge.

The first methods, involving charge management, might be effected by controlling the conductivity of the air. Chemical and mechanical methods seem difficult to deploy and might not be able to affect sufficient volume. I wonder if conductive air volumes, or specific channels, might be created by RF stimulation? Might it be possible to map the atmospheric charge, and through an array of steerable microwave exciters, create specific conductive paths for the relatively safe dissipation of localized charge? I wonder if the HAARP has investigated lightning control possibilities?

Ed
wb6wsn

306. Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 13:13:26 UTC
From: stryped@hotmail.com
Message-ID: <1105103606.186938.285100@f14g2000cwb.googlegroups.com>
Source record: 84145

I have been reading alot on different designs and have read contradictory information on this. Does nayone here have an opinion?

Also, when building a j-pole, could I run the wire inside the tube. (Regular jacketed copper wire) to the bottom of the tube to a pl connector? Or would this mess up the impedance?

307. Re: The planning permission

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 13:53:50 UTC
From: Simon Smith <s.Smith@btinternet.com>
Message-ID: <crm49djtj1@sparta.btinternet.com>
Source record: 84146

Tom
I agree - Thankful for small mercies.....
John
"Tom" <noname@noprovider.nodomain> wrote in message
news:XZjDd.33645$L7.21064@trnddc05...
> The good news is, the clerk is actually being rather helpful.
> A less useful situation occurs when the clerk accepts anything
> you deliver and then the council rejects the proposal due to
> improper formatting.
>
> -- Tom
>
>
>
>
> "Simon Smith" <s.Smith@btinternet.com> wrote in message
> news:crk4mm$n48$1@titan.btinternet.com...
>> Well, I today decided to make a start in trying to obtain planning
>> permission for my new Antenna - even though the "Permitted Development
>> Rights" have been removed from our small Village in the middle of nowhere
>> on Bodmin Moor in Cornwall -
>> First step was to fill in all four sets of application forms - the
>> truth - the whole truth and nothing but the truth !! Then out in the wind
>> and rain with a tape measure and try to measure up the length of the
>> garden - distance from the house to the proposed site of the Antenna -
>> Height of the house in relation to the height of the Antenna - and then
>> go back indoors and start to draw it all up into a meaning full set of
>> drawing. Four copies were needed. Next step. Try to find the digital
>> Camera and wait for the rain to stop before taking a photo of the
>> intended site. Lunch. Proceed to print photos - run out of ink. Install
>> new print cartridge - and finally manage to get the whole lot ready for
>> the "Council"
>> Proceed to Bodmin Council offices - where a nice young girl offered to
>> view my drawings before accepting them for consideration. The first
>> mistake I made was in using feet and inches. "Sorry - we only take
>> metric" So I now have to re-do them all again. Next mistake "We Don't
>> take them on graph paper" Third mistake was
>> "We need a picture of the "Ariel" Forth mistake was: "We need the
>> drawings to be to scale"
>> Did Marconi have all this trouble with the "Council" ?
>> Here I am - now trying to re-do everything - to some sort of Scale. Wife
>> moaning - Kids Moaning - cat climbing over all the drawings - Dog waiting
>> to be walked..... TV blaring out .... Ohhh happy days .... I think I am
>> going Crazy..... Beam me up Scottie.....

>> To be Continued.........
>> John M3IIV
>>
>
>

308. Re: Tool for flat antenna wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 14:18:14 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41de9a34$1_1@127.0.0.1>
Source record: 84147

Dhakala wrote:
> I'm afraid scissors and wire stripper are what's taking so long. I'm
> hoping to find something that will chop out 1-2" of flat insulation at
> a pull of a lever or something, leaving the insulation-wrapped wires
> ready for stripping.

Forget the scissors and use an Exacto knife on the center insulation.
--
73, Cecil http://www.qsl.net/w5dxp

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309. Re: What's the deal? (was: Re: AM radio reception inside passenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 14:19:56 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <ecvJeWSMqp3BFAIp@ifwtech.co.uk>
Source record: 84148

Ed Price wrote:
>
>I would think that lightning protection should begin with the safe
>equalization of charges.

Oh, how we all wish! But think what that implies...

>If one could prevent localization of charge, there wouldn't be anything
>to discharge.

That would require control over the weather - and again, oh how we all wish!

>Failing that, if one could provide a controlled discharge mechanism,
>that drains charge without a massive discharge channel, that would also
>be good.

But again, we don't know how to do that. Starting from a weakly ionized probe leader, lightning has a huge positive feedback mechanism. Once it has started to go, it'll go all the way!

>Failing that, you fall back to a point <g> defense; first dissuading
>the creation of a conductive channel to the protected area,

If an ionized leader has made it all the way down from the cloud into the region of the protected area, we don't know any way to tell it "Wrong Way. Not In My Back Yard".

If the leader has come so close, you absolutely cannot stop what's probably going to happen next. All you can do is do is to design the protection system to make the best of it.

>or, failing at that, providing a specific, perhaps sacrificial path for
>the massive discharge.
>
At last, we've come down to earth. All that lightning protection can realistically aim to do is providing a specific path. The whole aim of lightning protection is to provide a safe discharge path *past* the structure that's being protected, as opposed to a damaging path *through* the structure.

A "sacrificial" path is not an option to design for. The lightning conductor *must* hang in there for the whole duration of the stroke(s), or else protection will be lost before it's all over.

To keep the original discussion in perspective, all this stuff about terminals at the top end of the conductor is about trying to achieve some kind of "come here" effect in literally the final few feet of the

entire lightning path (or tens of feet, if we're really lucky) to make sure the leader attaches to the terminal and not somewhere else on the structure.

The well known and most reliable way to do that is to make the terminal higher than everything else, so it dominates the local electric field. But that's still no guarantee that a leader won't come wandering down at some distance off to the side, and then strike downward or even sideways from there.

Bottom line: it's absolutely vital to be realistic about what lightning protection can do - and also what it cannot do. A system designed out of hopes and dreams will be the wrong system.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

310. Re: Tool for flat antenna wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 14:24:20 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41de9ba2$1_4@127.0.0.1>
Source record: 84150

Dhakala wrote:
> Thanks for the advice. Why would it be easier to cut the insulation
> from the inside of 300 ohm ladder-line wire than from flat antenna wire?

Because more than half has been chopped out already. You can cut
the ladder-line at a place where there's no center insulation and
have one inch wire tails needing only a wire stripper. If you
need longer wire tails than that, you only need to cut out about
1/4" of center insulation with an Exacto knife to achieve two inch
wire tails.
--
73, Cecil http://www.qsl.net/w5dxp

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311. Re: More j poll questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 14:25:51 UTC
From: stryped@hotmail.com
Message-ID: <1105107951.226864.318930@f14g2000cwb.googlegroups.com>
Source record: 84149

Allodoxaphibia wrote:
> On 6 Jan 2005 13:47:57 -0800, stryped@hotmail.com wrote:
> > Is there a way to tune a j pole besides moving the coax up or down?
>
> Well, errr, Bub, you ain't "tuning" a J-Pole by "...moving the coax
up or down".
>
> You 'tune' a J-Pole by whacking off, or whacking on 'calculated'
lengths
> of the 2 parallel pieces.
>
> There be a difference between "tuning" and "Matching".
>
> Jonesy
> --
> | Marvin L Jones | jonz | W3DHJ | linux
> | Gunnison, Colorado | @ | Jonesy | OS/2 __
> | 7,703' -- 2,345m | config.com | DM68mn SK

Ok, I understand what you are saying. Moving the coax affects the
"impedance". How does one effectively "tune" then by shortenign or
lengthening the elements?

312. Re: Center Fed " Zepp " with Coaxial Balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 14:29:00 UTC
From: "JimK2TL@gmail.com" <JimK2TL@gmail.com>
Message-ID: <1105108140.516909.7540@f14g2000cwb.googlegroups.com>
Source record: 84151

Maybe I did not explain properly. I use a coax switch to select either the FT-920 directly and thereby use the built in autotuner, or select an external manual tuner when I bypass the internal autotuner. This allows me to use either the built in autotuner, or the manual tuner, depending on the band. Most of the time the autotuner is just fine with the antenna I described. I don't understand why you thought I had 2 external tuners? Anyway, I hope this clears that up.

Jim/K2TL

313. Re: BEST automatic antenna tuner = ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 14:31:57 UTC
From: "C. J. Clegg" <answer.to.newsgroup@nospam.com>
Message-ID: <847tt0pehp97976o0kqfajt4mige3l09lm@4ax.com>
Source record: 84152

On Thu, 6 Jan 2005 23:28:06 -0500, "Jack Painter" <223bthp@cox.net>
wrote:

>Most ATU's could tune your rain gutter with about equally bad performance
>that you would get on any single antenna that you asked to service that
>entire bandwidth.

Good morning, Jack.

Well, that's not entirely true I don't think ... it's probably true
enough when referring to a physically-short antenna that you're trying
to extend well beyond its range, but I have a 160-meter inverted vee
fed with an open wire line that works very, very well on 160 through
10 (haven't tried it on 6 yet because my manual tuner won't go that
far).

Thanks for the eham.net link, I'll check it out.

CJ

314. vertical dipole or 5/8 lamda?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 14:43:30 UTC
From: Spam <spamcollector@sympatico.ca>
Message-ID: <pan.2005.01.07.14.43.29.466302@sympatico.ca>
Source record: 84155

What has higher gain?

A vertical dipole or a a 5/8 lamda vertical?

Is there any difference in gain between a center fed dipole or a 1/4
lamda matching stub feeding an end fed dipole such as the J-Pole?

315. Re: BEST automatic antenna tuner = ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 14:46:27 UTC
From: "JimK2TL@gmail.com" <JimK2TL@gmail.com>
Message-ID: <1105109187.942895.89350@f14g2000cwb.googlegroups.com>
Source record: 84153

I have owned a few different autotuners. They are a great convenience, but not without some cost in performance. The reviews I have seen on the efficiency of autotuners can be depressing. In fact, I have seen insertion loss figures as high as 65% on some bands and some crazy impedances.
I think this is due to the use of toroids and fixed capacitors in autotuners. A good efficient tuner usually has high Q air inductors and well made variables. Maybe that explains it, maybe not. However, they sure do work nice! I used an old SGC at the feedpoint of a 30 foot homebrew vertical. It was a kicker on all bands from 160 through 6 meters! Now, that of course is my own anecdotal experience, and the antenna may have been inefficient as hell, but it got me on the air and I got out real well. I have also used autouners on random wires and such, and again they work well. But expect to lose a fair amount of power.

316. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 14:51:18 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <e68tt0l84k1b2i92vin0ucc4o4bqotrbmo@4ax.com>
Source record: 84154

On 5 Jan 2005 17:07:51 -0800, "Cecil Moore" <w5dxp@hotmail.com> wrote:

|Slightly off topic - I've seen a couple of new automobiles with
|time-multiplexed LED taillights. What would be the advantage of such a
|design in an automobile?

What the hell is "time-multiplexed"?

317. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 14:51:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10ttc0gbli3kgd8@corp.supernews.com>
Source record: 84160

Cecil Moore wrote:
> Wes Stewart wrote:
>
>> On 5 Jan 2005 17:07:51 -0800, "Cecil Moore" <w5dxp@hotmail.com> wrote:
>> |Slightly off topic - I've seen a couple of new automobiles with
>> |time-multiplexed LED taillights. What would be the advantage of such a
>> |design in an automobile?
>>
>> What the hell is "time-multiplexed"?
>
>
> In this case, on half the time and off half the time at about
> a 100 Hz rate. Maybe square-wave power? Maybe pulse-width
> modulation, different from night to day? I thought it was a
> simple question to which someone had a simple answer.

"Time-multiplexed" means that they're turned on in sequence, without all being on at once. That would be as opposed to simply pulse modulated all at once.

My guess is that they're pulse modulated to provide easy and efficient control of the brightness, and possibly compensation for voltage and/or temperature. If they're time-multiplexed as well, that would even out the total current drain rather than its being in the form of big current pulses.

Are they really time-multiplexed, or are they all pulsed at once?

Roy Lewallen, W7EL

318. Re: Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 15:07:30 UTC
From: "Eike Lantzsch, ZP6CGE" <eikelan@gmx.net>
Message-ID: <slrnctt9di.n9i.eikelan@ID-77364.user.individual.net>
Source record: 84156

stryped@hotmail.com wrote:
> I have been reading alot on different designs and have read
> contradictory information on this. Does nayone here have an opinion?
>

As I understand it, a J-pole is derived from nothing but an inverted Zeppelin-antenna. That makes the feedpoint a balanced one and you need a balun or at least a choke. But as a Zepp-antenna it does not need any ground just like ordinary dipoles don't. But if you ground a J-pole the ground needs to be exactly in the middle of the short in the feed line. For practical reasons most J-poles are not constructed this way.

> Also, when building a j-pole, could I run the wire inside the tube.
> (Regular jacketed copper wire) to the bottom of the tube to a pl
> connector? Or would this mess up the impedance?
>

What you are looking for is on YO5OFH, Csaba Gajdos web page here:
http://www.qsl.net/yo5ofh/projects/antenna/jpol_antenna.htm
but I didn't try the design myself yet. I might within short.

There is ample of information on J-poles here:
http://www.cebik.com/jp1.html

Kind regards, Eike

319. Re: What's the deal? (was: Re: AM radio reception inside passenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 15:34:30 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41dea7f2$1_2@127.0.0.1>
Source record: 84157

Ian White, G3SEK wrote:
> The well known and most reliable way to do that is to make the terminal
> higher than everything else, so it dominates the local electric field.
> But that's still no guarantee that a leader won't come wandering down at
> some distance off to the side, and then strike downward or even sideways
> from there.

I have antennas, towers, tall trees, and power poles on my
property. Lightning chose to strike a five foot tall Live
Oak tree, killing half of it. The other half is still alive.
--
73, Cecil http://www.qsl.net/w5dxp

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320. Re: vertical dipole or 5/8 lamda?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 15:41:16 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41dea987$1_3@127.0.0.1>
Source record: 84158

Spam wrote:
> What has higher gain?
> A vertical dipole or a a 5/8 lamda vertical?

A 5/8 WL vertical *with an excellent ground plane* has about
3 dB gain over a vertical 1/2WL dipole.

> Is there any difference in gain between a center fed dipole or a 1/4
> lamda matching stub feeding an end fed dipole such as the J-Pole?

Both radiating portions are 1/2WL so they have about the
same gain.
--
73, Cecil http://www.qsl.net/w5dxp

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321. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 15:46:32 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41deaac4_3@127.0.0.1>
Source record: 84159

Wes Stewart wrote:

> On 5 Jan 2005 17:07:51 -0800, "Cecil Moore" <w5dxp@hotmail.com> wrote:
> |Slightly off topic - I've seen a couple of new automobiles with
> |time-multiplexed LED taillights. What would be the advantage of such a
> |design in an automobile?
>
> What the hell is "time-multiplexed"?

In this case, on half the time and off half the time at about
a 100 Hz rate. Maybe square-wave power? Maybe pulse-width
modulation, different from night to day? I thought it was a
simple question to which someone had a simple answer.
--
73, Cecil http://www.qsl.net/w5dxp

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322. Re: NEW RADIO HOBBY FOR 2005

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 16:38:34 UTC
From: Bob Schreibmaier <k3ph@ptd.net>
Message-ID: <Ku2cnf91bs-WJkPcUSdV9g@ptd.net>
Source record: 84162

In article <20650-41DCE80A-653@storefull-3277.bay.webtv.net>,
dx440@webtv.net says...
>
>
>10 METER FREE BAND IS HOTTER THAN EVER SO PASS IT OWN
>

```
____________________
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||__|| | | Please do not |
/ O O\__ | feed the trolls. |
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+-----------------------------------------------+
| Bob Schreibmaier K3PH | E-mail: k3ph@ptd.net |
| Kresgeville, PA 18333 | http://www.dxis.org |
+-----------------------------------------------+
```

323. Re: HF antenna and Power line ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 16:48:54 UTC
From: Thierry <->
Message-ID: <41debd79$1@news.vo.lu>
Source record: 84163

Hi,

Well, I receive some answers, found others on the Internet, all is now written in my 3 pages (see ref below).

The big picture:
There is surely no influence of HV power lines at 300m away. And probably no QRM on HF bands at that distance either. But will know more about HF consequences when will be on the air in the field...;-). I retain the idea of Cecil on 40m.

No study can confirm the direct relation between some leukemia and HV power lines located to say <100m from houses. There are leukemia observed with radiation equivalent to a exposure to an HV power line < 75m away.
On the other hand, companies recognize that beneath pylons (25m away) there is a risk for the health (and some electrical devices) due to the strong current and voltages, far higher than the current limits (see end p3 of my text,under guidelines) which are thermselves, already 50 or 100x higher to the values potentially at risk for security reasons.
But I don't see how we could contact a leukemia without a durable exposition. It doesn't come eating your familiar food and cookies... or half the population 'd be contaminated. As around the concerned spots studied by IRPA there is no other powerful sources of emission excepted these sad pylons...
At last, the risk is not black or white depending on the distance or the radiation level. All this is progressive and hard to define, hence the deep fog envelopping all studies.
WHO is currently studying the problem more deeply.

More info of my site with many links and some books to read.
http://www.astrosurf.com/lombry/qsl-em-radiation.htm, tables p2, ref p3

73
Thierry, ON4SKY

324. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 16:51:30 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41deb9fe$1_2@127.0.0.1>
Source record: 84161

Roy Lewallen wrote:
> "Time-multiplexed" means that they're turned on in sequence, without all
> being on at once. That would be as opposed to simply pulse modulated all
> at once.

The most trivial case of binary time multiplexing would be a
single LED being turned on for a logic 'one' and off for a logic
'zero'. That "binary time multiplexing" concept is a carry over
from 40 years as a digital engineer, 13 of them at Intel.

> Are they really time-multiplexed, or are they all pulsed at once?

It appeared that they were all pulsed at once. Perhaps I should
have used the word "pulsed" to avoid confusion in the RF analog
(non-digital) world.
--
73, Cecil http://www.qsl.net/w5dxp

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325. Re: Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 17:05:14 UTC
From: stryped@hotmail.com
Message-ID: <1105117514.546272.108320@z14g2000cwz.googlegroups.com>
Source record: 84164

Eike Lantzsch, ZP6CGE wrote:
> stryped@hotmail.com wrote:
> > I have been reading alot on different designs and have read
> > contradictory information on this. Does nayone here have an
opinion?
> >
>
> As I understand it, a J-pole is derived from nothing but an inverted
> Zeppelin-antenna. That makes the feedpoint a balanced one and you
> need a balun or at least a choke. But as a Zepp-antenna it does not
> need any ground just like ordinary dipoles don't. But if you ground
> a J-pole the ground needs to be exactly in the middle of the short
> in the feed line. For practical reasons most J-poles are not
> constructed this way.
>
> > Also, when building a j-pole, could I run the wire inside the
tube.
> > (Regular jacketed copper wire) to the bottom of the tube to a pl
> > connector? Or would this mess up the impedance?
> >
>
> What you are looking for is on YO5OFH, Csaba Gajdos web page here:
> http://www.qsl.net/yo5ofh/projects/antenna/jpol_antenna.htm
> but I didn't try the design myself yet. I might within short.
>
> There is ample of information on J-poles here:
> http://www.cebik.com/jp1.html
>
> Kind regards, Eike
So, does a j pole need to be insulated from the antenna mast?

326. Re: Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 17:11:10 UTC
From: stryped@hotmail.com
Message-ID: <1105117869.964874.136280@z14g2000cwz.googlegroups.com>
Source record: 84165

What about a dual band version?

327. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 17:19:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10ttkllsv6ieufc@corp.supernews.com>
Source record: 84170

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> "Time-multiplexed" means that they're turned on in sequence, without
>> all being on at once. That would be as opposed to simply pulse
>> modulated all at once.
>
>
> The most trivial case of binary time multiplexing would be a
> single LED being turned on for a logic 'one' and off for a logic
> 'zero'. That "binary time multiplexing" concept is a carry over
> from 40 years as a digital engineer, 13 of them at Intel.
>
>> Are they really time-multiplexed, or are they all pulsed at once?
>
>
> It appeared that they were all pulsed at once. Perhaps I should
> have used the word "pulsed" to avoid confusion in the RF analog
> (non-digital) world.

Yeah, digicats have their own language. In analog parlance, multiplexing basically means sharing. As in telephony, where you share one line among many users by connecting each to the line for a short time in sequence (time division multiplexing or TDMA - time division multiple access), breaking the spectrum into pieces and giving each user his own channel (frequency domain multiplexing), or more complex methods such as spread spectrum code domain multiplexing, or CDMA (code division multiple access). There's no sharing when there's only one user, channel, or LED involved, so no multiplexing. Except, I guess, for digital types who can share an LED between a 1 and a 0.

Just out of curiosity, what does your revered IEEE Dictionary have to say about it?

Roy Lewallen, W7EL

328. Want Maxcom Antenna Matcher

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 17:32:05 UTC
From: Skipp knows what the Maxcom is <skipp025@yahoo.com>
Message-ID: <crmh2l$h8a$1@skeeter.ucdavis.edu>
Source record: 84166
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.swap,rec.radio.swap

Hello there,

Yes, I know what's inside it and how it works... but I'd still like to find a Maxcom Antenna Matcher.

If you have a Maxcom Matcher you'd like to sell, please Email me direct at: skipp025@yahoo.com

It can even be in most any condition...

Thanks for looking at this want ad.

cheers
skipp
skipp025@yahoo.com
www.radiowrench.com/sonic

329. Re: More j poll questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 17:36:56 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41dec85a.1934921281@news.galilei.com>
Source record: 84167

Moving the coax up or down only changes the impedance.
there is a sweet spot of 52 ohms between the lower end 700 ohms and
the upper end 300 ohms of the impedance range.

Tuning for a center frequency is most easily accomplished by
installing a brass machine screw in the pipe caps after you shorten
the antenna and stub slightly to give you tuning room.

TTUL
Gary

330. Re: What's the deal? Lightning

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 17:39:51 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <wPzDd.15008$yW5.9891@fed1read02>
Source record: 84168

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:ecvJeWSMqp3BFAlp@ifwtech.co.uk...
> Ed Price wrote:
>>
>>I would think that lightning protection should begin with the safe
>>equalization of charges.
>
> Oh, how we all wish! But think what that implies...
>
>>If one could prevent localization of charge, there wouldn't be anything to
>>discharge.
>
> That would require control over the weather - and again, oh how we all
> wish!

I fully understand what I implied; this would be a technique well beyond our current capabilities. OTOH, it would be a grand concept. And we wouldn't have to "control the weather", just finesse one part of it, for a short time, in a very local region, so it might be applicable to protecting extremely valuable items and events, like maybe a shuttle launch or landing.

>
>>Failing that, if one could provide a controlled discharge mechanism, that
>>drains charge without a massive discharge channel, that would also be
>>good.
>
> But again, we don't know how to do that. Starting from a weakly ionized
> probe leader, lightning has a huge positive feedback mechanism. Once it
> has started to go, it'll go all the way!

You don't know how and I don't know how, but that's a long way from knowing that it's impossible. And I won't concede that there's no mechanism to modulate a discharge.

>
>>Failing that, you fall back to a point <g> defense; first dissuading the
>>creation of a conductive channel to the protected area,
>
> If an ionized leader has made it all the way down from the cloud into the
> region of the protected area, we don't know any way to tell it "Wrong Way.
> Not In My Back Yard".
>
> If the leader has come so close, you absolutely cannot stop what's
> probably going to happen next. All you can do is do is to design the
> protection system to make the best of it.

>
>>or, failing at that, providing a specific, perhaps sacrificial path for
>>the massive discharge.
>>
> At last, we've come down to earth. All that lightning protection can
> realistically aim to do is providing a specific path. The whole aim of
> lightning protection is to provide a safe discharge path *past* the
> structure that's being protected, as opposed to a damaging path *through*
> the structure.
>
> A "sacrificial" path is not an option to design for. The lightning
> conductor *must* hang in there for the whole duration of the stroke(s), or
> else protection will be lost before it's all over.

Sacrificial was a bad term; I didn't mean to imply that it wouldn't be durable, just that it would be the path to take the hit and protect the rest of the local area.

>
> To keep the original discussion in perspective, all this stuff about
> terminals at the top end of the conductor is about trying to achieve some
> kind of "come here" effect in literally the final few feet of the entire
> lightning path (or tens of feet, if we're really lucky) to make sure the
> leader attaches to the terminal and not somewhere else on the structure.
>
> The well known and most reliable way to do that is to make the terminal
> higher than everything else, so it dominates the local electric field. But
> that's still no guarantee that a leader won't come wandering down at some
> distance off to the side, and then strike downward or even sideways from
> there.
>
>
> Bottom line: it's absolutely vital to be realistic about what lightning
> protection can do - and also what it cannot do. A system designed out of
> hopes and dreams will be the wrong system.

I HOPE I'm not there when it hits, and you're DREAMING if you think I'll volunteer to hold the rod. That's being REALISTIC on my part. Seriously, if all you can propose is a thick, conductive pole, then you are entering the fight at your last line of defense. Think about the whole problem, not just optimizing the existing solution.

And BTW, what would be so bad about having some way to create a conductive channel from the charge to a place of YOUR choice? Even that modest goal could vastly expand the "cone of protection" that existing masts provide. Imagine being able to initiate safe cloud-to-cloud discharges. Imagine being able to direct all charge for a one-mile radius to discharge (even violently) to a designated lightning rod. One rod could protect an entire building; several rods could protect an entire large airport. My speculation about selection paths of ionization by RF excitation was just groping toward one way to create those channels, and HAARP naturally came to mind.

Ed
wb6wsn

331. Re: Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 17:50:05 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41dec8ff.1935086359@news.galilei.com>
Source record: 84169

A J-Pole is a 1/2 wave vertical antenna, that sits on TOP of a U
shaped 1/4 wave matching section.
During construction, the 1/2 wave vertical element AND ONE of the 1/4
wave legs of the Transformer are constructed of the same piece of
tubing. Thus the J appearance and name.

RF is invisible to whatever lies below the Horizontal Member, so
whether the mast is grounded or not would have no impact on the
J-Poles performance. However, the shield MUST be grounded for obvious
reasons.

It is Normal and Proper to RUN the COAX up the center of the mast,
INSIDE the Antenna and EXIT the vertical element at the Horizontal
Member.
If you don't, THEN you will need to stop stray RF that runs along the
coax and/or use a Balun.

When you connect your COAX to the J-Pole:
If it is a MonoBand J-Pole, run the center conductor to the STUB,
leaving the sheild jacket intact up to within about 1/2 inch of the
stub. Then run a wire from the shield horizontal to the horizontal
member and affix this to the vertical.
If it is a Multi-Band J-Pole, the center conductor should be connected
to the Vertical Element and a wire from the shield runs horizontal
over to the stub.

Although a J-Pole will work with the coax connected either way. On
MonoBand J-Poles, having the center conductor going to the Stub
reduces the noise level slightly. It can make a difference when you
are trying to pull in QRP stations.

Using 3 or 4 1/8th wave wires, like a capacity hat, protruding outward
on the top of the vertical element will give the same noise reducing
effect.

TTUL
Gary

stryped@hotmail.com verbositized:

>I have been reading alot on different designs and have read
>contradictory information on this. Does nayone here have an opinion?
>
>Also, when building a j-pole, could I run the wire inside the tube.
>(Regular jacketed copper wire) to the bottom of the tube to a pl
>connector? Or would this mess up the impedance?
>

332. ICOM AH-2 tuner manual

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 18:18:20 UTC
From: Spam <spamcollector@sympatico.ca>
Message-ID: <pan.2005.01.07.18.18.20.65897@sympatico.ca>
Source record: 84072

I am looking for an ICOM AH-2 antenna tuner manual.
It is not on the ICOM web site.

Greg
ve0acr _at_ rac _dot_ ca

333. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 18:25:28 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <suADd.3187$c13.547@bgtnsc04-news.ops.worldnet.att.net>
Source record: 84171

Cecil,

Here's the deal.

I will assume the low intensity tail light and the high intensity brake light share the same LEDs. In a typical system there will be 10's to even 100's of LEDs. The required light output from the tail light function and brake light function is quite different. I have seen numbers from ranging from 7:1 up to 15:1. Let's say that the brake light requires 10X the output required from the tail light.

Contrary to what was posted earlier in this thread, the light output from LEDs is roughly linear with forward drive current over several orders of magnitude. This is true up to nearly the point where the device explodes from overheating.

So why not just change the DC current to get the varying output required?

The problem is device matching. As you well know all semiconductor devices are subject to significant performance variation depending on exact process conditions, materials, phase of the moon, or whatever. LEDs are typically specified at one nominal current, with a nominal light output.

When used at the nominal conditions a batch of LEDs can be selected to match light output performance so that no obvious visual artifacts appear. However, if these same matched LEDs are driven at significantly different conditions, the light output will have wider variation, perhaps detectable to the ordinary observer.

Therefore the recommended method for reducing light intensity from a matched array of LEDs is to operate at nominal electrical conditions, but at a reduced duty cycle.

I do not know the details of the vehicle you observed, but it is likely that the brake light function uses DC or a high duty cycle pulse, while the tail light uses a low duty cycle pulsed activation.

There are other issues such as temperature variations and dealing with non-functioning LEDs, but that is enough for now.

73,
Gene
W4SZ

Cecil Moore wrote:
>
>

> It appeared that they were all pulsed at once. Perhaps I should
> have used the word "pulsed" to avoid confusion in the RF analog
> (non-digital) world.

334. Re: What's the deal? (was: Re: AM radio reception insidepassenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 18:40:28 UTC
From: richardharrison@webtv.net
Message-ID: <5899-41DED79C-993@storefull-3253.bay.webtv.net>
Source record: 84074

Jack Painter wrote:
"Your example of lightning was the opposite, and very rare, from the normal occurance of lightning, which is not positively charged."

I won`t predict nor defend either polarity of charge in an overhead cloud. In either case it will attract the opposite charge beneath.

In my example, I chose positive for the cloud because now it is popular to characterize electrons as the mobile electrical particle. My formal education was that regardless of what electrons do, current flows from plus to minus. In my hypothesis, I chose to characterize what charges were doing in the earth and other conductors. Electrons are considered mobile due to extremely small mass, so I chose them as the moving charge.

Effects of lightning are identical regardless of polarity or direction of travel for practical purposes. Significant factors in lightning protection are the maximum voltage reached across a protected device and the current through it. We can`t do anything about the millions of volts and the thousands of amps behind a lightning strike. We can put high impedance between the strike and our protected people and products and we can clamp the volts across them.

I`m sure that polarity makes no difference, one, the other, or both. For sure you must be prepared for both because lightning is a transient. In its start and stop, it generates powerful alternating components which include the entire radio spectrum.

Arc gaps are effective protectors which have dependable breakdown voltages for a given atmosphere, temperature, pressure, presence or absence of triggering radiation, etc. Breakdown voltage is proportional to gap width for given conditions. Electrode shape is significant in the striking (breakdown) voltage. Blunt electrodes require significantly more volts to arc across than do needle points. Anyone in the TV business knows that corona discharge from the high-voltage circuit occurs from a sharp point. Once a corona is producced from a point, conductance extends as far as the corona reaches.

I agree that charged air arrives in advance of a thunderstorm, whatever the polarity of charges may be. I`ve spent many years in broadcast stations and observed the storms. Before the storm arrives, tower guy insulators flash across from charges picked up by the guywire segments out of thin air.

On arrival, a bolt from the sky hits a tower or towers. Maybe it`s the reverse that occurs. It makes no difference. The station and its

equipment are protected by the tall towers. In lightning rods, more is better. All the stations in my experience used multitower arrays. None ever had significant lightning damage. Much of the time they were operating 24-7 and they might be dropped from the air for an instant due to a temporary overload caused by the lightning strike.

The medium wave stations I worked in had blunt lightning discharge electrodes. Lowest breakdown voltage wasn`t a requirement. The final amplifiers used vacuum tubes and were sturdy. The tower base insulators all had ball gaps side by side across them. Precipitation fell right through to have little effect on their striking voltage. Tower balls never fire anyway. It`s always the Faraday screen between the primary and secondary of the tower coupling transformer thet takes the lightning hit. The impedance and striking voltage are higher at that circuit point. The screen is heavy and easily withstands lightning strikes.

The shortwave stations I`ve worked in, all had arc gaps at the feedpoint of their parallel 600-ohm transmission lines. These were adjusted so that they just had 10 thousandths of an inch more than the minimum spacing required to prevent breakdown on full 100 KW carrier output with 100% modulation. These gap electrodes were consstructed like the letter V turned so one side was horizontal and the pointed ends of the V`s pointed to each other. The upward slope of the arc gap meant that heated air in the gap would rise increasing the arc distance so it might self-extinguish. We never had any lightning damage in the short wave plant with its dozens of antennas, lines and transmitters.

Sharp points lower breakdown voltage. In a situation where charge across a capacitance, auch as between a cloud and the earth, has increased to the breakdown value, it happens where there there is a sharp point in the neighborhood of the charge concentration.

Blunt electrodes require higher potential to flash over than sharp electrodes. For given electrodes in a controlled environment, the distance between electrodes can be calibrated in volts required to jump the gap.

Arc gaps are spaced to clamp the maximum voltage across them to a safe value. CRC`s "Handbook of Chemistry and Physics has a table of the voltages for blunt and sharp electrodes.

Best regards, Richard Harrison, KB5WZI

335. Re: Tool for flat antenna wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 18:46:53 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <gsltt016v8hc4erlsln9fka0dgkh11vgn7@4ax.com>
Source record: 84073

On Fri, 07 Jan 2005 08:24:20 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Dhakala wrote:
>> Thanks for the advice. Why would it be easier to cut the insulation
>> from the inside of 300 ohm ladder-line wire than from flat antenna wire?
>
>Because more than half has been chopped out already. You can cut
>the ladder-line at a place where there's no center insulation and
>have one inch wire tails needing only a wire stripper. If you
>need longer wire tails than that, you only need to cut out about
>1/4" of center insulation with an Exacto knife to achieve two inch
>wire tails.

I have an Exacto knife, but find a no. 199 Stanley box cutter, with
its bigger blade, a good tool for something like this. Either way, it
only takes a couple of seconds...

THere's probably a special stripper for 300-ohm line, but it probably
costs a pretty penny, too.

Bob
k5qwg

336. Re: ICOM AH-2 tuner manual

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 19:01:19 UTC
From: "Karl Geng, N1DL" <n1dl@arrl.net>
Message-ID: <luGdnV31MdXDQEPcRVn-iw@comcast.com>
Source record: 84075

go to:

http://www.hamdirectory.info/schemi/IC-AH2_user.pdf

73 N1DL

"Spam" <spamcollector@sympatico.ca> wrote in message
news:pan.2005.01.07.18.18.20.65897@sympatico.ca...
>I am looking for an ICOM AH-2 antenna tuner manual.
> It is not on the ICOM web site.
>
> Greg
> ve0acr _at_ rac _dot_ ca

337. Re: Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 19:10:24 UTC
From: Dan Richardson <dwr@mailinator.com>
Message-ID: <17ntt0has5jlhm8a47t7rd952atn1edav2@4ax.com>
Source record: 84076

On 07 Jan 2005 12:50:05 EST, raiar@bbs.galilei.com.nospam (Gary V. Deutschmann, Sr.) wrote:

>RF is invisible to whatever lies below the Horizontal Member, so
>whether the mast is grounded or not would have no impact on the
>J-Poles performance.

NEC anylisis I've done doesn't not show that to be true. A j-pole directly connected at its base to a conductive mast will increase higher takeoff angles. The worst case is with mast lengths of even ï¿½-wavelengths. With mast lengths of odd ï¿½-wavelengths produce less, but, in ether case connecting a j-pole to a conductive mast will increase high angle radiation patterns.

Danny, K6MHE

338. Re: hustler antenna resonant radials???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 19:23:24 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10ttodujp9hsv9a@news.supernews.com>
Source record: 84077

What about the Hustler antenna instructions which provide the "correct lengths" for cutting radials? Moreover they need not be "buried 2 inches" in the ground but can safely remain on the ground once grass growth effectively buries them. Also DX Engineering www.dxengineering.com has ground radials for sale which are "pre-cut to length". I assume they know what they are doing. Force 12 also recommends using "tuned radials" with their line of vertical antennas. I assume they too know more about antennas then I do.

I researched this topic before installing my 5-BTV and tuned radials were always recommended. If length means nothing I could have gone with 6 inch radials if I followed your logic...eh? My 5-BTV installation with 72 "tuned" radials at this page

1. http://www.ad5th.com/5-BTV.html

I am getting great reports so far but have only been on the air at this qth for a couple weeks. A new AL-80B arrives in 3 days which should improve my signal greatly. 73 / DX

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"N4LQ" <n4lq@iglou.com> wrote in message news:41ddf6b3$1_1@news.iglou.com...
> Why do hams persist on using "tuned" radials on the ground? They cut them
> to "resonance" which means nothing. A wire cut for resonance on 40 meters
> and buried under 2 inches of soil is no where near resonant 7mhz. It would
> be much more effective if they just made all the radials as long as
> possible and forget this resonance stuff but no one listens.
>
> --
> Steve N4LQ
> "Roger Adam" <roger.adam@remove_this.virgin.net> wrote in message
> news:2mYCd.525$Mw3.252@newsfe6-gui.ntli.net...
>> Andy,
>>
>> check out this site, it may you/someone else,
>>
>> regards
>>
>> http://www.ad5th.com/5-BTV.html
>>

>>
>>
>> http://www.ad5th.com/5-BTV.html
>>
>>
>>
>>
>>
>> I choose Polesoft Lockspam to fight spam, and you?
>> http://www.polesoft.com/refer.html
>>
>
>

339. Re: Tool for flat antenna wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 19:31:21 UTC
From: Dhakala <NoPoliticalCalls@gmail.com>
Message-ID: <1105126281.326482.125410@f14g2000cwb.googlegroups.com>
Source record: 84079

Thanks, Cecil. Now that I've seen a pic of ladder-line I know what you mean. Two short, lengthwise cuts and I'm done! :-)

340. Re: Tool for flat antenna wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 19:34:53 UTC
From: Dhakala <NoPoliticalCalls@gmail.com>
Message-ID: <1105126493.717603.142580@f14g2000cwb.googlegroups.com>
Source record: 84081

Thanks for the box cutter suggestion, Bob!

Perhaps I can fashion a metal stamp for this sort of thing. Just a U-shaped piece of lawn mower blade or something like that. A good whack with a mallet would cut out an appropriate chunk neatly and consistently. But I'll use the box cutter and ladder-line until volume gets really heavy.

341. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 19:41:29 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41dee1d4$1_3@127.0.0.1>
Source record: 84078

Roy Lewallen wrote:
> There's no sharing when there's only one user, channel, or LED
> involved, so no multiplexing. Except, I guess, for digital types who can
> share an LED between a 1 and a 0.

A two-wire serial ASCII RS232 line is time-multiplexed between
marks and spaces, i.e. you can't have a mark and a space occurring
at the same time. :-)

> Just out of curiosity, what does your revered IEEE Dictionary have to
> say about it?

I'm at the GED office presently. I'll check that when I get home.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

342. Re: hustler antenna resonant radials???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 19:46:01 UTC
From: dplatt@radagast.org
Message-ID: <10ttpnp7ap52460@corp.supernews.com>
Source record: 84082

>What about the Hustler antenna instructions which provide the "correct
>lengths" for cutting radials? Moreover they need not be "buried 2 inches" in
>the ground but can safely remain on the ground once grass growth effectively
>buries them. Also DX Engineering www.dxengineering.com has ground radials
>for sale which are "pre-cut to length". I assume they know what they are
>doing. Force 12 also recommends using "tuned radials" with their line of
>vertical antennas. I assume they too know more about antennas then I do.

Tuned radials are necessary and appropriate when the radials are
installed well above earth-ground level. When the antenna is mounted
up at a significant height, there's very little coupling between the
radials and ground, and the radials must be tuned in order to present
a low impedance on the frequencies of interest. Once tuned, each
radial presents a low-loss current path, and only a small number of
such radials are required.

When the radials are laid on the ground, buried, or placed a short
distance above the ground, matters are very different. There is a
great deal of capacitive coupling between the radials and the soil,
and the soil also presents a (resistive and rather lossy) path for the
current flow. As a result, two things are different:

- The coupling to the soil de-tunes the radials and greatly lowers
their Q. They no longer serve as a resonant system, and cutting
them to a tuned length is no longer essential.

- A much larger number of radials is necessary, in order to limit the
losses which occur when the return current flows through the soil.

So... in an elevated-antenna situation, as few as three or four
radials can give you low losses, but the radials must be tuned. For a
ground-mounted vertical, you need many more radials (dozens, and some
people prefer over 100), but they don't need to be tuned, and there's
not much performance difference to gain once the radials are at least
about an eighth of a wavelength.

>I researched this topic before installing my 5-BTV and tuned radials were
>always recommended.

For elevated antennas, that's true. For ground-mounted antennas,
tuning is simply unnecessary.

Take a look at http://www.cebik.com/gr.html which shows some antenna
modelling and graphs for vertical antennas with ground-mounted
radials. The chart of "Ground Radial Test 2" is an interesting one.
It shows that there's only a very modest difference in performance
(less than half of a dB!) between a 64-radial system using tuned

quarter-wavelength radials, and a 64-radial system using radials which
are only .15 wavelength long.

> If length means nothing I could have gone with 6 inch
>radials if I followed your logic...eh?

It is not true that "length means nothing". 6-inch radials are too
short to provide adequate coupling to the soil.

It *is* true that "length is not critical".

> My 5-BTV installation with 72 "tuned"
>radials at this page
>
>1. http://www.ad5th.com/5-BTV.html
>
>I am getting great reports so far but have only been on the air at this qth
>for a couple weeks.

That's good news.

The bad news is that you could have used non-tuned radials, and saved
yourself some bother and perhaps some money (used somewhat shorter
lengths of wire), and gotten equally-good reports.

You didn't hurt yourself by tuning the radials. You just invested
some effort (and perhaps some money) unnecessarily.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

343. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 19:46:02 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41dee2e5$1_4@127.0.0.1>
Source record: 84080

Gene Fuller wrote:
> I do not know the details of the vehicle you observed, but it is likely
> that the brake light function uses DC or a high duty cycle pulse, while
> the tail light uses a low duty cycle pulsed activation.

Thanks very much, Gene, for that information. I only observed
the pulsed taillight function and not the braking function so
the above explanation didn't occur to me. Makes a lot of sense
now. Thanks again.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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344. Re: hustler antenna resonant radials???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 20:04:43 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10ttqritjbj9o87@news.supernews.com>
Source record: 84083

You're entitled to your opinion on this seemingly controversial topic.
73 / DX ..hope to catch you on the bands one day Dave

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"Dave Platt" <dplatt@radagast.org> wrote in message
news:10ttpnp7ap52460@corp.supernews.com...
> >What about the Hustler antenna instructions which provide the "correct
>>lengths" for cutting radials? Moreover they need not be "buried 2 inches"
>>in
>>the ground but can safely remain on the ground once grass growth
>>effectively
>>buries them. Also DX Engineering www.dxengineering.com has ground radials
>>for sale which are "pre-cut to length". I assume they know what they are
>>doing. Force 12 also recommends using "tuned radials" with their line of
>>vertical antennas. I assume they too know more about antennas then I do.
>
> Tuned radials are necessary and appropriate when the radials are
> installed well above earth-ground level. When the antenna is mounted
> up at a significant height, there's very little coupling between the
> radials and ground, and the radials must be tuned in order to present
> a low impedance on the frequencies of interest. Once tuned, each
> radial presents a low-loss current path, and only a small number of
> such radials are required.
>
> When the radials are laid on the ground, buried, or placed a short
> distance above the ground, matters are very different. There is a
> great deal of capacitive coupling between the radials and the soil,
> and the soil also presents a (resistive and rather lossy) path for the
> current flow. As a result, two things are different:
>
> - The coupling to the soil de-tunes the radials and greatly lowers
> their Q. They no longer serve as a resonant system, and cutting
> them to a tuned length is no longer essential.
>
> - A much larger number of radials is necessary, in order to limit the
> losses which occur when the return current flows through the soil.
>
> So... in an elevated-antenna situation, as few as three or four

> radials can give you low losses, but the radials must be tuned. For a
> ground-mounted vertical, you need many more radials (dozens, and some
> people prefer over 100), but they don't need to be tuned, and there's
> not much performance difference to gain once the radials are at least
> about an eighth of a wavelength.
>
>>I researched this topic before installing my 5-BTV and tuned radials were
>>always recommended.
>
> For elevated antennas, that's true. For ground-mounted antennas,
> tuning is simply unnecessary.
>
> Take a look at http://www.cebik.com/gr.html which shows some antenna
> modelling and graphs for vertical antennas with ground-mounted
> radials. The chart of "Ground Radial Test 2" is an interesting one.
> It shows that there's only a very modest difference in performance
> (less than half of a dB!) between a 64-radial system using tuned
> quarter-wavelength radials, and a 64-radial system using radials which
> are only .15 wavelength long.
>
>> If length means nothing I could have gone with 6 inch
>>radials if I followed your logic...eh?
>
> It is not true that "length means nothing". 6-inch radials are too
> short to provide adequate coupling to the soil.
>
> It *is* true that "length is not critical".
>
>> My 5-BTV installation with 72 "tuned"
>>radials at this page
>>
>>1. http://www.ad5th.com/5-BTV.html
>>
>>I am getting great reports so far but have only been on the air at this
>>qth
>>for a couple weeks.
>
> That's good news.
>
> The bad news is that you could have used non-tuned radials, and saved
> yourself some bother and perhaps some money (used somewhat shorter
> lengths of wire), and gotten equally-good reports.
>
> You didn't hurt yourself by tuning the radials. You just invested
> some effort (and perhaps some money) unnecessarily.
>
> --
> Dave Platt <dplatt@radagast.org> AE6EO
> Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will

> boycott any company which has the gall to send me such ads!

345. Re: hustler antenna resonant radials???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 20:28:10 UTC
From: Dan Richardson <dwr@mailinator.com>
Message-ID: <nrrtt013keimekp5kj76vfl2lafe7dokfq@4ax.com>
Source record: 84084

On Fri, 7 Jan 2005 14:04:43 -0600, "Charlie" <charlie@earthlink.com>
wrote:

>You're entitled to your opinion on this seemingly controversial topic.
>73 / DX ..hope to catch you on the bands one day Dave

Possible the controversy is in your mind Charlie.

The velocity factor using wires buried under ground is a fraction of
the velocity factor in air or free space. Hence if you are hell bent
on having resonance in your buried radial system (which in this
application does nothing to improve system efficiency) they need be a
whole lot shorter than the length = 234/F that is used for elevated
radial systems.

Danny, K6MHE

346. Re: ICOM AH-2 tuner manual

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 20:29:06 UTC
From: Spam <spamcollector@sympatico.ca>
Message-ID: <pan.2005.01.07.20.29.05.781651@sympatico.ca>
Source record: 84086

On Fri, 07 Jan 2005 14:01:19 -0500, Karl Geng, N1DL wrote:

> go to:
>
> http://www.hamdirectory.info/schemi/IC-AH2_user.pdf
>
> 73 N1DL
>
>
> "Spam" <spamcollector@sympatico.ca> wrote in message
> news:pan.2005.01.07.18.18.20.65897@sympatico.ca...
>> [quoted text muted]

Just what I was looking for.

Thank you.

347. Re: Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 20:36:56 UTC
From: stryped@hotmail.com
Message-ID: <1105130216.680452.145750@z14g2000cwz.googlegroups.com>
Source record: 84085

Gary V. Deutschmann, Sr. wrote:
> A J-Pole is a 1/2 wave vertical antenna, that sits on TOP of a U
> shaped 1/4 wave matching section.
> During construction, the 1/2 wave vertical element AND ONE of the 1/4
> wave legs of the Transformer are constructed of the same piece of
> tubing. Thus the J appearance and name.
>
> RF is invisible to whatever lies below the Horizontal Member, so
> whether the mast is grounded or not would have no impact on the
> J-Poles performance. However, the shield MUST be grounded for
obvious
> reasons.
>
> It is Normal and Proper to RUN the COAX up the center of the mast,
> INSIDE the Antenna and EXIT the vertical element at the Horizontal
> Member.
> If you don't, THEN you will need to stop stray RF that runs along the
> coax and/or use a Balun.
>
> When you connect your COAX to the J-Pole:
> If it is a MonoBand J-Pole, run the center conductor to the STUB,
> leaving the sheild jacket intact up to within about 1/2 inch of the
> stub. Then run a wire from the shield horizontal to the horizontal
> member and affix this to the vertical.
> If it is a Multi-Band J-Pole, the center conductor should be
connected
> to the Vertical Element and a wire from the shield runs horizontal
> over to the stub.
>
> Although a J-Pole will work with the coax connected either way. On
> MonoBand J-Poles, having the center conductor going to the Stub
> reduces the noise level slightly. It can make a difference when you
> are trying to pull in QRP stations.
>
> Using 3 or 4 1/8th wave wires, like a capacity hat, protruding
outward
> on the top of the vertical element will give the same noise reducing
> effect.
>
> TTUL
> Gary
>
So, if coax is kept inside the tubing, there is no stray rf and
therefore a choke or balun is not needed?

Are you saying the shield must be grounded to a surge supressor to
prevent lightening stikes?

My ideas was to run the wire inside and even make the coaxle
connections inside the tubing with wire terminals and screws, so as to
keep everything neat and weath proof.

What if you used a non insulated pvc type pipe to connect the stub and
verticle element?
>
>
>
>
>
>
> stryped@hotmail.com verbositized:
>
> >I have been reading alot on different designs and have read
> >contradictory information on this. Does nayone here have an opinion?
> >
> >Also, when building a j-pole, could I run the wire inside the tube.
> >(Regular jacketed copper wire) to the bottom of the tube to a pl
> >connector? Or would this mess up the impedance?
> >

348. Re: hustler antenna resonant radials???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 21:38:53 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10tu0c05hg3tv9f@news.supernews.com>
Source record: 84087

TY for your candor. God Bless and 73

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"Dan Richardson" <dwr@mailinator.com> wrote in message
news:nrrtt013keimekp5kj76vfl2lafe7dokfq@4ax.com...
> On Fri, 7 Jan 2005 14:04:43 -0600, "Charlie" <charlie@earthlink.com>
> wrote:
>
>>You're entitled to your opinion on this seemingly controversial topic.
>>73 / DX ..hope to catch you on the bands one day Dave
>
> Possible the controversy is in your mind Charlie.
>
> The velocity factor using wires buried under ground is a fraction of
> the velocity factor in air or free space. Hence if you are hell bent
> on having resonance in your buried radial system (which in this
> application does nothing to improve system efficiency) they need be a
> whole lot shorter than the length = 234/F that is used for elevated
> radial systems.
>
> Danny, K6MHE
>
>
>

349. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 22:21:07 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41df0b61$1_2@127.0.0.1>
Source record: 84090

```
Cecil Moore wrote:
> Roy Lewallen wrote:
>> Just out of curiosity, what does your revered IEEE Dictionary have to
>> say about it?
>
> I'm at the GED office presently. I'll check that when I get home.

Well, looks like I win. The IEEE Dictionary agrees with you and you
have said in the past that the IEEE Dictionary is wrong. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---
```

350. Re: hustler antenna resonant radials???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 22:23:03 UTC
From: Dan Richardson <dwr@mailinator.com>
Message-ID: <8t2ut0pms4vnh4f1p8mhunji0jq9itvivl@4ax.com>
Source record: 84088

You may find this article interesting.

http://www.bencher.com/pdfs/00361ZZV.pdf

73
Danny

On Fri, 7 Jan 2005 15:38:53 -0600, "Charlie" <charlie@earthlink.com>
wrote:

>TY for your candor. God Bless and 73

351. Re: Best j pole design and questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 22:23:28 UTC
From: W4JLE <W4jle@w4jle.com>
Message-ID: <DZDDd.712$Lu1.90@fe61.usenetserver.com>
Source record: 84089

You may want to consider building a stainless steel fractal antenna. it is purported to have more positive characteristics than even the best CB antennas.

The fact that you can weld will save a lot of bending.

<stryped@hotmail.com> wrote in message news:1105023321.784569.107790@z14g2000cwz.googlegroups.com...
> Can anyone tell me where I can find plans for building a great jpole
> that is dual band and has a low swr?
>
> Also, do you have to ground or use a balun with a jpole? I have seen
> some plans that say you dont on their design.
>

352. Re: What's the deal? Lightning

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 22:46:54 UTC
From: Allen Windhorn <Allen.Windhorn@LSUSA.com>
Message-ID: <ufz1cvov5.fsf@LSUSA.com>
Source record: 84091

"Ed Price" <edprice@cox.net> writes:

> ...
> And BTW, what would be so bad about having some way to create a
> conductive channel from the charge to a place of YOUR choice? Even
> that modest goal could vastly expand the "cone of protection" that
> existing masts provide. Imagine being able to initiate safe
> cloud-to-cloud discharges. Imagine being able to direct all charge for
> a one-mile radius to discharge (even violently) to a designated
> lightning rod. One rod could protect an entire building; several rods
> could protect an entire large airport. My speculation about selection
> paths of ionization by RF excitation was just groping toward one way
> to create those channels, and HAARP naturally came to mind.

A long time ago, there was some (theoretical at least) effort to see
whether UV lasers could be used to create an ionized channel over a
long distance. Something like that might do the job. OTOH a
rainstorm is generally pretty opaque to UV.

Teh RF excitation has already been tried -- I think someone has a
patent on it. One problem with it is that where there is lightning
there tends to be wind, so that the ionized air is blown away faster
than it can be generated.

Regards,
Allen WA0OHE

353. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 23:00:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10tu8lb1vvmgt32@corp.supernews.com>
Source record: 84094

Cecil Moore wrote:
>
> Well, looks like I win. The IEEE Dictionary agrees with you and you
> have said in the past that the IEEE Dictionary is wrong. :-)

Ah, binary again. I disagree with all entries or I disagree with none, with no other possibilities. Spoken like a true digital engineer.

Indeed, I often disagree with that book, and don't feel that it does a very good job of reflecting usage among working engineers. But apparently on this issue I do agree with it -- a possibility only in my analog world but seemingly not in your digital one.

Roy Lewallen, W7EL

354. Re: What's the deal? Lightning

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 23:34:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vh6ut0tqj36l80eo36k46h0eqh9avdmotr@4ax.com>
Source record: 84092

On 07 Jan 2005 16:46:54 -0600, Allen Windhorn
<Allen.Windhorn@LSUSA.com> wrote:
>> My speculation about selection
>> paths of ionization by RF excitation was just groping toward one way
>> to create those channels, and HAARP naturally came to mind.
>A long time ago, there was some (theoretical at least) effort to see
>whether UV lasers could be used to create an ionized channel over a
>long distance.

Hi Guys,

One has to wonder about the consequence of double jeopardy standing
beneath that antenna (HAARP experiment) or holding the laser.

Think insurance covers this?

Supply shop foreman (perplexed):
"Another laser? What happened to the last one?"

Tech (smoke curling up from clothes):
"ummmm, burned out real quick-like. Could you hurry? They say
more rain is on the way!"

73's
Richard Clark, KB7QHC

355. Re: ICOM AH-2 tuner manual

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-07 23:53:45 UTC
From: w9gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <noidnX698M2RvELcRVn-pw@comcast.com>
Source record: 84093

"Spam" <spamcollector@sympatico.ca> wrote in message
news:pan.2005.01.07.18.18.20.65897@sympatico.ca...
>I am looking for an ICOM AH-2 antenna tuner manual.
> It is not on the ICOM web site.
>
> Greg
> ve0acr _at_ rac _dot_ ca

Greg,

Actually these manuals are on the Icom Worldwide (Japan) web site:
http://www.icom.co.jp/world/support/download/menu.html

Here is the Icom AH-2
http://www.icom.co.jp/manual/external/transceivers/AH-2.pdf

and the AH-2b Antenna Element
http://www.icom.co.jp/manual/external/transceivers/AH-2B.pdf

w9gb

356. OCF Dipole on 20 meters:

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 01:03:11 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <9r6dnVKltefNrELcRVn-uA@adelphia.com>
Source record: 84095

I'm using a homebrew dipole at the moment. It is a fairly typical one, with coax going to a 4:1 balun. Short side 40 some feet, and ~135 feet total. Roughly What I am curious about is that 80 meter operation is pretty good, 40 meters is good also, but on 20 meters it, for lack of a better word, sucks.

Is the OCF multi-band antenna a dog on 20 meters?

- Mike KB3EIA -

357. Re: Tool for flat antenna wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 01:04:58 UTC
From: ml <m@di.net>
Message-ID: <m-14F5F6.20045107012005@news.verizon.net>
Source record: 84096

In article <41de9a34$1_1@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
wrote:

> Dhakala wrote:
> > I'm afraid scissors and wire stripper are what's taking so long. I'm
> > hoping to find something that will chop out 1-2" of flat insulation at
> > a pull of a lever or something, leaving the insulation-wrapped wires
> > ready for stripping.
>
> Forget the scissors and use an Exacto knife on the center insulation.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> -----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
> News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000
> Newsgroups
> ---= East/West-Coast Server Farms - Total Privacy via Encryption =---

You can try one of thouse 'automatic' wire stripper things , radioshack
used to sell them sure other places must perhaps sears and junk
stores the goodones like i got cost 20$$usd, seen cheepies at flea
mkts and such for like $5bucks

they claim to strip anything it's mouth on mine is 3" i got the model
designed to also strip ribbon cable but the smaller ones will strip tv
antenna style no trouble it will also strip telco flat 'satin' cable
either silver only or silver and wires all w/one squeeze! wow

it also strips the wire w/o nicking the copper and you don't have to
set it for diff ga , just squeeze handle seems unbelieavlbe looks
cheep but so far it worked for me,

if you use it alot buy a few spare blades onece they go dull it will do
bad things

358. Re: hustler antenna resonant radials???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 01:09:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10tug7prmbs2de0@corp.supernews.com>
Source record: 84100

For what it's worth, I'll add my voice to Dave's and Danny's. The change in velocity factor Danny speaks of is on the order of a factor of 5 for ordinary soil. That is, a quarter wavelength under the ground is about 1/5 the physical length of a quarter wavelength in free space or well above the ground. So if you did need to "tune" buried radials for any reason, you'd have to make them about 1/20 of a free space quarter wavelength. And the "tuning" would be extremely broad because of the loss.

To amplify what Dave said, the current on an elevated or free space radial has nearly the same distribution as on a dipole half -- it's maximum at the feedpoint and drops to zero at the end, following a nearly sine shaped curve. When buried in the lossy ground, it instead decays in a more-or-less exponential fashion. In some cases there are some remnants of the free-space distribution, but they're very muted. So basically, the current just fades out as you get farther and farther from the feedpoint. At the point where the current has dropped to a low value, you can cut the radial with no significant effect. This is very much different from the behavior above ground.

I'm not surprised to find technically inaccurate material coming from antenna manufacturers. Although they might know how to build antennas, and certainly how to sell them, they often don't have any great depth of knowledge of fundamental principles. (In fact, a lack of knowledge of fundamental principles is often an advantage in the selling area, because it gives them an excuse for making claims of impossible performance, and the invention of non-existent phenomena to explain it.) I recall many years ago contacting a major manufacturer of coaxial cable about a theoretical matter, and found that they knew nothing at all about how transmission lines worked. They were experts at extruding polyethylene and PVC and at weaving fine copper wire, and nothing else.

Roy Lewallen, W7EL

Dan Richardson wrote:
> On Fri, 7 Jan 2005 14:04:43 -0600, "Charlie" <charlie@earthlink.com>
> wrote:
>
>
>>You're entitled to your opinion on this seemingly controversial topic.
>>73 / DX ..hope to catch you on the bands one day Dave
>
>
> Possible the controversy is in your mind Charlie.
>
> The velocity factor using wires buried under ground is a fraction of

> the velocity factor in air or free space. Hence if you are hell bent
> on having resonance in your buried radial system (which in this
> application does nothing to improve system efficiency) they need be a
> whole lot shorter than the length = 234/F that is used for elevated
> radial systems.
>
> Danny, K6MHE
>
>
>

359. Re: BEST automatic antenna tuner = ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 01:12:41 UTC
From: ml <m@di.net>
Message-ID: <m-FD6663.20124007012005@news.verizon.net>
Source record: 84097

In article <1105109187.942895.89350@f14g2000cwb.googlegroups.com>,
"JimK2TL@gmail.com" <JimK2TL@gmail.com> wrote:

> I have owned a few different autotuners. They are a great convenience,
> but not without some cost in performance. The reviews I have seen on
> the efficiency of autotuners can be depressing. In fact, I have seen
> insertion loss figures as high as 65% on some bands and some crazy
> impedances.
> I think this is due to the use of toroids and fixed capacitors in
> autotuners. A good efficient tuner usually has high Q air inductors
> and well made variables. Maybe that explains it, maybe not. However,
> they sure do work nice! I used an old SGC at the feedpoint of a 30
> foot homebrew vertical. It was a kicker on all bands from 160 through
> 6 meters! Now, that of course is my own anecdotal experience, and the
> antenna may have been inefficient as hell, but it got me on the air and
> I got out real well. I have also used autouners on random wires and
> such, and again they work well. But expect to lose a fair amount of
> power.

hollycow batman, 65&loss thru the tuner geeewiz i always assumed they
were not totally eff even manual tuners have loss never ever woulda
guessed that bad

think i need to buy some testing gear and see for myself how bad mine
are hope i am not loosing that much

360. Re: What's the deal? (was: Re: AM radio reception inside passenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 01:23:28 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <ICGDd.9973$B95.1664@lakeread02>
Source record: 84098

"Richard Clark" <kb7qhc@comcast.net> wrote

> On Fri, 7 Jan 2005 01:53:00 -0500, "Jack Painter" <223bthp@cox.net>
> wrote:
> >Interested in your comments *after* you have read the study.
> >http://lightning-protection-institute.com/Documents/air-terminals.pdf
>
> Hi Jack,
>
> "It is quite obvious from these plots
> that the experimentally determined electric field
> strength is less than the "simple-minded" V/d value."
>
> Interesting brush-off so early in the paper begs for real editorial
> control. As very few would experience lighting sourced from a grid of
> wire 5M overhead this paper seems an example of the "laboratory
> factor" it set out to examine and yields a paper confined to
> laboratory arcana. All fine and well, but what is the point?
>
> "There is an urgent need for detailed theoretical
> modelling which can quantify the space charge
> effects around air terminals, particularly in
> relation to upleader development."
>
> Which seems at odds with your statement:
> On Fri, 7 Jan 2005 01:17:07 -0500, "Jack Painter" <223bthp@cox.net>
> wrote:
> >The junk-science of early-streamer-emission
> but I'm not terribly interested. I wasn't particularly intrigued by
> Pons and Fleishman either, beyond the hubris of their closet drama.
>
> It would seem some have a desperate need to topple Franklin from a
> pedestal of their own building. (Theirs is called the fallacy of
> "present mindedness.") I'm satisfied that contemporary Europeans held
> him in high esteem for many noble achievements. Reductionists are
> measured against their own few of baser metal.
>
> Hope you found that interesting, but I doubt it - rather banal stuff.
>
> 73's
> Richard Clark, KB7QHC

Richard,
Thanks. I always find your comments about scientific material interesting.
There is some monumental evidence accumulating to contest ESE/CTS, and this

begs the question that if there is such a political fight over preventing its presentation to the whole IEEE body for a vote, what are they so afraid of? Russian scientists have now been commissioned to find (contrary to all other studies) that the principle works. Avoiding the comments about streamers in the referenced paper though, my point really was that they arrived at a statistical average they may have been looking for, but attempts to remove the laboratory principle appeared honest to me (and to others). Your opinion there is important, at least to me.

73,
Jack Painter
Virginia Beach, VA

361. Re: BEST automatic antenna tuner = ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 01:57:00 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <10tuffemibhci10@corp.supernews.com>
Source record: 84099

You ain't losing anywhere near that much,, unless it are broke!
Butch KF5DE

ml wrote:
> In article <1105109187.942895.89350@f14g2000cwb.googlegroups.com>,
> "JimK2TL@gmail.com" <JimK2TL@gmail.com> wrote:
>
>
>>I have owned a few different autotuners. They are a great convenience,
>>but not without some cost in performance. The reviews I have seen on
>>the efficiency of autotuners can be depressing. In fact, I have seen
>>insertion loss figures as high as 65% on some bands and some crazy
>>impedances.
>>I think this is due to the use of toroids and fixed capacitors in
>>autotuners. A good efficient tuner usually has high Q air inductors
>>and well made variables. Maybe that explains it, maybe not. However,
>>they sure do work nice! I used an old SGC at the feedpoint of a 30
>>foot homebrew vertical. It was a kicker on all bands from 160 through
>>6 meters! Now, that of course is my own anecdotal experience, and the
>>antenna may have been inefficient as hell, but it got me on the air and
>>I got out real well. I have also used autouners on random wires and
>>such, and again they work well. But expect to lose a fair amount of
>>power.
>
>
> hollycow batman, 65&loss thru the tuner geeewiz i always assumed they
> were not totally eff even manual tuners have loss never ever woulda
> guessed that bad
>
> think i need to buy some testing gear and see for myself how bad mine
> are hope i am not loosing that much

362. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 02:11:02 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <p8fut09aqi08247ogj00muibml6ng7vq63@4ax.com>
Source record: 84101

On Fri, 07 Jan 2005 13:41:29 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

|Roy Lewallen wrote:
|> There's no sharing when there's only one user, channel, or LED
|> involved, so no multiplexing. Except, I guess, for digital types who can
|> share an LED between a 1 and a 0.
|
|A two-wire serial ASCII RS232 line is time-multiplexed between
|marks and spaces, i.e. you can't have a mark and a space occurring
|at the same time. :-)

Baloney. By this definition, OOK Morse is a "time-multiplexed"
system, eh?

Why not just Google this: define: multiplexing

Then try this: define: time multiplexed. And the answer is, "Huh?"

What you mean is that the LEDs are pulsed at some rate and/or duty
cycle. I wouldn't call this, "multiplexing."

|
|> Just out of curiosity, what does your revered IEEE Dictionary have to
|> say about it?

Took the words right out of my mouth, Roy. I almost asked that in the
previous post.

363. Re: What's the deal? (was: Re: AM radio reception inside passenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 02:12:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5hdut011gs0pp8vjaajpqo8l4k8r46aenj@4ax.com>
Source record: 84102

On Fri, 7 Jan 2005 20:23:28 -0500, "Jack Painter" <223bthp@cox.net>
wrote:

>Thanks. I always find your comments about scientific material interesting.

Hi Jack,

Well, when I look at these tempests in a teapot, I reduce things
myself.

For instance, this distinction between a sharp point on a rod and a
blunt point on a rod. Nature hardly takes the time in a lightning
strike to be so particular. This is so multivariate a problem that no
single variable is going to be a determiner at this rather fussy level
of detail.

The reduction consists of the logic in the extreme. We have a blunt
rod, we have a sharp rod. It is purported (or I have read the
controversy completely wrong) that this makes a difference, somehow.
We put those on a yet blunter rod (a tower); or with a yet blunter rod
(another tower) nearby (in the scale of miles transit, nearby by
hundreds of yards/meters/feet/inches/cm is very proximal) and yet such
neighbors are not the choice of the stroke (or they are and this
upsets the catalogue of evidence).

Hence the reductio ad absurdum is that blunt points are significant,
but not too significant.

All that aside - I do not dismiss the topic entirely. It offers
something I have found in my own work. The near field area to a
monopole:
http://home.comcast.net/~kb7qhc/antennas/Fields/Vertical/index.htm
displays a very marked disturbance above it. The introduction of a
metal pole into space distorts it far beyond the borders of the
graphic pointed to. In a sense, it acts like (in my imagination) the
vertex of a energy well; or at greater scales, a dimple in the fabric
of the ï¿½ther. Such analogies and illustrations are intriguing, but
not conclusive of anything but how to intellectually amuse while
monkeying with numbers.

73's
Richard Clark, KB7QHC

364. Re: hustler antenna resonant radials???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 02:36:07 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <1hgut0p4ol8o0e5ks2m0jvvfj212gdv54g@4ax.com>
Source record: 84104

On Fri, 7 Jan 2005 13:23:24 -0600, "Charlie" <charlie@earthlink.com>
wrote:

|What about the Hustler antenna instructions which provide the "correct
|lengths" for cutting radials? Moreover they need not be "buried 2 inches" in
|the ground but can safely remain on the ground once grass growth effectively
|buries them. Also DX Engineering www.dxengineering.com has ground radials
|for sale which are "pre-cut to length". I assume they know what they are
|doing.

Of course they do.... they are separating fools from their money.

|Force 12 also recommends using "tuned radials" with their line of
|vertical antennas. I assume they too know more about antennas then I do.

I'm sure. And they say, among other things (including some
advertising hype) at:

http://force12inc.com/brvinfo.htm

"The most efficient radial system is one that is elevated above
ground." Only then, does it pay (or matter) to tune the radials.

365. coax from cable company

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 02:49:53 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1105152593.809723.286370@c13g2000cwb.googlegroups.com>
Source record: 84103

I was just given a coil of 7/8 hardline coax that I have not seen
before.
It has plastic discs inside to separate the core from the outer
aluminum tube which I suppose uses air as the dielectric. Anybody got
any info on this stuff
and any advantages it may have over the normal hardline cable?
Regards
Art

366. Re: HF antenna and Power line ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 02:57:56 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <41e06c7a_4@news1.prserv.net>
Source record: 84060

"Thierry" <-> wrote in message news:41debd79$1@news.vo.lu...
> Hi,
>
> Well, I receive some answers, found others on the Internet, all is now
> written in my 3 pages (see ref below).
>
> The big picture:
> There is surely no influence of HV power lines at 300m away. And probably no
> QRM on HF bands at that distance either.
<snip>

Thierry:

Our rule is that any power line which is line-of-sight from the antenna is capable of causing interference on HF. See:

http://www.arrl.org/tis/info/HTML/power_line_handbook/

for more information.

--
Crazy George
Remove N O and S P A M imbedded in return address

367. Re: BEST automatic antenna tuner = ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 03:07:52 UTC
From: "JimK2TL@gmail.com" <JimK2TL@gmail.com>
Message-ID: <1105153672.562994.69600@f14g2000cwb.googlegroups.com>
Source record: 84105

Again, the high insertion loss is with autotuners into a huge mismatch
on some bands..seems like the higher bands from what I have read.
I don't know this for a fact, only what I read in some reviews along
the way. I think I saw a QST product review or 2 that spec'd this
loss.
The 65% was worse case senario. But the insertion loss was always
higher than a good manual tuner.

368. Re: coax from cable company

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 03:09:01 UTC
From: artie <artie.m@gmail.com>
Message-ID: <070120051909013024%artie.m@gmail.com>
Source record: 84106

In article <1105152593.809723.286370@c13g2000cwb.googlegroups.com>, art
<aunwin@insightbb.com> wrote:

> I was just given a coil of 7/8 hardline coax that I have not seen
> before.
> It has plastic discs inside to separate the core from the outer
> aluminum tube which I suppose uses air as the dielectric. Anybody got
> any info on this stuff
> and any advantages it may have over the normal hardline cable?
> Regards
> Art
>

Good stuff, but 75 ohms.

--
Namaste--

369. Re: coax from cable company

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 03:18:24 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns95D7C4716C6AFspectrumhogstarbandn@207.106.92.175>
Source record: 84107

> I was just given a coil of 7/8 hardline coax that I have not seen
> before.
> It has plastic discs inside to separate the core from the outer
> aluminum tube which I suppose uses air as the dielectric. Anybody got
> any info on this stuff
> and any advantages it may have over the normal hardline cable?
> Regards
> Art

That's nothing real new. Yes, is air dielectric and slightly less lossy
than regular foam dielectric heliax. Since you described the outer
conductor as aluminum, I suspect it is 75 ohm cable.... but not
necessarily. There should be info printed onto the outer plastic jacket
material mthat would help in specifically identifying that cable.

Ed K7AAT

370. Re: hustler antenna resonant radials???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 03:18:45 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10tuk9ak6hr8208@news.supernews.com>
Source record: 84108

I just want to thank all of you for your kindness and speediness in pointing out my error as a new vertical antenna user. I am glad several of you had a laugh on me for burying tuned radials. Thank you for your kindness and courtesy. Hope to catch each and every one of you on the bands. I am grateful for the tact and diplomacy that many of you showed me. True Ham Spirit at it's best.

Based on what I have been told by the gentlemen in this great group I could have used much shorter radials than any "tuned length". If that is right then I have achieved a much more effective radial system then what I would have had I not erred. Is this right? In other words I have more wire in the ground then I need..right? Now if that is so..does that hurt or help

TY Roy

73 / DX

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"Wes Stewart" <n7ws_@_yahoo.com> wrote in message
news:1hgut0p4ol8o0e5ks2m0jvvfj212gdv54g@4ax.com...
> On Fri, 7 Jan 2005 13:23:24 -0600, "Charlie" <charlie@earthlink.com>
> wrote:
>
> |What about the Hustler antenna instructions which provide the "correct
> |lengths" for cutting radials? Moreover they need not be "buried 2 inches"
> in
> |the ground but can safely remain on the ground once grass growth
> effectively
> |buries them. Also DX Engineering www.dxengineering.com has ground radials
> |for sale which are "pre-cut to length". I assume they know what they are
> |doing.
>
> Of course they do.... they are separating fools from their money.
>
> |Force 12 also recommends using "tuned radials" with their line of
> |vertical antennas. I assume they too know more about antennas then I do.
>
> I'm sure. And they say, among other things (including some
> advertising hype) at:

>
> http://force12inc.com/brvinfo.htm
>
> "The most efficient radial system is one that is elevated above
> ground." Only then, does it pay (or matter) to tune the radials.
>
>

371. Re: hustler antenna resonant radials???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 03:30:54 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10tuog3a98pcn65@corp.supernews.com>
Source record: 84112

Nobody's laughing at you -- it's a topic that's very poorly understood.

Here's how it works with buried radials. . .

It never hurts to make them longer. But beyond some distance, it doesn't help appreciably -- if the current on a radial has dropped to a negligible value at its end, extending it won't do anything.

What is this distance? Well, like so many other things, the only really honest answer is that it depends. As it turns out, the current fades more rapidly if you have only a few radials. So if you only have a few, it doesn't help to make them super long. If you have a lot (say, 60 or more), increasing the length has more effect -- but your system will already be so efficient that it won't make much difference.

The classic set of measurements of various ground systems was published in 1937 as "Ground Systems as a Factor in Antenna Efficiency" by Brown, Lewis, and Epstein. Their paper has many graphs of the effectiveness of various combinations of radial lengths and number of radials for various vertical heights -- for the particular ground at the place of their experiments, the characteristics of which weren't recorded. Their data have been interpreted and reorganized countless times and in countless ways -- a web search should bring you a lot of hits. But some rules of thumb (and only rules of thumb) for amateurs(*) emerge:

1. There's not much point in making radials much longer than a free-space quarter wavelength or so.

2. Increasing the number of radials from 16 to 120 or more will probably net you less than a couple of dB. That might be worth it to you, it might not.

These assume more-or-less average soil. If your soil is very dry, you might benefit from more and/or longer radials.

And of course, there's no point in fussing over exact lengths. There's no need to even make them the same length. Put down what you can and don't worry about it. Putting in more won't hurt, nor will making them longer. But you're not likely to notice much difference between a big installation and a fairly simple one, unless your ground is extraordinarily poor.

Roy Lewallen, W7EL

(*) An increase in field strength of a few percent is a worthwhile pursuit for AM broadcasters, because it increases the size of their audience and hence the value of their advertising. Small increments like

that are completely useless for amateurs, though, so our goals are
somewhat different. Keep that in mind when looking through various
analyses and recommendations, since most are oriented toward broadcasters.

Charlie wrote:
> I just want to thank all of you for your kindness and speediness in pointing
> out my error as a new vertical antenna user. I am glad several of you had a
> laugh on me for burying tuned radials. Thank you for your kindness and
> courtesy. Hope to catch each and every one of you on the bands. I am
> grateful for the tact and diplomacy that many of you showed me. True Ham
> Spirit at it's best.
>
> Based on what I have been told by the gentlemen in this great group I could
> have used much shorter radials than any "tuned length". If that is right
> then I have achieved a much more effective radial system then what I would
> have had I not erred. Is this right? In other words I have more wire in the
> ground then I need..right? Now if that is so..does that hurt or help
>
> TY Roy
>
> 73 / DX
>

372. Re: coax from cable company

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 03:38:23 UTC
From: Lou <lf08357@yahoo.com>
Message-ID: <TCIDd.34787$NC6.29031@newsread1.mlpsca01.us.to.verio.net>
Source record: 84109

"Ed" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns95D7C4716C6AFspectrumhogstarbandn@207.106.92.175...
>
>
>> I was just given a coil of 7/8 hardline coax that I have not seen
>> before.
>> It has plastic discs inside to separate the core from the outer
>> aluminum tube which I suppose uses air as the dielectric. Anybody got
>> any info on this stuff
>> and any advantages it may have over the normal hardline cable?
>> Regards
>> Art
>
> That's nothing real new. Yes, is air dielectric and slightly less lossy
> than regular foam dielectric heliax. Since you described the outer
> conductor as aluminum, I suspect it is 75 ohm cable.... but not
> necessarily. There should be info printed onto the outer plastic jacket
> material mthat would help in specifically identifying that cable.
>
>
> Ed K7AAT
>

In a "Hints and Kinks" book - I believe - or maybe it was an Antenna
Handbook from the ARRL - they described how to make a matching network to
take that sort of heliax to use for 50 ohm purposes.

Lou

373. Re: hustler antenna resonant radials???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 04:05:47 UTC
From: Dan Richardson <dwr@mailinator.com>
Message-ID: <3emut017mnpotncertht94jo2gsavqb8sa@4ax.com>
Source record: 84110

On Fri, 7 Jan 2005 21:18:45 -0600, "Charlie" <charlie@earthlink.com>
wrote:

>I just want to thank all of you for your kindness and speediness in pointing
>out my error as a new vertical antenna user. I am glad several of you had a
>laugh on me for burying tuned radials

Don't feel bad Charlie, we read the book. <G>

I would really suggest you consider purchasing the current edition of
the ARRL Antenna book. There is a whole chapter (3) devoted to the
effects of ground. You'll find in more reliable information in that
book than you ever see in antenna manufacturers' statements and
claims.

Oh, yes when it comes to radials you can't have too much wire in the
ground, but you can hit the wall of diminishing returns.

Bust of luck and 73
Danny, K6MHE

374. Re: coax from cable company

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 04:09:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10tuqolhgl01n23@corp.supernews.com>
Source record: 84116

It's a common misconception that the use of disks or foamed dielectric reduces loss because of reduced dielectric loss.

But, up to a frequency of somewhere around 1 - 10 GHz or so, that isn't true.

Below 1 - 10 GHz, the conductor skin effect loss is much greater than the dielectric loss of solid PE or PTFE (the common coax insulating materials), so further reduction of dielectric loss makes no appreciable difference.

BUT, going to disks or foamed dielectric does reduce the effective dielectric constant of the insulator. This results in the requirement of a larger diameter center conductor for the same Z0 and cable diameter. The cable does have lower loss, but because of the larger center conductor, not because of decreased dielectric loss.

Roy Lewallen, W7EL

Ed wrote:
>>I was just given a coil of 7/8 hardline coax that I have not seen
>>before.
>>It has plastic discs inside to separate the core from the outer
>>aluminum tube which I suppose uses air as the dielectric. Anybody got
>>any info on this stuff
>>and any advantages it may have over the normal hardline cable?
>>Regards
>>Art
>
>
> That's nothing real new. Yes, is air dielectric and slightly less lossy
> than regular foam dielectric heliax. Since you described the outer
> conductor as aluminum, I suspect it is 75 ohm cable.... but not
> necessarily. There should be info printed onto the outer plastic jacket
> material mthat would help in specifically identifying that cable.
>
>
> Ed K7AAT
>

375. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 04:21:05 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <10tunu61n0okmc6@corp.supernews.com>
Source record: 84111

Wes Stewart wrote:
> On Fri, 07 Jan 2005 13:41:29 -0600, Cecil Moore <w5dxp@hotmail.com>
> wrote:
>
> |Roy Lewallen wrote:
> |> There's no sharing when there's only one user, channel, or LED
> |> involved, so no multiplexing. Except, I guess, for digital types who can
> |> share an LED between a 1 and a 0.
> |
> |A two-wire serial ASCII RS232 line is time-multiplexed between
> |marks and spaces, i.e. you can't have a mark and a space occurring
> |at the same time. :-)
>
> Baloney. By this definition, OOK Morse is a "time-multiplexed"
> system, eh?
>
> Why not just Google this: define: multiplexing
>
> Then try this: define: time multiplexed. And the answer is, "Huh?"
>
> What you mean is that the LEDs are pulsed at some rate and/or duty
> cycle. I wouldn't call this, "multiplexing."
>
> |
> |> Just out of curiosity, what does your revered IEEE Dictionary have to
> |> say about it?
>
> Took the words right out of my mouth, Roy. I almost asked that in the
> previous post.
>
Time Domain Multiplexing is where two or more signals share one data pipe. Under TDM each signal is allocated one domain. Each domain is sent in sequence. At the other end each domain is isolated and combined with other domains elements from the same source. i.e. a, b, c fragmented and sent as a1, b1 , c1, a2, b2, c2, a3, b3, c3 received and defragmented as a, b, c. Commonly used to sent telephone conversations and internet packets over copper wires and radio.

Dave WD9BDZ

376. Re: OCF Dipole on 20 meters:

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 04:37:28 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41df6396$1_3@127.0.0.1>
Source record: 84113

Mike Coslo wrote:
> I'm using a homebrew dipole at the moment. It is a fairly typical one,
> with coax going to a 4:1 balun. Short side 40 some feet, and ~135 feet
> total. Roughly What I am curious about is that 80 meter operation is
> pretty good, 40 meters is good also, but on 20 meters it, for lack of a
> better word, sucks.
>
> Is the OCF multi-band antenna a dog on 20 meters?

EZNEC sez it has about 8 dBi maximum gain in an 8-lobed
pattern with 4 major lobes. It should be a pretty good
antenna in certain directions. If you are expecting good
20m broadside performance, which it has on 40m, then you
will be disappointed.

If the antenna is running N/S or E/W, the major lobes on
20m will roughly be in the NE, NW, SE, & SW directions in
a "cloverleaf" pattern.

You can see all this for yourself by downloading the free
demo version of EZNEC from http://www.eznec.com
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

377. Re: BEST automatic antenna tuner = ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 04:45:53 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41df6590$1_3@127.0.0.1>
Source record: 84114

ml wrote:
> hollycow batman, 65&loss thru the tuner geeewiz i always assumed they
> were not totally eff even manual tuners have loss never ever woulda
> guessed that bad

A short mobile whip might have a feedpoint impedance of 2-j1500 ohms
yet an SGC-230 will load it just fine. 65% loss (or more) seems
understandable under those circumstances.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

378. Re: coax from cable company

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 05:02:12 UTC
From: "aunwin@insightbb.com"
Message-ID: <oPJDd.1565$IU6.1185@attbi_s02>
Source record: 84115

The fact that it is 75 ohm really doesn't bother me. I use 1inch dia Andrews hard line at the moment
for a 200 foot run but this other stuff was used for cable T.V. and computor stuff before they changed out to
fiberglass ,so I wondered if it was better than what I was using now and if so how much !
It does not have a plastic covering on it so no numbers are visible.
Regards
Art

"Lou" <lf08357@yahoo.com> wrote in message
news:TCIDd.34787$NC6.29031@newsread1.mlpsca01.us.to.verio.net...
>
> "Ed" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
> news:Xns95D7C4716C6AFspectrumhogstarbandn@207.106.92.175...
>>
>>
>>> I was just given a coil of 7/8 hardline coax that I have not seen
>>> before.
>>> It has plastic discs inside to separate the core from the outer
>>> aluminum tube which I suppose uses air as the dielectric. Anybody got
>>> any info on this stuff
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>> necessarily. There should be info printed onto the outer plastic jacket
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>> Ed K7AAT
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> Handbook from the ARRL - they described how to make a matching network to
> take that sort of heliax to use for 50 ohm purposes.
>
> Lou
>

379. Re: hustler antenna resonant radials???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 05:23:28 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10turj38n2gaq2e@news.supernews.com>
Source record: 84117

Thanks Roy for a great yet concise answer to this matter. I misunderstood about tuned radials. I wish I would have done more then a cursory look at the matter. Basically all I saw was "tuned radials" and "you can't have too many". Had I read more I would have eventually seen that buried radials need not be tuned and that a 1/4 lambda would have been adequate. I have over 1300 ft of radials! Don't ask what my pre-cut "tuned radials" cost me!! I made sure I had plenty and now that this cabbage is boiled I am glad to see at least I did not do my station a disservice. Most importantly I learned something.I am not a new ham but am new to this vertical antenna scene.

I am aware of your reputation in this field Roy and I appreciate your warm, courteous and most of all informative replies. 73 / DX

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10tuog3a98pcn65@corp.supernews.com...
> Nobody's laughing at you -- it's a topic that's very poorly understood.
>
> Here's how it works with buried radials. . .
>
> It never hurts to make them longer. But beyond some distance, it doesn't
> help appreciably -- if the current on a radial has dropped to a negligible
> value at its end, extending it won't do anything.
>
> What is this distance? Well, like so many other things, the only really
> honest answer is that it depends. As it turns out, the current fades more
> rapidly if you have only a few radials. So if you only have a few, it
> doesn't help to make them super long. If you have a lot (say, 60 or more),
> increasing the length has more effect -- but your system will already be
> so efficient that it won't make much difference.
>
> The classic set of measurements of various ground systems was published in
> 1937 as "Ground Systems as a Factor in Antenna Efficiency" by Brown,
> Lewis, and Epstein. Their paper has many graphs of the effectiveness of
> various combinations of radial lengths and number of radials for various
> vertical heights -- for the particular ground at the place of their
> experiments, the characteristics of which weren't recorded. Their data
> have been interpreted and reorganized countless times and in countless

> ways -- a web search should bring you a lot of hits. But some rules of
> thumb (and only rules of thumb) for amateurs(*) emerge:
>
> 1. There's not much point in making radials much longer than a free-space
> quarter wavelength or so.
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> 2. Increasing the number of radials from 16 to 120 or more will probably
> net you less than a couple of dB. That might be worth it to you, it might
> not.
>
> These assume more-or-less average soil. If your soil is very dry, you
> might benefit from more and/or longer radials.
>
> And of course, there's no point in fussing over exact lengths. There's no
> need to even make them the same length. Put down what you can and don't
> worry about it. Putting in more won't hurt, nor will making them longer.
> But you're not likely to notice much difference between a big installation
> and a fairly simple one, unless your ground is extraordinarily poor.
>
> Roy Lewallen, W7EL
>
> (*) An increase in field strength of a few percent is a worthwhile pursuit
> for AM broadcasters, because it increases the size of their audience and
> hence the value of their advertising. Small increments like that are
> completely useless for amateurs, though, so our goals are somewhat
> different. Keep that in mind when looking through various analyses and
> recommendations, since most are oriented toward broadcasters.
>
>
> Charlie wrote:
>> I just want to thank all of you for your kindness and speediness in
>> pointing out my error as a new vertical antenna user. I am glad several
>> of you had a laugh on me for burying tuned radials. Thank you for your
>> kindness and courtesy. Hope to catch each and every one of you on the
>> bands. I am grateful for the tact and diplomacy that many of you showed
>> me. True Ham Spirit at it's best.
>>
>> Based on what I have been told by the gentlemen in this great group I
>> could have used much shorter radials than any "tuned length". If that is
>> right then I have achieved a much more effective radial system then what
>> I would have had I not erred. Is this right? In other words I have more
>> wire in the ground then I need..right? Now if that is so..does that hurt
>> or help
>>
>> TY Roy
>>
>> 73 / DX
>>

380. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 05:29:16 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41df6fba$1_1@127.0.0.1>
Source record: 84118

Wes Stewart wrote:

> Cecil Moore <w5dxp@hotmail.com> wrote:
> |A two-wire serial ASCII RS232 line is time-multiplexed between
> |marks and spaces, i.e. you can't have a mark and a space occurring
> |at the same time. :-)
>
> Baloney.

Didn't you ever use an 8 to 1 *MULTIPLEXER* chip to change
parallel BAUDOT to serial BAUDOT? The parallel BAUDOT bits
are time-multiplexed into a serial bit stream by the
three clock bits. The first parallel bit is hard-wired to
yield a start pulse and the last two parallel bits are hard-
wired to yield a stop pulse. The center five parallel BAUDOT
bits are time-multiplexed from parallel to serial by five
states of the clock.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

381. Re: Antenna impedance analyzer comparison

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 05:35:57 UTC
From: Rick Karlquist N6RK <richard@karlquist.removethis.com>
Message-ID: <z62dnW4btex77ULcRVn-qg@comcast.com>
Source record: 84119

But I want to adjust the matching network at the base
of the antenna. I need real time feedback to when I
turn a know. An indicator 1000 ft away is useless.

Rick N6RK

"J. Mc Laughlin" <jcm@power-net.net> wrote in message
news:10tl81p9fg88268@corp.supernews.com...
> Dear Rick:
> OK. Your vertical antenna certainly picks up a lot of stray RF.
>
> However, one of the beauties of using a network analyzer is the
ability
> to characterize the transmission line (even 1000 feet of it) and a filter
> that is between the network analyzer and the antenna, AND THEN to have the
> effects of all of the stuff between the analyzer and antenna removed so as
> to leave the properties of the antenna.
>
> One has to measure the "stuff" (transmission line +) with the "stuff"
> disconnected from the antenna. Even if you went out to the antenna, you
> would need (temporarily) to disconnect the "stuff" from the antenna.
>
>
> This scheme really works. One has some front-end-load required in
order
> to characterize the "stuff," but then it is straight forward.
>
> 73 Mac N8TT
>
> --
> J. Mc Laughlin; Michigan U.S.A.
> Home: JCM@Power-Net.Net
>
>

382. Re: Antenna impedance analyzer comparison

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 05:36:24 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41df7167$1_3@127.0.0.1>
Source record: 84121

Rick Karlquist N6RK wrote:
> My old laptop was an active matrix, and it still wasn't
> readable in sunlight, or even in a room on a sunny day
> near a window.

I have the same problem with my IC-756PRO.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

383. Re: Antenna impedance analyzer comparison

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 05:37:13 UTC
From: Rick Karlquist N6RK <richard@karlquist.removethis.com>
Message-ID: <IL2dnaPx75Os7ELcRVn-qA@comcast.com>
Source record: 84120

My old laptop was an active matrix, and it still wasn't
readable in sunlight, or even in a room on a sunny day
near a window.

Rick N6RK

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:2ojDTJD6V52BFALS@ifwtech.co.uk...
> Rick Karlquist N6RK wrote:
> >I had a laptop a long time ago, and I couldn't
> >read the screen outdoors. Are the newer ones
> >better?
> >
> If the LCD that you remember was an old passive matrix type, you may be
> pleasantly surprised by a modern active matrix (TFT) display.
>
> LCDs are still not as bright as a CRT, though, so I was more than
> half-serious in suggesting an awning for shade.
>
> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

384. Re: NEW RADIO HOBBY FOR 2005 i am going to study for my ham ticket

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 06:33:23 UTC
From: dx440@webtv.net
Message-ID: <16871-41DF7EB3-1093@storefull-3273.bay.webtv.net>
Source record: 84022

yep i am troll.all win i am going to study for my ham ticket .what is
the best cw tape to buy i dont like 2 meter nerds only hf nerds lol.
i

385. Re: Center Fed " Zepp " with Coaxial Balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 07:03:51 UTC
From: AaronJ <noemail@noemail.com>
Message-ID: <sqvut01jo3c1pokfd66m8malf5h2aqcp5f@4ax.com>
Source record: 84023

"JimK2TL@gmail.com" <JimK2TL@gmail.com> wrote:
>Maybe I did not explain properly. I use a coax switch to select either
>the FT-920 directly and thereby use the built in autotuner, or select
>an external manual tuner when I bypass the internal autotuner. This
>allows me to use either the built in autotuner, or the manual tuner,
>depending on the band.

Again, you could do the same thing *without* using a coax switch. Simply run the FT920 direct to your external tuner and the output of the external tuner to the antenna. Use one tuner and put the other on bypass, or visa versa. This setup will allow you to use either tuner (or no tuner) on any band.

> I don't understand why you thought I had
>2 external tuners?

Never thought you did. Try reading that part again.

386. Re: vertical dipole or 5/8 lamda?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 07:19:16 UTC
From: nm5k@wt.net
Message-ID: <1105168756.962434.275650@f14g2000cwb.googlegroups.com>
Source record: 84024

Cecil Moore wrote:
> Spam wrote:
> > What has higher gain?
> > A vertical dipole or a a 5/8 lamda vertical?
>
> A 5/8 WL vertical *with an excellent ground plane* has about
> 3 dB gain over a vertical 1/2WL dipole.

A little optimistic maybe....Normally, a dual 5/8 collinear
would give about 3 dbd. A single 5/8? As far as textbook
numbers,it's usually rated apprx 3.3 dbi vs the 2.1 dbi
for the 1/2 wave.
So only about a db or so...In modeling the 5/8 GP, using
sloping 5/8 wave radials gave the appx 3.1-3.3 dbi...
To get much more than that, you have to run two 5/8's elements.
The most I could get by using 5/8 radials sloped at a *real*
steep angle, was about 4.2 dbi. A normal dual 5/8 collinear
will do appx 5.1 dbi, but spacing can vary the gain.
MK

387. Re: NEW RADIO HOBBY FOR 2005 i am going to study for my ham ticket

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 08:08:55 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <Y0OjdRBXU53BFwWL@g3ohx.demon.co.uk>
Source record: 84025

In message <16871-41DF7EB3-1093@storefull-3273.bay.webtv.net>, Free
radio <dx440@webtv.net> writes
>yep i am troll.all win i am going to study for my ham ticket .what is
>the best cw tape to buy i dont like 2 meter nerds only hf nerds lol.
>i
>

Instead of tape, look at http://www.qsl.net/g4fon/ and lots of other
sites.
Ian.
--

388. Why the 4:1 or 9:1 baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 08:21:40 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <IEOnRBDUg53BFwX2@g3ohx.demon.co.uk>
Source record: 84026

People keep saying that they use 4:1 or 9:1 baluns.
Often I can see no reason for this (such as when simply feeding a dipole
with coax, or on the output of an ATU).

I'm obviously missing the point. Why the impedance transformation?
Ian.
--

389. Re: Why the 4:1 or 9:1 baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 11:01:44 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <croeiohhr1@titan.btinternet.com>
Source record: 84027

"Ian Jackson" wrote
> People keep saying that they use 4:1 or 9:1 baluns.
> Often I can see no reason for this (such as when simply feeding a dipole
> with coax, or on the output of an ATU).
>
> I'm obviously missing the point. Why the impedance transformation?

==========

Nearly always there IS no point to be missed.

Reasoning seldom enters an argument.

Which of the infinite number of impedance ratios on one antenna are to be favoured?

Personally, I have never used a balun except of the choke variety which can be used between indeterminate impedances of any ratio to serve a recognisable purpose.

But the right to free speech must be held.

Reg, G4FGQ

390. Re: OCF Dipole on 20 meters:

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 13:00:54 UTC
From: news <w3jxp@adelphia.net>
Message-ID: <LuadnRMoLMvmRELcRVn-hw@adelphia.com>
Source record: 84028

Hi Mike:

Did you miss my presentation on OFC dipoles awhile back at the club meeting?
The pattern on 20M is a clover leaf with gain with the main lobes at about
45 deg to the wire. We saw this at field day with the antennas broad side to
the west we had great signals into Maine but not so good into the Midwest.

--
John Passaneau, W3JXP
State College, PA
w3jxp@adelphia.net

"Mike Coslo" <mcoslo@adelphia.net> wrote in message
news:9r6dnVKltefNrELcRVn-uA@adelphia.com...
> I'm using a homebrew dipole at the moment. It is a fairly typical one,
> with coax going to a 4:1 balun. Short side 40 some feet, and ~135 feet
> total. Roughly What I am curious about is that 80 meter operation is
> pretty good, 40 meters is good also, but on 20 meters it, for lack of a
> better word, sucks.
>
> Is the OCF multi-band antenna a dog on 20 meters?
>
> - Mike KB3EIA -
>

391. Re: hustler antenna resonant radials???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 13:29:36 UTC
From: N4LQ <n4lq@iglou.com>
Message-ID: <41dfe037_1@news.iglou.com>
Source record: 84029

If length means nothing I could have gone with 6 inch
> radials if I followed your logic...eh?

I thought my "logic" said "make them all as log as possible". If the manufacturs say cut radials to X length then lay them on the ground...then they need to go back to school. One rule of thumb is: Try to make the radial length at least equal to the heigth of the vertical. If the Hustler is 20' tall, make the radials at least 20' long and use lots of them. Having 50 radials 20' long is better than 8 radials 500' long etc.
N4LQ

--
Steve N4LQ
"Charlie" <charlie@earthlink.com> wrote in message
news:10ttodujp9hsv9a@news.supernews.com...
> What about the Hustler antenna instructions which provide the "correct
> lengths" for cutting radials? Moreover they need not be "buried 2 inches"
> in the ground but can safely remain on the ground once grass growth
> effectively buries them. Also DX Engineering www.dxengineering.com has
> ground radials for sale which are "pre-cut to length". I assume they know
> what they are doing. Force 12 also recommends using "tuned radials" with
> their line of vertical antennas. I assume they too know more about
> antennas then I do.
>
> I researched this topic before installing my 5-BTV and tuned radials were
> always recommended. If length means nothing I could have gone with 6 inch
> radials if I followed your logic...eh? My 5-BTV installation with 72
> "tuned" radials at this page
>
> 1. http://www.ad5th.com/5-BTV.html
>
> I am getting great reports so far but have only been on the air at this
> qth for a couple weeks. A new AL-80B arrives in 3 days which should
> improve my signal greatly. 73 / DX
>
> --
>
> Charlie
> Ham Radio - AD5TH
> www.ad5th.com
> Live Blues Music
> www.492acousticblues.com
>
>
>

>
> "N4LQ" <n4lq@iglou.com> wrote in message
> news:41ddf6b3$1_1@news.iglou.com...
>> Why do hams persist on using "tuned" radials on the ground? They cut them
>> to "resonance" which means nothing. A wire cut for resonance on 40 meters
>> and buried under 2 inches of soil is no where near resonant 7mhz. It
>> would be much more effective if they just made all the radials as long as
>> possible and forget this resonance stuff but no one listens.
>>
>> --
>> Steve N4LQ
>> "Roger Adam" <roger.adam@remove_this.virgin.net> wrote in message
>> news:2mYCd.525$Mw3.252@newsfe6-gui.ntli.net...
>>> Andy,
>>>
>>> check out this site, it may you/someone else,
>>>
>>> regards
>>>
>>> http://www.ad5th.com/5-BTV.html
>>>
>>>
>>>
>>> http://www.ad5th.com/5-BTV.html
>>>
>>>
>>>
>>>
>>>
>>> I choose Polesoft Lockspam to fight spam, and you?
>>> http://www.polesoft.com/refer.html
>>>
>>
>>
>
>

392. Re: coax from cable company

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 13:31:30 UTC
From: "aunwin@insightbb.com"
Message-ID: <PgRDd.820$jS.92@attbi_s03>
Source record: 84030

Thank you Roy. That puts the whole question in perspective.
I suppose the long runs that are required for country locations
would not benefit from serial amplification so prevention of
loss would be more beneficial
Regards
Art

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10tuqolhgl01n23@corp.supernews.com...
> It's a common misconception that the use of disks or foamed dielectric
> reduces loss because of reduced dielectric loss.
>
> But, up to a frequency of somewhere around 1 - 10 GHz or so, that isn't
> true.
>
> Below 1 - 10 GHz, the conductor skin effect loss is much greater than the
> dielectric loss of solid PE or PTFE (the common coax insulating
> materials), so further reduction of dielectric loss makes no appreciable
> difference.
>
> BUT, going to disks or foamed dielectric does reduce the effective
> dielectric constant of the insulator. This results in the requirement of a
> larger diameter center conductor for the same Z0 and cable diameter. The
> cable does have lower loss, but because of the larger center conductor,
> not because of decreased dielectric loss.
>
> Roy Lewallen, W7EL
>
> Ed wrote:
>>>I was just given a coil of 7/8 hardline coax that I have not seen
>>>before.
>>>It has plastic discs inside to separate the core from the outer
>>>aluminum tube which I suppose uses air as the dielectric. Anybody got
>>>any info on this stuff
>>>and any advantages it may have over the normal hardline cable?
>>>Regards
>>>Art
>>
>>
>> That's nothing real new. Yes, is air dielectric and slightly less lossy
>> than regular foam dielectric heliax. Since you described the outer
>> conductor as aluminum, I suspect it is 75 ohm cable.... but not
>> necessarily. There should be info printed onto the outer plastic jacket
>> material mthat would help in specifically identifying that cable.

>>
>>
>> Ed K7AAT
>>

393. Re: What's the deal? Lightning

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 13:42:30 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <brRDd.15933$yW5.7726@fed1read02>
Source record: 84031

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:vh6ut0tqj36l80eo36k46h0eqh9avdmotr@4ax.com...
> On 07 Jan 2005 16:46:54 -0600, Allen Windhorn
> <Allen.Windhorn@LSUSA.com> wrote:
>>> My speculation about selection
>>> paths of ionization by RF excitation was just groping toward one way
>>> to create those channels, and HAARP naturally came to mind.
>>A long time ago, there was some (theoretical at least) effort to see
>>whether UV lasers could be used to create an ionized channel over a
>>long distance.
>
> Hi Guys,
>
> One has to wonder about the consequence of double jeopardy standing
> beneath that antenna (HAARP experiment) or holding the laser.
>
> Think insurance covers this?
>
> Supply shop foreman (perplexed):
> "Another laser? What happened to the last one?"
>
> Tech (smoke curling up from clothes):
> "ummmm, burned out real quick-like. Could you hurry? They say
> more rain is on the way!"
>
> 73's
> Richard Clark, KB7QHC

Well, I could easily imagine a laser protected within a large conductive lightning rod. All you need is a 1/" hole in an otherwise well-shielded structure. Maybe a bit larger to allow for pointing, or you could put some optics safely outside the rod.

Regarding the RF excitation, I assumed that a single-point source would be dumb, because the best ionization path would be right back to YOU. But an array of exciters, electronically steered to create a sufficient power density at a focal point, is a lot smarter.

Again, I don't know if the technique would work, but an electronically steered (more like focusing) array would be one way to do it.

One poster said that the ionized channel might blow away in the wind. Maybe a quick system could "paint" an ionization channel fast enough. Maybe a system could detect and take advantage of leaders, to create a shorter path.

Ed
wb6wsn

394. Re: What's the deal? (was: Re: AM radio reception inside passenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 13:52:39 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <IARDd.15935$yW5.7327@fed1read02>
Source record: 84032

"Jack Painter" <223bthp@cox.net> wrote in message
news:lCGDd.9973$B95.1664@lakeread02...
>
> "Richard Clark" <kb7qhc@comcast.net> wrote
>
>> On Fri, 7 Jan 2005 01:53:00 -0500, "Jack Painter" <223bthp@cox.net>
>> wrote:
>> >Interested in your comments *after* you have read the study.
>> >http://lightning-protection-institute.com/Documents/air-terminals.pdf
>>
>> Hi Jack,
>>
>> "It is quite obvious from these plots
>> that the experimentally determined electric field
>> strength is less than the "simple-minded" V/d value."
>>
>> Interesting brush-off so early in the paper begs for real editorial
>> control. As very few would experience lighting sourced from a grid of
>> wire 5M overhead this paper seems an example of the "laboratory
>> factor" it set out to examine and yields a paper confined to
>> laboratory arcana. All fine and well, but what is the point?
>>
>> "There is an urgent need for detailed theoretical
>> modelling which can quantify the space charge
>> effects around air terminals, particularly in
>> relation to upleader development."
>>
>> Which seems at odds with your statement:
>> On Fri, 7 Jan 2005 01:17:07 -0500, "Jack Painter" <223bthp@cox.net>
>> wrote:
>> >The junk-science of early-streamer-emission
>> but I'm not terribly interested. I wasn't particularly intrigued by
>> Pons and Fleishman either, beyond the hubris of their closet drama.
>>
>> It would seem some have a desperate need to topple Franklin from a
>> pedestal of their own building. (Theirs is called the fallacy of
>> "present mindedness.") I'm satisfied that contemporary Europeans held
>> him in high esteem for many noble achievements. Reductionists are
>> measured against their own few of baser metal.
>>
>> Hope you found that interesting, but I doubt it - rather banal stuff.
>>
>> 73's
>> Richard Clark, KB7QHC

>
> Richard,
> Thanks. I always find your comments about scientific material interesting.
> There is some monumental evidence accumulating to contest ESE/CTS, and
> this
> begs the question that if there is such a political fight over preventing
> its presentation to the whole IEEE body for a vote, what are they so
> afraid
> of? Russian scientists have now been commissioned to find (contrary to
> all
> other studies) that the principle works.

Those "Russian scientists" often seemed to come up with controversial and unrepeatable results. Old cold warriors wondered if the Russians were that much smarter or dumber. Then, in the 90's, we found that a lot of that weird stuff was internal political smoke and mirrors, more related to funding than science.

Ed
wb6wsn

395. Re: Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 15:01:49 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41dff0e6.2010837343@news.galilei.com>
Source record: 84033

stryped@hotmail.com verbositized:

>
>>
>So, if coax is kept inside the tubing, there is no stray rf and
>therefore a choke or balun is not needed?

Some stray RF somewhere, but not enough to worry about regarding the
antenna operation.
However, it is still a good idea to coil a few turns of the coax
before entering the shack.
>
>Are you saying the shield must be grounded to a surge supressor to
>prevent lightening stikes?
Not at all, the SHEILD should never go through a supressor.
For proper operation of ANY antenna, the sheild should be grounded.
For lightning protection the sheild should be grounded to an 8 foot
stake OUTSIDE and the center conductor run through a gas bottle also
grounded to the 8 foot stake outside. Actually, every piece of
equipment in the shack should be properly grounded.
>
>My ideas was to run the wire inside and even make the coaxle
>connections inside the tubing with wire terminals and screws, so as to
>keep everything neat and weath proof.
Sounds good on paper! But I have no idea if it would work, never
tried it. I do know this, with the shield grounded and the antenna
grounded, logically it should make no difference WHERE the shield is
grounded to, but from an RF standpoint, the shield connection to the
vertical must be horizontal with the connection to the driven element.
On Multi-Band J-Poles with single coax feed, we place a horizontal
shorting strap between the connect points of the unfed stub and
vertical element to get the antenna to work properly.
It's been too many years ago that I studied this stuff to remember
why.

>What if you used a non insulated pvc type pipe to connect the stub and
>verticle element?
Wrong Analogy! Although we use the word Stub, a J-Pole consists of a
1/2 wave vertical element, affixed to one leg of a 1/4 wave U-shaped
matching transformer.
By making the horizontal member from PVC and not contiguous with the
two legs of the U, you would not have a U shaped matching transformer.
FWIW: The U does not have to be vertical, it can be horizontal as is
the upper matching transformer on a Stacked-J and BOTH stubs become
affixed to the vertical elements.

I have seen a unique antenna design that looks like a J-Pole, but the
1/2 wave vertical is insulated from the U-Shaped matching section,
just as a ground plane is insulated from its 1/2 wave vertical.
The feed for this type of antenna was quite hairy to get just right!
If I recall, a brass rod extended up into the vertical about 8 inches
to it's connection point and the lower connection point was similar to
a J-Pole.

TTUL
Gary

396. Re: hustler antenna resonant radials???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 15:16:13 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10tvuai1qb03247@news.supernews.com>
Source record: 84034

Thx Steve for that 73

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"N4LQ" <n4lq@iglou.com> wrote in message news:41dfe037_1@news.iglou.com...
> If length means nothing I could have gone with 6 inch
>> radials if I followed your logic...eh?
>
> I thought my "logic" said "make them all as log as possible". If the
> manufacturs say cut radials to X length then lay them on the ground...then
> they need to go back to school. One rule of thumb is: Try to make the
> radial length at least equal to the heigth of the vertical. If the Hustler
> is 20' tall, make the radials at least 20' long and use lots of them.
> Having 50 radials 20' long is better than 8 radials 500' long etc.
> N4LQ
>
>
>
> --
> Steve N4LQ
> "Charlie" <charlie@earthlink.com> wrote in message
> news:10ttodujp9hsv9a@news.supernews.com...
>> What about the Hustler antenna instructions which provide the "correct
>> lengths" for cutting radials? Moreover they need not be "buried 2 inches"
>> in the ground but can safely remain on the ground once grass growth
>> effectively buries them. Also DX Engineering www.dxengineering.com has
>> ground radials for sale which are "pre-cut to length". I assume they
>> know what they are doing. Force 12 also recommends using "tuned radials"
>> with their line of vertical antennas. I assume they too know more about
>> antennas then I do.
>>
>> I researched this topic before installing my 5-BTV and tuned radials were
>> always recommended. If length means nothing I could have gone with 6
>> inch radials if I followed your logic...eh? My 5-BTV installation with 72
>> "tuned" radials at this page
>>
>> 1. http://www.ad5th.com/5-BTV.html
>>
>> I am getting great reports so far but have only been on the air at this

>> qth for a couple weeks. A new AL-80B arrives in 3 days which should
>> improve my signal greatly. 73 / DX
>>
>> --
>>
>> Charlie
>> Ham Radio - AD5TH
>> www.ad5th.com
>> Live Blues Music
>> www.492acousticblues.com
>>
>>
>>
>>
>> "N4LQ" <n4lq@iglou.com> wrote in message
>> news:41ddf6b3$1_1@news.iglou.com...
>>> Why do hams persist on using "tuned" radials on the ground? They cut
>>> them to "resonance" which means nothing. A wire cut for resonance on 40
>>> meters and buried under 2 inches of soil is no where near resonant 7mhz.
>>> It would be much more effective if they just made all the radials as
>>> long as possible and forget this resonance stuff but no one listens.
>>>
>>> --
>>> Steve N4LQ
>>> "Roger Adam" <roger.adam@remove_this.virgin.net> wrote in message
>>> news:2mYCd.525$Mw3.252@newsfe6-gui.ntli.net...
>>>> Andy,
>>>>
>>>> check out this site, it may you/someone else,
>>>>
>>>> regards
>>>>
>>>> http://www.ad5th.com/5-BTV.html
>>>>
>>>>
>>>>
>>>> http://www.ad5th.com/5-BTV.html
>>>>
>>>>
>>>>
>>>>
>>>>
>>>> I choose Polesoft Lockspam to fight spam, and you?
>>>> http://www.polesoft.com/refer.html
>>>>
>>>
>>>
>>
>>
>

>

397. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 15:52:46 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <01vvt05v0eiehvk06urpopk9hra9eoiq48@4ax.com>
Source record: 84035

On Fri, 07 Jan 2005 23:29:16 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

|Wes Stewart wrote:
|
|> Cecil Moore <w5dxp@hotmail.com> wrote:
|> |A two-wire serial ASCII RS232 line is time-multiplexed between
|> |marks and spaces, i.e. you can't have a mark and a space occurring
|> |at the same time. :-)
|>
|> Baloney.
|
|Didn't you ever use an 8 to 1 *MULTIPLEXER* chip to change
|parallel BAUDOT to serial BAUDOT?

Actually, no. I have however, worked on monopulse RADAR missile
seekers where the requirement for three phase and gain matched
receiver channels (sum, delta elevation, delta azimuth) was reduced to
two by time-sharing one delta channel. You can call this multiplexing
if you want (TDMA?), but as an r-f guy, I have a different take. At
any point in time the only data in the delta channel was *either*
elevation *or* azimuth, not both elevation *and* azimuth. (* maybe a
digital system after all? :-)

|The parallel BAUDOT bits
|are time-multiplexed into a serial bit stream by the
|three clock bits. The first parallel bit is hard-wired to
|yield a start pulse and the last two parallel bits are hard-
|wired to yield a stop pulse. The center five parallel BAUDOT
|bits are time-multiplexed from parallel to serial by five
|states of the clock.

Fine, but how does this support your statement above to which I
responded?

I think I'm catching on tho...in ham terms, a digital multiplexer is
like a two-meter repeater; only one guy can talk at a time. I'm more
familiar with analog multiplexers, a 20-meter DX pile-up for instance,
where everybody talks at once. [g].

398. Re: hustler antenna resonant radials???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 16:20:52 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <6v00u0dd11ofhaq39vl6dlcp66ebusifh1@4ax.com>
Source record: 84036

On Fri, 7 Jan 2005 21:18:45 -0600, "Charlie" <charlie@earthlink.com>
wrote:

|I just want to thank all of you for your kindness and speediness in pointing
|out my error as a new vertical antenna user. I am glad several of you had a
|laugh on me for burying tuned radials. Thank you for your kindness and
|courtesy. Hope to catch each and every one of you on the bands. I am
|grateful for the tact and diplomacy that many of you showed me. True Ham
|Spirit at it's best.
|
|Based on what I have been told by the gentlemen in this great group I could
|have used much shorter radials than any "tuned length". If that is right
|then I have achieved a much more effective radial system then what I would
|have had I not erred. Is this right? In other words I have more wire in the
|ground then I need..right? Now if that is so..does that hurt or help

I haven't followed this thread since its inception, but I did read
comments from you such as: "If length means nothing I could have gone
with 6 inch radials if I followed your logic...eh?" and "You're
entitled to your opinion on this seemingly controversial topic."

This came across as an attitude problem (further exemplified by your
sarcasm above) that precluded gentler handling of your inexperience,
by me anyway.

In the future, I suggest a more receptive attitude on your part might
elicit less hostile advice.

You did do a great installation job, however, and while you expended
more effort than necessary, it is not for naught.

399. longwire for portable?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 16:32:58 UTC
From: "G. Doughty" <ki4bbl@cox.net>
Message-ID: <0XTDd.22402$sf5.18322@lakeread05>
Source record: 84037

Hiya,

I have an MFJ 9040 and want to make it totally portable. No tuner, etc. I am thinking about a longwire cut to frequency but how do I connect it? Won't I need to use some feedline? If so, how do I connect it to 20-22gg wire? I need to make this as cheaply as possible. Interested in just throwing the antenna up or down a balcony etc.

Thks
greg
ki4bbl@cox.net

400. Re: OCF Dipole on 20 meters:

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 16:36:06 UTC
From: kelly@dvol.com
Message-ID: <1105202166.414218.314590@c13g2000cwb.googlegroups.com>
Source record: 84038

Mike Coslo wrote:
> I'm using a homebrew dipole at the moment. It is a fairly typical
one,
> with coax going to a 4:1 balun. Short side 40 some feet, and ~135
feet
> total. Roughly What I am curious about is that 80 meter operation is
> pretty good, 40 meters is good also, but on 20 meters it, for lack of
a
> better word, sucks.
>
> Is the OCF multi-band antenna a dog on 20 meters?

I ran into the same problem at the N2EY/W3RV Field Day site. The NW/SE 80M G5RV cooked on 80 & 40 but it wasn't so hot on 20/15 I assumed because of the "lobes to nowhere useful" problem discussed above. So I built conventional coax-fed 20 & 15M dipoles strung end-to-end and installed them parallel with but lower than the G5RV from another pair of trees. From here near the NE coast we now have major lobes aimed southwestward on all four bands which seem to cover the whole country and Canada quite well except directly off their ends. I suspect part of the success of the 20/15M dipoles vs. the G5RV is attributable to lower tuner losses, we don't need a tuner for 20 & 15.
> - Mike KB3EIA -

w3rv

401. Re: Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 16:50:08 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <5bUDd.11469$B95.1530@lakeread02>
Source record: 84039

<stryped@hotmail.com> wrote
> So, if coax is kept inside the tubing, there is no stray rf and
> therefore a choke or balun is not needed?

Gary did a good job of answering your questions, but I am reinforcing what he said.

By design, the J-Pole may allow feedline radiation: None, a little, or a lot, depending on the users unique configurations of feedline length, design frequency, and accuracy of matching-stub construction, etc. Therefore an isolating 1:1 Balun or coils of feedline (choke) at the feedpoint of the antenna are highly recommended. Routing the coax inside the variable lenth of the main antenna length to get to the shorting (matching) stub would have little or no effect on preventing feedline radiation, if your design was subject to it in the first place.

>
> Are you saying the shield must be grounded to a surge supressor to
> prevent lightening stikes?

Not everyone is subject to lightning, and for some it is rare enough that they choose not to worry about it. But if lightning protection design is used, it requires shield-grounding. Coax shield (braid, solid, any kind) must be grounded, and at several points depending on the tower height, mast, length of feedline, etc. In order for lightning arrestors (more commonly called SPD or Surge Protection Device) to work properly, the coax shield must be well grounded *before* it is connected to the arrestor/surge device. That's another whole subject and we have explained your J-pole doesn't "need" grounding several times. A copper J-Pole however, is about as attractive a point for lightning attachment as you could offer. It is also subject to the same levels of static electricity that any airborne antenna picks up. Act according to your individual desire for survival there.

>
> My ideas was to run the wire inside and even make the coaxle
> connections inside the tubing with wire terminals and screws, so as to
> keep everything neat and weath proof.

That would be a really neat and pretty wx-proof design, but a lot of work. There might be an easier way to wx-proof it, mentioned later.

>
> What if you used a non insulated pvc type pipe to connect the stub and
> verticle element?

The cross-connector is a shorting, matching "bar", as Gary warned you against using the word "stub" if that was going to confuse anyone because it

is not a waveguide or filter or anything else the word stub is normally used to describe. Therefore it could never be made of an insulating dialectric such as PVC. You could however hot-dip coat the whole antenna in plastic or rubber if you wanted to really wx-proof it, and this would eliminate the difficult inside-assembly of coax in the tubing that your proposed.

One final note: the J-Pole is no miracle antenna. It's has zero gain when compared to any vertical antenna, and its entire attraction is it "fairly" easy construction, and very inexpensive construction materials. To get as *reliable* a vertical antenna for marine use that I required, might have cost well over $100. At or above that level the vertical antennas of 5/8 wavelength can normally provide gain of 6-10 dbi, and I do not want to get into what that is compared to as it has been hashed over a million times. I would leave it at "there will be considerable gain possible in vertical designs over the J-Pole". You have to be willing to pay for that. Most users are happy with J-Pole performance so it's record stands pretty well on its own.

73,
Jack Painter
Virginia Beach, Virginia

402. Re: What's the deal? Lightning

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 17:02:02 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <emUDd.11563$B95.6120@lakeread02>
Source record: 84040

"Ed Price" <edprice@cox.net> wrote
>
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:vh6ut0tqj36l80eo36k46h0eqh9avdmotr@4ax.com...
> > On 07 Jan 2005 16:46:54 -0600, Allen Windhorn
> > <Allen.Windhorn@LSUSA.com> wrote:
> >>> My speculation about selection
> >>> paths of ionization by RF excitation was just groping toward one way
> >>> to create those channels, and HAARP naturally came to mind.
> >>A long time ago, there was some (theoretical at least) effort to see
> >>whether UV lasers could be used to create an ionized channel over a
> >>long distance.
> >
> > Hi Guys,
> >
> > One has to wonder about the consequence of double jeopardy standing
> > beneath that antenna (HAARP experiment) or holding the laser.
> >
> > Think insurance covers this?
> >
> > Supply shop foreman (perplexed):
> > "Another laser? What happened to the last one?"
> >
> > Tech (smoke curling up from clothes):
> > "ummmm, burned out real quick-like. Could you hurry? They say
> > more rain is on the way!"
> >
> > 73's
> > Richard Clark, KB7QHC
>
>
> Well, I could easily imagine a laser protected within a large conductive
> lightning rod. All you need is a 1/" hole in an otherwise well-shielded
> structure. Maybe a bit larger to allow for pointing, or you could put some
> optics safely outside the rod.
>
> Regarding the RF excitation, I assumed that a single-point source would be
> dumb, because the best ionization path would be right back to YOU. But an
> array of exciters, electronically steered to create a sufficient power
> density at a focal point, is a lot smarter.
>
> Again, I don't know if the technique would work, but an electronically
> steered (more like focusing) array would be one way to do it.
>

> One poster said that the ionized channel might blow away in the wind.
Maybe
> a quick system could "paint" an ionization channel fast enough. Maybe a
> system could detect and take advantage of leaders, to create a shorter
path.
>
> Ed
> wb6wsn

Hi Ed, using high powered lasers to "paint" a thunderstorm cloud has been done, and whether reliably or not, was able to trigger lightning. It hasn't translated into practical protection schemes yet, but that could simply be economics. As a means of triggering lightning to a safe point away from vulnerable assets, it still leaves the possibility that some storms are so powerful that nothing short of an extensive, multi-point array of lasers could ever offer protection at an individual point. It is generally so much less expensive to employ catenary wires overhead, build faraday-cages around, and position air terminals in appropriate areas than the costs of such a laser system. There would also be a new class of airspace required for operation of such lasers. Something like a "no-fly zone" in fact! ;-)

73,
Jack Painter
Virginia Beach, Virginia

403. Re: hustler antenna resonant radials???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 17:30:51 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10u0671ovdok087@news.supernews.com>
Source record: 84041

Thanks for the kind words Wes.
Please fax me a copy of your medical credentials and I'll more genuinely consider your diagnosis.
Most of the others have been courteous and respectful. Maybe you were absent that day....73

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"Wes Stewart" <n7ws_@_yahoo.com> wrote in message news:6v00u0dd11ofhaq39vl6dlcp66ebusifh1@4ax.com...
> On Fri, 7 Jan 2005 21:18:45 -0600, "Charlie" <charlie@earthlink.com>
> wrote:
>
> |I just want to thank all of you for your kindness and speediness in
> pointing
> |out my error as a new vertical antenna user. I am glad several of you had
> a
> |laugh on me for burying tuned radials. Thank you for your kindness and
> |courtesy. Hope to catch each and every one of you on the bands. I am
> |grateful for the tact and diplomacy that many of you showed me. True Ham
> |Spirit at it's best.
> |
> |Based on what I have been told by the gentlemen in this great group I
> could
> |have used much shorter radials than any "tuned length". If that is right
> |then I have achieved a much more effective radial system then what I
> would
> |have had I not erred. Is this right? In other words I have more wire in
> the
> |ground then I need..right? Now if that is so..does that hurt or help
>
> I haven't followed this thread since its inception, but I did read
> comments from you such as: "If length means nothing I could have gone
> with 6 inch radials if I followed your logic...eh?" and "You're
> entitled to your opinion on this seemingly controversial topic."
>
> This came across as an attitude problem (further exemplified by your
> sarcasm above) that precluded gentler handling of your inexperience,
> by me anyway.

>
> In the future, I suggest a more receptive attitude on your part might
> elicit less hostile advice.
>
> You did do a great installation job, however, and while you expended
> more effort than necessary, it is not for naught.

404. Re: coax from cable company

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 17:41:11 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <XWUDd.12108$_X7.6637@newssvr33.news.prodigy.com>
Source record: 84042

Art,
It's chief advantage is that it's cheaper to make. Not
much, but some. One of it's disadvantages is that you will
have to seal it (makes a good garden hose otherwise).
'Doc

405. Re: What's the deal? Lightning

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 17:55:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2070u0dmjb0d604puo824or2ija7oeruk9@4ax.com>
Source record: 84043

On Sat, 8 Jan 2005 05:42:30 -0800, "Ed Price" <edprice@cox.net> wrote:

>or you could put some optics safely outside

Supply shop foreman (shocked):
"You want WHAT?"

Tech (still smoldering):
"You know, one of those Disco Balls. We're gonna spread
the beam, hit it, and hope it -ummmmm- clears the air. You
got many in stock? We may need a few.

"Oh yeah, another laser too."

73's
Richard Clark, KB7QHC

406. Re: What's the deal? (was: Re: AM radio reception inside passenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 18:07:24 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4o70u05lj1gvq6deh1chuovgdvbjd3vrq6@4ax.com>
Source record: 84044

On Sat, 8 Jan 2005 05:52:39 -0800, "Ed Price" <edprice@cox.net> wrote:

>Those "Russian scientists" often seemed to come up with controversial and
>unrepeatable results.

Hi Ed,

There certainly seems to be a mixed bag of what's useful out of the
old USSR. However, their math software applications have been killers
in the capitalistic marketplace. One other jewel came from their
rocket division that built the most powerful engines known, and then
the bureaucracy ordered them scrapped because they abandoned their man
on the moon program.

The engineer in charge deliberately ignored this order and had
something like a couple of hundred wrapped up and put into storage.
They are making quite a killing on selling those right now.

Another story is their development of a supersonic torpedo. That's
right, a jet powered torpedo that can dart through the ocean at
600MPH. It was speculated that it was the cause of the sinking of
their submarine, the Kursk. It was thought that the propellant lit
off in its bay, and the rest is history.

73's
Richard Clark, KB7QHC

407. Re: longwire for portable?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 18:31:05 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <crp8t9$7lf$2@sparta.btinternet.com>
Source record: 84045

"G. Doughty" wrote
> I have an MFJ 9040 and want to make it totally portable. No tuner, etc.
I
> am thinking about a longwire cut to frequency but how do I connect it?
> Won't I need to use some feedline? If so, how do I connect it to 20-22gg
> wire? I need to make this as cheaply as possible. Interested in just
> throwing the antenna up or down a balcony etc.
>
==========

You forgot to say what an MFJ 9040 is. I've never heard of it. Does
everybody except me always have one?

But you have no problems.

Just throw some wire over the balcony or out of the bedroom window, cut to a
length of about 1/4 or 3/4-wavelengths at the frequency you intend to use it
at, and plug the near end of it into the coaxial output socket of the
transmitter.

At least as important is the ground connection. For that use large aligator
clips at the ends of shortish lengths of 18-gauge, plastic-insulated,
flexible, multi-strand wire and connect to the domestic plumbing system.
Hot or cold water or central heating pipes, or preferably several of them,
will do fine.

To save yourself the inconvenience of withdrawing the antenna to prune it,
make the antenna wire length a little longer than 1/4 or 3/4-wavelengths and
connect it in series with a 300 pF variable capacitor.

Don't worry about the SWR if the transmitter doesn't mind.

Reg, G4FGQ

408. Re: longwire for portable?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 18:44:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <p3a0u09okc3r8sb5oe037tab6igm09p7h7@4ax.com>
Source record: 84046

On Sat, 8 Jan 2005 11:32:58 -0500, "G. Doughty" <ki4bbl@cox.net>
wrote:

>I have an MFJ 9040 and want to make it totally portable. No tuner, etc. I
>am thinking about a longwire cut to frequency but how do I connect it?
>Won't I need to use some feedline? If so, how do I connect it to 20-22gg
>wire? I need to make this as cheaply as possible. Interested in just
>throwing the antenna up or down a balcony etc.

Hi Greg,

Both your description above AND the manual scream "use a tuner."

A "tuned" antenna is only tuned to its environment, and unless you
take that environment with you on the road, that antenna is NOT going
to be tuned. However, there is much to be said for sloppy
installations being so lossy as to match every time. A low dipole
often so qualifies. However, a longwire cut to frequency (something
of a contradiction in terms, by the way) would then depend on the
ground path attached to your MFJ. If you are thinking of cut to
frequency in the sense of a halfwave, then you are driving a severe
mismatch (which that manual also screams may lead to spurs).

Get the drift?

73's
Richard Clark, KB7QHC

409. Re: Center Fed " Zepp " with Coaxial Balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 18:51:21 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e02bb7$1_1@127.0.0.1>
Source record: 84047

AaronJ wrote:
> Again, you could do the same thing *without* using a coax switch. Simply run the
> FT920 direct to your external tuner and the output of the external tuner to the
> antenna. Use one tuner and put the other on bypass, or visa versa. This setup
> will allow you to use either tuner (or no tuner) on any band.

Some tuners don't have a bypass function. Perhaps his doesn't.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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410. Re: vertical dipole or 5/8 lamda?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 19:04:24 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e02ec6$1_3@127.0.0.1>
Source record: 84048

nm5k@wt.net wrote:

> Cecil Moore wrote:
>>A 5/8 WL vertical *with an excellent ground plane* has about
>>3 dB gain over a vertical 1/2WL dipole.
>
> A little optimistic maybe....Normally, a dual 5/8 collinear
> would give about 3 dbd. A single 5/8? As far as textbook
> numbers,it's usually rated apprx 3.3 dbi vs the 2.1 dbi
> for the 1/2 wave.

You're right. I was thinking about the gain of a 2x5/8WL
dipole over a 1/2WL dipole.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

411. Re: Why the 4:1 or 9:1 baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 19:15:15 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e03151$1_3@127.0.0.1>
Source record: 84049

Ian Jackson wrote:
> People keep saying that they use 4:1 or 9:1 baluns.
> Often I can see no reason for this (such as when simply feeding a dipole
> with coax, or on the output of an ATU).
>
> I'm obviously missing the point. Why the impedance transformation?
> Ian.

The feedpoint impedance of a dipole varies with frequency from a
low value of about 50 ohms to a high value of about 8000 ohms.
In between, it can look like 1000(+/-)j1000 ohms.
Baluns with a high transforming ratio try to take the impedance
lower so, for instance, with a 4:1 balun, the above values would
ideally go from 50 ohms to 12.5 ohms, 8000 ohms to 2000 ohms,
and from 1000+j1000 ohms to 250+j250 ohms. You can see that the
second set of values have a smaller absolute range than the first
set, thus making them an easier match for the tuner.

That's the simplified version. There are disadvantages to using
baluns with a high transforming ratio.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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412. Benjamin Franklin, Mason, had LIGHTNING all wrong on purpose ....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 19:22:41 UTC
From: Barry Horowitz <barry_horrowitz@yahoo.com>
Message-ID: <1105212161.683683.9740@c13g2000cwb.googlegroups.com>
Source record: 84050
Cross-posted to: rec.radio.amateur.antenna, sci.astro, sci.military.naval, soc.culture.indonesia, alt.politics.usa

DON'T FORGET!!! When the paired mates, ARGON and NEON, are "coupled,"
they produce

LIGHTNING

aka [BLITZ!!!] ... they both form absolutely NO OXIDES

http://carpathian_bronze.tripod.com/antarii_deck2.html

interesting related topics:

SUPER COOLED LIQUID WATER

-- Water vapour deposited on low-temperature (<140K) is known to form
an amorphous phase, termed AMORPHOUS SOLID WATER (ASW), that is
metastable with respect to crystalline ice. There is still a debate
about whether this amorphous form of water transforms to a metastable
liquid above the GLASS TRANSITION temperature at 136K and before
crystallization near 160K. Furthermore, if the amorphous solid does
melt into a liquid, a question remains as to whether this liquid is a
metastable extension of supercooled liquid water OR A DISTINCT
THERMODYNAMIC PHASE.

DEUTERONOMIC REFORM -- 622 BC. King Josian of Judah made a Book of Law
which vigorously enforced a reform in which all rural religious
sanctuaries and fertility-focused BELIEF NETWORKS were purged and
annihilated and ALL WORSHIP was commanded to be performed at the TEMPLE
OF JERUSALEM.

The word "Hebrew" [in Hebrew!] is " 'Ibri ", which means "one from the
other element".

The Pentateuch arose AT THIS TIME and was known as Deuteronomy, or
spoken by "D," otherwise known as DEUTERIUM. This is when the
Israelites were first to have been "chosen". This was also the first
instance of monotheism in Judaic lore.

Today, "D" is called 2H and is known as HEAVY HYDROGEN. It is rarely if
ever a natural atomic species. The nuclear fusion of both deuterium and
tritium releases an enormous amount of energy and is the essence of
thermonuclear weapons.

HEAVY WATER
-- D2O is also called DEUTERIUM oxide, a "water" composed of deuterium
(HEAVY HYDROGEN), a hydrogen isotope with a mass which is DOUBLED that
of regular hydrogen), and Oxygen.
H20=Water

SiO2=Silicon Dioxide
CO2=Carbon Dioxide
2H=Heavy Hydrogen (is it real???)

Heavy Water has a molecular weight of about 20. Water has a molecular weight of about 18.

Unmitigated and persistent "electrolysis" of 100,000 gallons of water, until only a few drops remain, yields nearly "pure" HEAVY WATER (deuterium oxide). These few drops of heavy water can now be used as a moderator of neutrons in NUCLEAR POWER plants.

GAMMA RAYS -- gamma rays are penetrating electron-magnetic RADIATION of the same nature as an X-RAY though usually of somewhat shorter wavelength, emitted spontaneously by some RADIOACTIVE substances. Even a chance encounter of a gamma ray with a SINGLE genetic NUCLEOTIDE results in a toxic biochemical effect and results in DNA/gene mutation. Gamma Rays originate in PARTICLE--ANTIPARTICLE ANNIHILATION. The absorption of gamma rays by nuclei causes PHOTODISINTEGRATION and PHOTOFISSION of a nucleus or NUCLEI. To make a simple analogy, think QUASARS and their ever present BLACKHOLE companion, with its insatiable ACCRETION DISK, sucking up all light in its reach at speeds of 6.5 million MPH, and reducing billions of suns and stars into a teeny cosmic compression.

413. Re: coax from cable company

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 19:30:03 UTC
From: Phil <Phil@letskillspam.be>
Message-ID: <%wWDd.25091$6w2.1686557@phobos.telenet-ops.be>
Source record: 84051

"art" <aunwin@insightbb.com> wrote in message
news:1105152593.809723.286370@c13g2000cwb.googlegroups.com...
> I was just given a coil of 7/8 hardline coax that I have not seen
> before.
> It has plastic discs inside to separate the core from the outer
> aluminum tube which I suppose uses air as the dielectric. Anybody got
> any info on this stuff
> and any advantages it may have over the normal hardline cable?
> Regards
> Art
>

Look on Google for "fused disc" AND "cable".

Most Cable TV companies stopped using it when they started using frequencies
above 300 MHz.

This cable acts as a filter around 350 MHz.

414. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 19:33:52 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e035ae$1_1@127.0.0.1>
Source record: 84052

Wes Stewart wrote:
> Fine, but how does this support your statement above to which I
> responded?

The 8-bit ASCII could be generated using a digital multiplexer.
If one had a 10-bit digital multiplexer chip, one could use an
ASCII byte stream into it to generate serial ASCII. That's eight
separate input bit data streams being time-multiplexed into one
output data stream and that comes under the definition of multiplexing.

One problem here is the age of my vocabulary. When I learned and
worked on this stuff, there were digital multiplexers and decoders,
i.e. the word "encoder" was not in common use yet. Reference:
"Fundamentals of Logic Design", 2nd edition, Charles H. Roth, Jr.,
copyright 1979, pages 184-190. "Multiplexers" and "decoders" are
described in detail but absolutely no mention of "encoders" anywhere
in the book. Back then, "encoders" were included in the definition
of "multiplexers".
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

415. Re: hustler antenna resonant radials???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 19:55:13 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <9ed0u0ttqcvho558c92o8t424u9tfi1bot@4ax.com>
Source record: 84053

On Sat, 8 Jan 2005 11:30:51 -0600, "Charlie" <charlie@earthlink.com>
wrote:

|Thanks for the kind words Wes.
|Please fax me a copy of your medical credentials and I'll more genuinely
|consider your diagnosis.
|Most of the others have been courteous and respectful. Maybe you were absent
|that day....

Perhaps. But I can be as kind and courteous as the next guy when it
is reciprocal. Over one hundred hams got their Novice tickets via
classes that I taught at the local community college and I *never* had
a complaint about disrespecting any of them because of their
ignorance. Some of them even repeated the course just for the fun of
it...and I might add they were paying tuition. Likewise the tech
course I taught at the local Air Force base and the grad students I
tutored in a microwave measurements course my boss taught at the U of
Az.

That said, if one of them had told me "You're entitled to your opinion
on this seemingly controversial topic", I would have shown him the
door. I actually like helping the inexperienced, but I don't suffer
fools gladly.

416. Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 20:11:56 UTC
From: aw10809@yahoo.com
Message-ID: <1105215116.343501.211630@c13g2000cwb.googlegroups.com>
Source record: 84054

Hello,

I apologize if this is a question has been asked a million times - but a google search has beeen overwhelming.

I bought a Teac SL-D88 radio for our kitchen, but the FM reception is terrible. We live in a stone house (18 inch thick stone walls).

We have an old (currently unused) TV antenna on our roof that has a coaxial cable running into our basement. The kitchen radio has an external antenna that consists of a single wire (no dipole or coaxial hook-up).

Can I connect the radio to the antenna, and how would I do that?
Thanks in advance.

Michael

417. Re: The planning permission

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 20:41:29 UTC
From: CW <cmagers@earthlink.net>
Message-ID: <UbSdneipB5hl2X3cRVn-uA@comcast.com>
Source record: 84055

Seems you're making progress (?) over there. Sounds totally American.

"Simon Smith" <s.Smith@btinternet.com> wrote in message
news:crk4mm$n48$1@titan.btinternet.com...
> Well, I today decided to make a start in trying to obtain planning
> permission for my new Antenna - even though the "Permitted Development
> Rights" have been removed from our small Village in the middle of nowhere
on
> Bodmin Moor in Cornwall -
> First step was to fill in all four sets of application forms - the truth -
> the whole truth and nothing but the truth !! Then out in the wind and rain
> with a tape measure and try to measure up the length of the garden -
> distance from the house to the proposed site of the Antenna - Height of
the
> house in relation to the height of the Antenna - and then go back indoors
> and start to draw it all up into a meaning full set of drawing. Four
copies
> were needed. Next step. Try to find the digital Camera and wait for the
rain
> to stop before taking a photo of the intended site. Lunch. Proceed to
print
> photos - run out of ink. Install new print cartridge - and finally manage
to
> get the whole lot ready for the "Council"
> Proceed to Bodmin Council offices - where a nice young girl offered to
view
> my drawings before accepting them for consideration. The first mistake I
> made was in using feet and inches. "Sorry - we only take metric" So I now
> have to re-do them all again. Next mistake "We Don't take them on graph
> paper" Third mistake was
> "We need a picture of the "Ariel" Forth mistake was: "We need the
drawings
> to be to scale"
> Did Marconi have all this trouble with the "Council" ?
> Here I am - now trying to re-do everything - to some sort of Scale. Wife
> moaning - Kids Moaning - cat climbing over all the drawings - Dog waiting
to
> be walked..... TV blaring out .... Ohhh happy days .... I think I am going
> Crazy..... Beam me up Scottie.....
> To be Continued.....
> John M3IIV
>
>

418. Re: The planning permission

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 20:50:49 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <10u0htit1l05af9@corp.supernews.com>
Source record: 84056

CW wrote:
> Seems you're making progress (?) over there. Sounds totally American.
>
> "Simon Smith" <s.Smith@btinternet.com> wrote in message
> news:crk4mm$n48$1@titan.btinternet.com...
>
>>Well, I today decided to make a start in trying to obtain planning
>>permission for my new Antenna - even though the "Permitted Development
>>Rights" have been removed from our small Village in the middle of nowhere
>
> on
>
>>Bodmin Moor in Cornwall -
>>First step was to fill in all four sets of application forms - the truth -
>>the whole truth and nothing but the truth !! Then out in the wind and rain
>>with a tape measure and try to measure up the length of the garden -
>>distance from the house to the proposed site of the Antenna - Height of
>
> the
>
>>house in relation to the height of the Antenna - and then go back indoors
>>and start to draw it all up into a meaning full set of drawing. Four
>
> copies
>
>>were needed. Next step. Try to find the digital Camera and wait for the
>
> rain
>
>>to stop before taking a photo of the intended site. Lunch. Proceed to
>
> print
>
>>photos - run out of ink. Install new print cartridge - and finally manage
>
> to
>
>>get the whole lot ready for the "Council"
>>Proceed to Bodmin Council offices - where a nice young girl offered to
>
> view
>
>>my drawings before accepting them for consideration. The first mistake I
>>made was in using feet and inches. "Sorry - we only take metric" So I now

>>have to re-do them all again. Next mistake "We Don't take them on graph
>>paper" Third mistake was
>>"We need a picture of the "Ariel" Forth mistake was: "We need the
>
> drawings
>
>>to be to scale"
>>Did Marconi have all this trouble with the "Council" ?
>>Here I am - now trying to re-do everything - to some sort of Scale. Wife
>>moaning - Kids Moaning - cat climbing over all the drawings - Dog waiting
>
> to
>
>>be walked..... TV blaring out .... Ohhh happy days .... I think I am going
>>Crazy..... Beam me up Scottie........
>>To be Continued.........
>>John M3IIV
>>
>>
>
>
>
John;

Remember that they are the government and are only here to help you!!!!

Dave WD9BDZ

419. Resonant and Non-resonant Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 21:51:49 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <crpklksng1@titan.btinternet.com>
Source record: 84057

The only radials on which resonance is truly effective, whether they be coil-loaded or not, are the elevated variety. ie., those which are roughly 1/10 wavelengths or more above ground level. At lower levels the loss induced in the ground or in the loading coils, although perhaps not immediately apparent, can be undesirably high.

Radial proximity to the ground has two effects - first is the obvious loss induced in the ground due to soil resistivity. Second is the more insidious reduction in propagation velocity along the radials due to soil permittivity which makes a mess of the resonant frequency.

For low-height radials it is incorrect to use calculated lengths from the usual formulae. Depending on soil constants (and radial angles) it is necessary to shorten radials by careful pruning aided by readily available antenna impedance analysers.

When radials are lying on the ground, with ordinary soils, the propagation velocity is roughy half of the free-space velocity. Consequently, the physical resonant length is only half of the value when radials are well elevated.

But because of the higher loss in radials lying on the ground the pruning to obtain resonance is much less critical. The resonant Q may be down to 2 or 3.

When radials are buried to a depth of fractions of an inch or more the velocity factor can fall very fast to as low as 0.1 at the lower HF frequencies. It depends on moisture content of the soil. Pure water has a very high dielectric constant (permittivity) of 80.

Incidentally, soil relative magnetic permeabilty, which also affects velocity factor to the same extent, always remains in the neighbourhood of unity simply because the pure iron and similar magnetic materials content of ordinary soil is quite small by volume.

So at HF a buried radial wire (unless in dry Sahara sand) is a high-loss transmission line with a low velocity factor. Resonance effects are practically non-existent. For usual length radials line input impedance is Zo of the line. The lossy effects are due only to the resistive conponent of Zo. The reactive component is of no consequence because it is tuned out simultaneously with a vertical antenna reactance.

The resistive component of input impedance of a set of buried radials is a complicated function of frequency which does not bear a very close relationship with soil conductivity. So the actual value of soil conductivity at VLF, even if it is known, and it seldom is, entered in modelling programs is of little use.

Only at HF, say at 30 MHz and above, in very high resistance soils, do small resonant effects re-appear. And not surprisingly ground losses decrease down to values experienced in soils of very low resistivities.

When the soil is an insulator ground losses are zero. Does maximum ground loss occur when ground resistivity is 377 ohm-metres at which no reflections occur.

For an approximate analysis of the performance of a set of buried radials, download program RADIALS2 from website below. Download in a few seconds and run immediately. You may be pleasantly relieved at the short lengths and nunber of radials required to acheive a reasonable performance. It won't be the oft-advertised, magazine magic number of 120 which is divisible by 60, 30, 20, 15, 12, 10, 8, 6, 5, 4, 3 and 2.

Reg, G4FGQ

420. Re: Center Fed " Zepp " with Coaxial Balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 22:07:22 UTC
From: "JimK2TL@gmail.com" <JimK2TL@gmail.com>
Message-ID: <1105222042.070926.59100@c13g2000cwb.googlegroups.com>
Source record: 84058

I do not have a bypass switch on the manual tuner, because it is a homebrew tuner..my fault for not clearing that up ..I never built in a bypass switch since I had a nice coax switch laying around.
Thanks .
Jim/K2tl

421. Re: Resonant and Non-resonant Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-08 22:27:14 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <crpmo1kod1@hercules.btinternet.com>
Source record: 84059

```
Obtain program RADIALS2 from website below.
--
.....................................................
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....................................................
```

422. Re: Center Fed " Zepp " with Coaxial Balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 01:50:18 UTC
From: AaronJ <noemail@noemail.com>
Message-ID: <4831u05cq68ga21ds33ijvr0pfsckcm6r5@4ax.com>
Source record: 84061

"JimK2TL@gmail.com" <JimK2TL@gmail.com> wrote:

>I do not have a bypass switch on the manual tuner, because it is a
>homebrew tuner..

Ahh, that's what I was missing. Tnx...

423. money

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 02:14:41 UTC
From: jjrvn@hotmail.com
Message-ID: <1105236881.228857.78420@c13g2000cwb.googlegroups.com>
Source record: 84062

I'm sure you've read these letters asking you to send $1 to six different addresses. Putting your home address or mailing address on the internet can be risky, but through PayPal all you have to provide is your email address. It's safe and easy. Just go to www.paypal.com and set up your FREE account! No credit card is needed. I am not a gullible person and have never trusted things like this, but I gave it a try. Hey it's only $6. I figured at least 6 people would respond out of the millions of people that use the internet. You should give it a try too! You have nothing to lose, and thousands to gain! Read on for the letter that I found (of course, I added my PayPal e-mail on #6)...

HOW TO TURN $6 INTO $6,000+!!! THIS REALLY CAN MAKE YOU EASY MONEY!!! IT WORKS!!! BUT YOU HAVE TO FOLLOW IT TO THE LETTER FOR IT TO WORK!!!! A little while back, I was browsing through newsgroups, just like you are now and came across an article similar to this that said you could make thousands of dollars within weeks with only an initial investment of $6.00! So I thought, "Yeah, right, this must be some kind of scam" but like most of us, I was curious, so I kept reading. Anyway, it said that you send $1.00 though PayPal to each of the emails stated in the article. You then place your own email address in the bottom of the list at #6, and post the article in at least 200 news groups. (There are thousands) No catch. That was it. So after thinking it over, and talking to few people first, I thought about trying it. I figured what have I got to lose except $6.00, right? Like most of us I was a little skeptical and a little worried about the legal aspects of it. It follows the same regulations as the "mailed chain letters, which according to the U.S. Post Office (1-800-725-2161) is indeed legal! Then I invested the measly $6.00. Well GUESS WHAT!!? Within 7 days, I started getting money in my PayPal account! I was shocked! I figured it would end soon, but the money just kept coming in. In my first week, I made about $20.00. By the end second week I had made a total over $1,200.00!!! In the third week I had over $10,000.00 and it's still growing. This is now my fourth week and I have made a total of just over $36,000.00 and it's still coming in rapidly. It's Certainly worth $6.00. I have spent more than that on the lottery!! Let me tell you how this works and most importantly, why it works? Also, make sure you print a copy of this article now, so that you can get the information off of it as you need it.

$$

REQUIREMENTS: You must have a confirmed PayPal account. If you do not have a PayPal account you can go to www.paypal.com and follow the instructions to set up a free account. In order to place the initial $6 into your account, you will have to confirm your bank account with

PayPal (which may take a few days). PayPal is 100% secure and is used my millions of people world wide. Confirming a www.paypal.com account simply means (1) PayPal will first ask you to confirm the email you used to sign up your PayPal account by sending you an email with a link for you to click to that email. As soon as you click that link your email is confirmed. (2) PayPal will then make two small deposits into your bank account if you set up your PayPal account with a checking or savings bank account. Or PayPal will make two small deposits to your credit card if you set up your PayPal account with your credit card. Then after a few days (it takes up to a few days for these deposits to appear in your bank account or on your credit card statement) then after a few days you go back to the www.paypal.com website and sign in. Then you click where it says this account is not yet confirmed. A screen will pop up that gives you 2 boxes to fill in. You then enter the numbers of the 2 small deposit amounts (two separate 2 digit numbers) that were deposited to your bank account or credit card. Now you have a working and confirmed PayPal account and can receive payments.

$$

[STEP 1]
Send, though PayPal, $1.00 to each email on the below list. Make the subject of the payment "Email List" and in the comments, write "PLEASE PUT ME ON YOUR EMAIL LIST." What you are doing is creating a service by this - and best of all you are not giving your address to anyone you do not know. THIS IS ABSOLUTELY LEGAL!! YOU ARE CREATING A SERVICE. Here are the latest PayPal e-mails on the e-mail lists:

#1)brittany...@excite.com

#2) mth...@renc.igs.net

#3) Mishav...@aol.com

#4) nike31...@aol.com

#5) careent...@hotmail.com

#6) jjrvn...@hotmail.com

www.paypal.com

Subject of Payment: ***Email List***

Comments: ***PLEASE PUT ME ON YOUR EMAIL LIST***

[STEP 2]
Now take the #1) email off the list that you see above, move the other addresses up one (6 becomes 5 & 5 becomes 4, etc) the put YOUR email address (the one used in your PayPal account) as #6) on the list. **MAKE SURE THE EMAIL YOU SUPPLY IS EXACTLY AS IT APPEARS IN YOUR PAYPAL ACCOUNT**

[STEP 3]
Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups, message boards, etc. (I think there are close to 32,000 groups) All you need is 200, but remember, the more you post, the more money you make - as well as everyone else on the list! In this situation your job is to let as many people see this letter as possible. So they will make you and me reach!!!! You can even start posting the moment your email is confirmed. Payments will still appear in your PayPal account even while your bank account is being confirmed.

$$$

DIRECTIONS ON HOW TO POST TO NEWSGROUPS/MESSAGE BOARDS.

[Step 1]
You do not need to re-type this entire letter to do your own posting. Simply put your CURSOR at the beginning of this letter and drag your CURSOR to the bottom of this document, and select 'copy' from the edit menu. This will copy the entire letter into your computer's temporary memory.

[Step 2]
Open a blank Notepad file and place your cursor at the top of the blank page. From the 'Edit' menu select 'Paste'. This will paste a copy of the letter into notepad so that you can add your email to the list.

[Step 3]
Save your new Notepad file as a .txt file. If you want to do your postings in different sittings, you'll always have this file to go back to.

[Step 4]
Use Netscape or Internet Explorer and try searching for various newsgroups, on-line forums, message boards, bulletin boards, chat sites, discussions, discussion groups, online communities, etc. EXAMPLE: go to any search engine like yahoo.com, google.com, altavista.com, excite.com, then search with subjects like "millionaire message board" or "money making message board" or "opportunity message board" or "money making discussions" or "business bulletin board" or "money making forum" etc. You will find thousands and thousands of message boards. Click them one by one then you will find the option to post a new message.

[Step 5]
Visit these message boards and post this article as a new message by highlighting the text of this letter and selecting 'Paste' from the 'Edit' menu. Fill in the Subject, this will be the header that everyone sees as they scroll thru the list of postings in a particular group, click the post message button. You're done with your first one! Congratulations! THAT'S IT!! All you have to do is jump to different newsgroups and post away. After you get the hang of it, it will take about 30 seconds for each newsgroup! **REMEMBER, THE MORE NEWSGROUPS

AND/OR MESSAGE BOARDS YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200** That's it! You will begin receiving money within days! **JUST MAKE SURE THE EMAIL YOU SUPPLY IS EXACTLY AS IT APPEARS ON PAYPAL.**

Have fun!

424. Re: Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 02:16:02 UTC
From: stryped@hotmail.com
Message-ID: <1105236962.078936.84920@c13g2000cwb.googlegroups.com>
Source record: 84063

Jack Painter wrote:
> <stryped@hotmail.com> wrote
> > So, if coax is kept inside the tubing, there is no stray rf and
> > therefore a choke or balun is not needed?
>
> Gary did a good job of answering your questions, but I am reinforcing what
> he said.
>
> By design, the J-Pole may allow feedline radiation: None, a little, or a
> lot, depending on the users unique configurations of feedline length, design
> frequency, and accuracy of matching-stub construction, etc. Therefore an
> isolating 1:1 Balun or coils of feedline (choke) at the feedpoint of the
> antenna are highly recommended. Routing the coax inside the variable lenth
> of the main antenna length to get to the shorting (matching) stub would have
> little or no effect on preventing feedline radiation, if your design was
> subject to it in the first place.
>
> >
> > Are you saying the shield must be grounded to a surge supressor to
> > prevent lightening stikes?
>
> Not everyone is subject to lightning, and for some it is rare enough that
> they choose not to worry about it. But if lightning protection design is
> used, it requires shield-grounding. Coax shield (braid, solid, any kind)
> must be grounded, and at several points depending on the tower height, mast,
> length of feedline, etc. In order for lightning arrestors (more commonly
> called SPD or Surge Protection Device) to work properly, the coax shield
> must be well grounded *before* it is connected to the arrestor/surge device.
> That's another whole subject and we have explained your J-pole

doesn't
> "need" grounding several times. A copper J-Pole however, is about as
> attractive a point for lightning attachment as you could offer. It is
also
> subject to the same levels of static electricity that any airborne
antenna
> picks up. Act according to your individual desire for survival there.
>
> >
> > My ideas was to run the wire inside and even make the coaxle
> > connections inside the tubing with wire terminals and screws, so as
to
> > keep everything neat and weath proof.
>
> That would be a really neat and pretty wx-proof design, but a lot of
work.
> There might be an easier way to wx-proof it, mentioned later.
>
> >
> > What if you used a non insulated pvc type pipe to connect the stub
and
> > verticle element?
>
> The cross-connector is a shorting, matching "bar", as Gary warned you
> against using the word "stub" if that was going to confuse anyone
because it
> is not a waveguide or filter or anything else the word stub is
normally used
> to describe. Therefore it could never be made of an insulating
dialectric
> such as PVC. You could however hot-dip coat the whole antenna in
plastic or
> rubber if you wanted to really wx-proof it, and this would eliminate
the
> difficult inside-assembly of coax in the tubing that your proposed.
>
> One final note: the J-Pole is no miracle antenna. It's has zero gain
when
> compared to any vertical antenna, and its entire attraction is it
"fairly"
> easy construction, and very inexpensive construction materials. To
get as
> *reliable* a vertical antenna for marine use that I required, might
have
> cost well over $100. At or above that level the vertical antennas of
5/8
> wavelength can normally provide gain of 6-10 dbi, and I do not want
to get
> into what that is compared to as it has been hashed over a million
times. I

> would leave it at "there will be considerable gain possible in
vertical
> designs over the J-Pole". You have to be willing to pay for that.
Most users
> are happy with J-Pole performance so it's record stands pretty well
on its
> own.
>
> 73,
> Jack Painter
> Virginia Beach, Virginia

What type of verticle are you talking about, like a ground plane? Would a ground plane be a better antenna for 2meters?

425. Tuning a ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 02:19:19 UTC
From: stryped@hotmail.com
Message-ID: <1105237159.359112.99040@c13g2000cwb.googlegroups.com>
Source record: 84064

How would you go about tuning a ground plane antenna? Is a ground plane
a good antenna for 2 meters/440?

On another note, I have read about discone's being very broad banded.
Are these the best antenna for scanner listening?

426. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 02:42:05 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <41e09c9c_1@news1.prserv.net>
Source record: 84065

This is really funny! On the 5th, someone posted a question about how a dish tracks a satellite, and I told them to go
look up monopulse techniques for the answer and got roundly slapped around the head and shoulders for offering a non
answer. Now, here the three channel monopulse technique appears in a discussion of AUTOMOBILE TAIL LIGHTS for gosh
sakes.

Go figure.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Wes Stewart" <n7ws_@_yahoo.com> wrote in message
news:01vvt05v0eiehvk06urpopk9hra9eoiq48@4ax.com...

<snip>
>
> Actually, no. I have however, worked on monopulse RADAR missile
> seekers where the requirement for three phase and gain matched
> receiver channels (sum, delta elevation, delta azimuth) was reduced to
> two by time-sharing one delta channel. You can call this multiplexing
> if you want (TDMA?), but as an r-f guy, I have a different take. At
> any point in time the only data in the delta channel was *either*
> elevation *or* azimuth, not both elevation *and* azimuth. (* maybe a
> digital system after all? :-)
>

<snip more>

427. Re: Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 03:04:38 UTC
From: Dan Richardson <dwr@mailinator.com>
Message-ID: <bj71u0h334ut1fub3vc5jjv7arogq8i051@4ax.com>
Source record: 84066

On 8 Jan 2005 18:16:02 -0800, stryped@hotmail.com wrote:

>What type of verticle are you talking about, like a ground plane? Would
>a ground plane be a better antenna for 2meters?

A ï¿½-wave groundplane, a ï¿½-wave dipole, a J-Pole or 5/8-wave ground
plane in most typical installations according to NEC analysis will not
vary more than a dB at best.

Remember a receiving station can hardly detect a dB difference.

Danny, K6MHE

428. Re: What's the deal? Lightning

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 03:17:40 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <mn1Ed.17157$yW5.11855@fed1read02>
Source record: 84067

"Jack Painter" <223bthp@cox.net> wrote in message
news:emUDd.11563$B95.6120@lakeread02...
>
> "Ed Price" <edprice@cox.net> wrote

SNIP

>> Regarding the RF excitation, I assumed that a single-point source would
>> be
>> dumb, because the best ionization path would be right back to YOU. But an
>> array of exciters, electronically steered to create a sufficient power
>> density at a focal point, is a lot smarter.
>>
>> Again, I don't know if the technique would work, but an electronically
>> steered (more like focusing) array would be one way to do it.
>>
>> One poster said that the ionized channel might blow away in the wind.
> Maybe
>> a quick system could "paint" an ionization channel fast enough. Maybe a
>> system could detect and take advantage of leaders, to create a shorter
> path.
>>
>> Ed
>> wb6wsn
>
> Hi Ed, using high powered lasers to "paint" a thunderstorm cloud has been
> done, and whether reliably or not, was able to trigger lightning. It
> hasn't
> translated into practical protection schemes yet, but that could simply be
> economics. As a means of triggering lightning to a safe point away from
> vulnerable assets, it still leaves the possibility that some storms are so
> powerful that nothing short of an extensive, multi-point array of lasers
> could ever offer protection at an individual point. It is generally so
> much
> less expensive to employ catenary wires overhead, build faraday-cages
> around, and position air terminals in appropriate areas than the costs of
> such a laser system. There would also be a new class of airspace required
> for operation of such lasers. Something like a "no-fly zone" in fact!
> ;-)
>
> 73,
> Jack Painter
> Virginia Beach, Virginia
>
>

More like a "dead-fly" zone. Yeah, aircraft (and satellite / astronaut) protection are not trivial concerns when you start squirting power into the air.

BTW, I seem to recall the use of small (sounding?) rockets used around the perimeter of the Kennedy launch complex. I don't recall if these rockets trailed a thin wire, or if their exhaust plume was sufficient to trigger a lightning discharge. Anyway, I thought I recall these small expendable rockets being used as a lightning diversion technique to protect the exposed launch vehicle. (Yes, I know they also use catenary wires from the tower to the ground, but the rocket technique was supposedly to condition the area around the vehicle just as launch occurred, and the tower was moved away from the vehicle.)

Ed
wb6wsn

429. Re: Benjamin Franklin, Mason, had LIGHTNING all wrong on purpose ....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 03:24:04 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <nt1Ed.17168$yW5.12224@fed1read02>
Source record: 84068
Cross-posted to: rec.radio.amateur.antenna,sci.astro,sci.military.naval,soc.culture.indonesia,alt.politics.usa

"Barry Horowitz" <barry_horrowitz@yahoo.com> wrote in message
news:1105212161.683683.9740@c13g2000cwb.googlegroups.com...
> DON'T FORGET!!! When the paired mates, ARGON and NEON, are "coupled,"
> they produce
>
> LIGHTNING
>
> aka [BLITZ!!!] ... they both form absolutely NO OXIDES
>
> http://carpathian_bronze.tripod.com/antarii_deck2.html

A good example of sufficiently advanced blather being indistinguishable from
knowledge.

Ed
wb6wsn

430. WTB: latching relay

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 03:27:35 UTC
From: k9sqg@aol.com
Message-ID: <20050108222735.06537.00002664@mb-m15.aol.com>
Source record: 84069

Looking for a new old stock latching relay, DPDT, for RF switching. Would like 1/4 inch contacts, and a well insulated frame.

73s,

Evan

431. Re: The planning permission

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 03:35:20 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <JJ1Ed.17200$yW5.7710@fed1read02>
Source record: 84070

"David G. Nagel" <nagel@core.com> wrote in message
news:10u0htit1l05af9@corp.supernews.com...
> CW wrote:
>> Seems you're making progress (?) over there. Sounds totally American.
>>
>> "Simon Smith" <s.Smith@btinternet.com> wrote in message
>> news:crk4mm$n48$1@titan.btinternet.com...
>>
>>>Well, I today decided to make a start in trying to obtain planning
>>>permission for my new Antenna - even though the "Permitted Development
>>>Rights" have been removed from our small Village in the middle of nowhere

SNIP

>>>my drawings before accepting them for consideration. The first mistake I
>>>made was in using feet and inches. "Sorry - we only take metric" So I now
>>>have to re-do them all again. Next mistake "We Don't take them on graph
>>>paper" Third mistake was
>>>"We need a picture of the "Ariel" Forth mistake was: "We need the
>>
>> drawings
>>
>>>to be to scale"
>>>Did Marconi have all this trouble with the "Council" ?

SNIP

> John;
>
> Remember that they are the government and are only here to help you!!!!
>
> Dave WD9BDZ

We Americans used to chuckle about how, in Germany, everything was
prohibited except that which was specifically allowed. And now, we have
Covenants, planning commissions, the EPA, the FAA, the FCC, OSHA, and
agencies yet unformed, should we try to stick a wire up in the air. We've
learned a lot from Europe, and don't remember Pogo at all.

Ed
wb6wsn

432. Re: Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 03:48:35 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <oQ1Ed.11698$B95.9566@lakeread02>
Source record: 84071

<stryped@hotmail.com> wrote
> Jack Painter wrote:
> > <stryped@hotmail.com> wrote
> > One final note: the J-Pole is no miracle antenna. It's has zero gain
> when
> > compared to any vertical antenna, and its entire attraction is it
> "fairly"
> > easy construction, and very inexpensive construction materials. To
> get as
> > *reliable* a vertical antenna for marine use that I required, might
> have
> > cost well over $100. At or above that level the vertical antennas of
> 5/8
> > wavelength can normally provide gain of 6-10 dbi, and I do not want
> to get
> > into what that is compared to as it has been hashed over a million
> times. I
> > would leave it at "there will be considerable gain possible in
> vertical
> > designs over the J-Pole". You have to be willing to pay for that.
> Most users
> > are happy with J-Pole performance so it's record stands pretty well
> on its
> > own.
> >
> > 73,
> > Jack Painter
> > Virginia Beach, Virginia
>
> What type of verticle are you talking about, like a ground plane? Would
> a ground plane be a better antenna for 2meters?
>

Yes/Yes, and there are a number of verticals with referenced gain far in excess of the more or less unity-gain J-Pole. The specific ones I mentioned are Marine. Like a vertical-dipole the J-Pole is a "complete" antenna and requires no radials, I doubt that it could even benefit from them. And the gain is referring to transmit, not receive, as all verticals are pretty equal in reception (and it's not always pretty ;-)

What is your target for 2 meters? General area coverage or specific directional? Need to null out signals or interference from specific directions? Look at aYagi. J-Poles are not for anything special, just good general coverage at about $10 in parts. At that job they have become very popular antennas!

73,
Jack Painter
Virginia Beach, Virginia

433. Re: What's the deal? Lightning

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 04:00:33 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <C%1Ed.11700$B95.5920@lakeread02>
Source record: 83972

"Ed Price" <edprice@cox.net> wrote

> BTW, I seem to recall the use of small (sounding?) rockets used around the
> perimeter of the Kennedy launch complex. I don't recall if these rockets
> trailed a thin wire, or if their exhaust plume was sufficient to trigger a
> lightning discharge. Anyway, I thought I recall these small expendable
> rockets being used as a lightning diversion technique to protect the
exposed
> launch vehicle. (Yes, I know they also use catenary wires from the tower
to
> the ground, but the rocket technique was supposedly to condition the area
> around the vehicle just as launch occurred, and the tower was moved away
> from the vehicle.)
>
> Ed
> wb6wsn

Yessir Ed. At NASA Wallops Island (Eastern Shore, VA) they regularly launch sounding rockets. We have had one land well off course about 300 yards off the Virginia Beach Oceanfront late one night. I was able to help call off the extensive search involving air, sea and land assets when I convinced District to check with Group Eastern Shore (who I had heard make the Securite' announcement earlier, warning of the rocket launches). Witnesses at the beach had reported a flaming plane crash in the water. When the CG Helo pilot realized that it was probably a rocket, (and there were still more scheduled) he bugged out fast.

As to triggering lightning with rockets, yes they do trail wire, and this method of lightning experimentation provides excellent results. Makes sense they would clear the air first before a launch, but I think they are pretty sure lightning isn't likely before they light one of those candles, huh? The static charges from a rocket alone must be impressive. Maybe it could attract lightning from a lot farther than normally considered in the risk-zone.

Jack
Va Beach

434. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 04:16:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bfb1u01nmageuqg17g5g3afbgh4d80gofo@4ax.com>
Source record: 83778

On Tue, 11 Jan 2005 03:30:07 GMT, ml <m@di.net> wrote:
>what would happen if i build say i'd have to stay physically small , so
>say a 1/4wave verticle on 10m and then made that antenna
>supercondutive?

Hi OM,

As far as performance? Absolutely no difference to it even if it were
elevated 1000ï¿½F above that to compare.

- Well maybe someone with enough sophisticated equipment might notice
a dB difference - then they would whack the side of the gear to clear
that up - nope, no difference....

You need to come to terms with just how imperceptible 1 dB is (zilch,
in technical terms), and how much power it takes (about 12%, just more
$ to burn) to make that imperceptible difference. The dollar has lost
30% of its value in the world market in the last few years - have you
noticed? This may not be one way to appreciate 1dB, but it does
reveal how relative changes go unfelt.

73's
Richard Clark, KB7QHC

435. Re: Tuning a ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 05:06:26 UTC
From: Howard <mensch90249@yahoo.com>
Message-ID: <2he1u09esh388j0c1u73i4fhi6v0q3ou93@4ax.com>
Source record: 83973

On 8 Jan 2005 18:19:19 -0800, stryped@hotmail.com wrote:

>How would you go about tuning a ground plane antenna? Is a ground plane
>a good antenna for 2 meters/440?
>
>On another note, I have read about discone's being very broad banded.
>Are these the best antenna for scanner listening?

A 1/4 wave ground plane is tuned by varying the length of the
radiating element. Calculate the length, add a bit for good measure,
build it then tune it by pruning the length (in small increments).
The tuning can be done using an SWR analyzer or as most of us do, with
a radio and an SWR meter.

Discone's do offer broadband coverage, though I don't have direct
experience to say they actually work well, great or poorly. I do know
that for my scanner I use a 1/4 wave ground plane that was built for
220 MHz and it works fine - for a reference point though I am in an
urban area and most of what I listen to is within a 15 mile radius.
In order to decide what's best you should first establish your
purpose; are you in a fringe area, do you need directional coverage,
do you scan a wide range of frequencies or are your listening
interests all in the same "neck of the RF spectrum"?

436. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 07:09:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jul1u05cki12bbh4n5nnmdaosh59o0efei@4ax.com>
Source record: 83974

On Sat, 8 Jan 2005 20:42:05 -0600, "Crazy George"
<muNnscOh@attSglPobaAl.nMet> wrote:
>Now, here the three channel monopulse technique appears in a discussion of AUTOMOBILE TAIL LIGHTS for gosh sakes.

Hi George,

A sucker post is how we got there.

73's
Richard Clark, KB7QHC

437. Re: coax from cable company

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 07:58:12 UTC
From: Roger <Delete-Invallid.stuff.groups@tm.net>
Message-ID: <8so1u05cqj8fs42f6dd00c56f6lqmcr677@4ax.com>
Source record: 83975

On Sat, 08 Jan 2005 19:30:03 GMT, "Phil" <Phil@letskillspam.be> wrote:

>
>"art" <aunwin@insightbb.com> wrote in message
>news:1105152593.809723.286370@c13g2000cwb.googlegroups.com...
>> I was just given a coil of 7/8 hardline coax that I have not seen
>> before.
>> It has plastic discs inside to separate the core from the outer
>> aluminum tube which I suppose uses air as the dielectric. Anybody got
>> any info on this stuff
>> and any advantages it may have over the normal hardline cable?
>> Regards
>> Art
>>
>
>Look on Google for "fused disc" AND "cable".
>
>Most Cable TV companies stopped using it when they started using frequencies
>above 300 MHz.
>
>This cable acts as a filter around 350 MHz.
>
I used to use a lot of the 3/4 " foam filled CATV line and still have
probably 200 to 300 feet left. At HF it works well and does not
require matching sections unless the operator is a perfectionist.

It's much more rugged than the fused disk stuff and water isn't
normally a problem.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com

438. Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 11:33:44 UTC
From: news <news@care4free.net>
Message-ID: <JUq0fdFoZR4BFwPh@care4free.net>
Source record: 83976
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

I need to improve my ground system, and am thinking of burying some radials under the lawn.

[I realise this is not the most efficient way to do it from an electrical point of view, but the alternative approach of installing the radials above the ground is completely out of the question, for aesthetic reasons].

Some practical questions:

~~~~~~~~~~~~~~~~~~~~~~~~~

1. What is the "best" type of wire (or braid) to use for the radials?

2. How do I bond the radials together? (I guess my 15-watt soldering iron won't be up to the job ...).

3. What kind of solder and flux should I use?

4. What precautions should I take to minimise the effects of corrosion at the joints?

5. How deep should I bury the radials? Two inches, six inches, 12 inches?

6. Is there anything else I should know?

~~~~~~~~~~~~~~~~~~~~~~~~~

We are on heavy clay soil that alternates between being very dry and very wet.

My main interest is in the lower hf bands (40/80/160) and possibly 136kHz.

--
73
Ian, G3NRW
g3nrw@yahoo.co.uk

439. Re: Benjamin Franklin, Mason, had LIGHTNING all wrong on purpose ....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 12:10:22 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10u27pc8sm16kcf@corp.supernews.com>
Source record: 83977

"Ed Price" <edprice@cox.net> wrote in message
news:nt1Ed.17168$yW5.12224@fed1read02...
>
> "Barry Horowitz" <barry_horrowitz@yahoo.com> wrote in message
> news:1105212161.683683.9740@c13g2000cwb.googlegroups.com...
>> DON'T FORGET!!! When the paired mates, ARGON and NEON, are "coupled,"
>> they produce
>>
>> LIGHTNING
>>
>> aka [BLITZ!!!] ... they both form absolutely NO OXIDES
>>
>> http://carpathian_bronze.tripod.com/antarii_deck2.html
>
>
>
> A good example of sufficiently advanced blather being indistinguishable
> from knowledge.
>
> Ed
> wb6wsn
>

Well, Ed,
It is difficult to produce oxides without oxygen, but bullshit is easy to
come up with.
73
H.

440. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 12:24:34 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34cm3tF48i2jeU1@individual.net>
Source record: 83978
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"news" <news@care4free.net> wrote in message
news:JUq0fdFoZR4BFwPh@care4free.net...
> I need to improve my ground system, and am thinking of burying some
> radials under the lawn.
>
> [I realise this is not the most efficient way to do it from an
> electrical point of view, but the alternative approach of installing the
> radials above the ground is completely out of the question, for
> aesthetic reasons].
>
> Some practical questions:
>
> ~~~~~~~~~~~~~~~~~~~~~~~~
> 1. What is the "best" type of wire (or braid) to use for the radials?
>

Whatever you can get cheaply, as you need a lot.

Insulated is fine- the soil (rf) conductivity is poor (or you'd not need radials) so the benefit from have bare wire is minimal. Insulated will stop it corroding.

> 2. How do I bond the radials together? (I guess my 15-watt soldering
> iron won't be up to the job ...).

>
> 3. What kind of solder and flux should I use?

Bring them to a 'star point' which is your earth point and it should have a normal earth stake. Make sure this is bonded to you PME point for safety by 10mm^2 wire.

If you solder, use ordinary multicore solder.

>
> 4. What precautions should I take to minimise the effects of corrosion
> at the joints?

Self amalgamating tape or use conduit boxes and 'pot' with epoxy.

>
> 5. How deep should I bury the radials? Two inches, six inches, 12
> inches?

Depends- this is as much to do with what the land is used for. In the past I've used a spade to make a shallow 'slit', maybe 2" deep, in the lawn and

pushed wires into that.

In a flower bed or vegetable patch that wouldn't be deep enough.

Don't forget patios. Our patios have radials under them. Also, you can run wires around the bottom of fences etc, by paths.

> 6. Is there anything else I should know?

Don't forget that safety bonding!

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

441. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 12:48:50 UTC
From: Gordon Hudson <gordon@usenet2.hostroute.co.uk>
Message-ID: <41e1282f$0$23054$5a6aecb4@news.aaisp.net.uk>
Source record: 83979
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"news" <news@care4free.net> wrote in message
news:JUq0fdFoZR4BFwPh@care4free.net...
>I need to improve my ground system, and am thinking of burying some radials
>under the lawn.
>
> [I realise this is not the most efficient way to do it from an electrical
> point of view, but the alternative approach of installing the radials
> above the ground is completely out of the question, for aesthetic
> reasons].
>
> Some practical questions:
>
> ~~~~~~~~~~~~~~~~~~~~~~~~
> 1. What is the "best" type of wire (or braid) to use for the radials?
>
> 2. How do I bond the radials together? (I guess my 15-watt soldering iron
> won't be up to the job ...).

I would use a blowtorch (But I am used to using one).
The secret is not to overheat things.
Its a kind of dabbing technique to get up to temperature.

442. Re: HF antenna and Power line ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 12:49:14 UTC
From: Thierry <->
Message-ID: <41e12850$1@news.vo.lu>
Source record: 83980

"Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message
news:41e06c7a_4@news1.prserv.net...
>
>
> "Thierry" <-> wrote in message news:41debd79$1@news.vo.lu...
> > Hi,
> >
> > Well, I receive some answers, found others on the Internet, all is now
> > written in my 3 pages (see ref below).
> >
> > The big picture:
> > There is surely no influence of HV power lines at 300m away. And
probably no
> > QRM on HF bands at that distance either.
> <snip>
>
> Thierry:
>
> Our rule is that any power line which is line-of-sight from the antenna is
capable of causing interference on HF. See:
>
> http://www.arrl.org/tis/info/HTML/power_line_handbook/

Many thanks George
I was just visiting ARRL's TIS but I did't find this link.
Some readings for my evenings ;-)

Thierry
>
> for more information.
>
> --
> Crazy George
> Remove N O and S P A M imbedded in return address
>
>
>

443. Re: coax from cable company

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 13:06:23 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <01b2u0h3l7lefhdmmk3ju45m1jjtj3pv8b@4ax.com>
Source record: 83981

On Sat, 08 Jan 2005 19:30:03 GMT, "Phil" <Phil@letskillspam.be> wrote:

|
|"art" <aunwin@insightbb.com> wrote in message
|news:1105152593.809723.286370@c13g2000cwb.googlegroups.com...
|> I was just given a coil of 7/8 hardline coax that I have not seen
|> before.
|> It has plastic discs inside to separate the core from the outer
|> aluminum tube which I suppose uses air as the dielectric. Anybody got
|> any info on this stuff
|> and any advantages it may have over the normal hardline cable?
|> Regards
|> Art
|>
|
|Look on Google for "fused disc" AND "cable".
|
|Most Cable TV companies stopped using it when they started using frequencies
|above 300 MHz.
|
|This cable acts as a filter around 350 MHz.

How so?

444. radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 13:28:08 UTC
From: Thierry <->
Message-ID: <41e1316f@news.vo.lu>
Source record: 83982

Hi,

We know that during the emission of a radiotelescope (rare, for tests or to send SETI msg, Hi!), the radiation can sterilize people working in the dish. Has someone some idea of the power require to produce such a effect or any generic graph (from IEEE standards ?) showing the risk vs frequency or emitting power ? I have one, http://www.astrosurf.com/lombry/Radio/table-power-field.gif but I would like to get a better idea of the power require (in W, Jy, etc).
If I had an idea of the require dBi and W , I could compute the EIRP and all concerned values.

Thanks in advance

Thierry, ON4SKY
http://www.astrosurf.com/lombry

445. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 14:01:51 UTC
From: Jacques <lesgranddish@yahoo.fr>
Message-ID: <1105279311.284013.93120@c13g2000cwb.googlegroups.com>
Source record: 83983

Thierry wrote:
> We know...

Do we ?

> ...that during the emission of a
> radiotelescope (rare, for tests or to
> send SETI msg, Hi!), the radiation can
> sterilize people working in the dish.

<rolls eyes>

Try tin foil pants to match the tin foil hat.

> Has someone some idea of the power require
> to produce such a effect or any generic
> graph (from IEEE standards ?) showing the
> risk vs frequency or emitting power ?

Health Canada's Safety Code 6.

Hint - it's not a dish issue with huge dishes. It might be a feed issue in the worst case. The bigger the dish, the less the issue (the feed being further away).

Likely, the 600mW cell phone is worse. And the 5w hand held W/T is even worse than that.

If you own a strong magnet and an electric stove, hold the magnet in your hand and turn on one stove top electric burner element to max. Bring the magnet close to the element and feel the very strong vibrations. (Don't burn your hand.)

446. Re: Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 14:13:28 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41e13b1e.2095373234@news.galilei.com>
Source record: 83984

stryped@hotmail.com verbositized:

>
>What type of verticle are you talking about, like a ground plane? Would
>a ground plane be a better antenna for 2meters?

Check out my Stacked-J for 2 meters. It is a J-Pole on top of a
J-Pole.
I don't know the difference in gain, but in comparison to a regular
J-Pole on the same mast, the Stacked-J outperformed it hands down.

From St. Louis County, MO I could reach both UMR (Rolla) and UofC
(Columbia) repeaters on the Stacked-J at 30 watts, a little noisy on
their end, but I was clear. On a single J-Pole I could not bring up
their repeaters even at 50 watts.

The Stacked-J can be found at http://archimedes.galilei.com/raiar
It's under Antenna's.

TTUL
Gary

447. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 14:30:09 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41e13d10.2095872000@news.galilei.com>
Source record: 83985
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Hi Ian

I had over 3,500 feet of radials under my HF9VX/w160.

They were buried only about 1 inch deep overall.
I used a meat cleaver and rubber mallet, placing an open eyehook through the hanging hole on the meat cleaver.
I stretched the wire out first, then let it pass through the eyehook.
As I cut along the edge of the wire to make the hole in the ground, the eyehook would pull it down below the surface.
The job went fairly quickly!

I used some 12 and some 14 guage insulated solid copper wire, whatever was on sale the cheapest, hi hi.....

At the antenna base, I drove an 8 foot ground rod, allowing it to stay above ground about 4 inches.
Each radial came up to this ground rod and made a 90 degree turn upwards.
I used a cheap pencil flame propane blowtorch and Copper Phosphorus Bronze brazing rods (low melting point, good adhesion to copper), affixing each wire to the ground rod.
I then welded an insulated braided 8 guage wire to this for later connection to the antenna.
After all the radials were in place and welded to the rod, I slipped a 3/4 inch copper pipe over the ground rod and down to the radials and filled it with silicone caulk.
Then, using a hose I washed out the dirt under the radials around the ground rod so that I could (after it was dry) get about a 1 inch deep layer of silicone around the ground rod and ends of all the radials so that the insulation was covered back about 1 inch and about 1/2 inch above the copper pipe.

Because the HF9VX has a COIL near ground level, I cut the bottom out of a vinyl Cylindrical flower pot and slipped this over the antenna mount and ground rod. It was stuck into the ground about an inch or two, down to the tops of the radials. To keep grass/weeds from growing, I also dumped a 4lb box of rock salt into the container.
I used a PVC sleeve over the antenna mount, so the salt would not get to the aluminum.

TTUL
Gary

448. park ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 14:39:12 UTC
From: ml <m@di.net>
Message-ID: <m-66E7CB.09391409012005@news.verizon.net>
Source record: 83986

Hi

I'll be going into a park, operating from a park bench via battery
ft897d and a nice dipole strung up in the trees

wondering should i have some sort of ground to my rig or what ever while
sitting on this bench?

how would i achiee that take a copper spike and wack it into the ground
connect to rig?

thanks

449. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 14:51:44 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <34cutvF45ai44U2@individual.net>
Source record: 83987
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Another way is to go to your local electrical wholesaler
(assuming he will deal with you now we're past Jan 1st/Part P)
and buy one of those chocolate-box-like strips for commoning
up 6mm green-and-yellow to clamp all the wires together.

"Gary V. Deutschmann, Sr." <raiar@bbs.galilei.com.nospam> wrote in message
news:41e13d10.2095872000@news.galilei.com...
> I used a cheap pencil flame propane blowtorch and Copper Phosphorus
> Bronze brazing rods (low melting point, good adhesion to copper),
> affixing each wire to the ground rod.

450. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 15:00:03 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <s2h2u09s02ll60elhpm090cqbbri62qao9@4ax.com>
Source record: 83988
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Sun, 09 Jan 2005 11:33:44 GMT, news <news@care4free.net> wrote:

>I need to improve my ground system, and am thinking of burying some
>radials under the lawn.
>
>[I realise this is not the most efficient way to do it from an
>electrical point of view, but the alternative approach of installing the
>radials above the ground is completely out of the question, for
>aesthetic reasons].
>
>Some practical questions:
>
>~~~~~~~~~~~~~~~~~~~~~~~~
>1. What is the "best" type of wire (or braid) to use for the radials?

Some of my literature recommends against braided or woven conductors
as having too high a surface resistance to lightning and RF,
especially if they get corroded. Wide smooth surfaces are better.

You might try Lowe's Home Improvement or Home Depot -- they both sell
500-ft. rolls of #12 copper wire for about $20. That'd save you going
to the poorhouse, on this :-)
>
>2. How do I bond the radials together? (I guess my 15-watt soldering
>iron won't be up to the job ...).

A Weller SP-120 (120 watts, 1/2" tip) or SP-170 (170 watts, 5/8" tip)
would do the job. Either of these is also great for soldering coax
plugs (I have the SP-170 & it's a barnburner). If you can't find the
irons locally at a hardware or hobby shop, a Google search brings them
up, online.

Bob
k5qwg

>
>3. What kind of solder and flux should I use?
>
>4. What precautions should I take to minimise the effects of corrosion
>at the joints?
>
>5. How deep should I bury the radials? Two inches, six inches, 12
>inches?
>
>6. Is there anything else I should know?

>
>~~~~~~~~~~~~~~~~~~~~~~~~~
>
>We are on heavy clay soil that alternates between being very dry and
>very wet.
>
>My main interest is in the lower hf bands (40/80/160) and possibly
>136kHz.

451. Re: Why the 4:1 or 9:1 baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 15:06:59 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <pYQv2OFTiU4BFw6y@g3ohx.demon.co.uk>
Source record: 83989

In message <41e03151$1_3@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
writes
>Ian Jackson wrote:
>> People keep saying that they use 4:1 or 9:1 baluns.
>> Often I can see no reason for this (such as when simply feeding a
>>dipole with coax, or on the output of an ATU).
>> I'm obviously missing the point. Why the impedance transformation?
>> Ian.
>
>The feedpoint impedance of a dipole varies with frequency from a
>low value of about 50 ohms to a high value of about 8000 ohms.
>In between, it can look like 1000(+/-)j1000 ohms.
>Baluns with a high transforming ratio try to take the impedance
>lower so, for instance, with a 4:1 balun, the above values would
>ideally go from 50 ohms to 12.5 ohms, 8000 ohms to 2000 ohms,
>and from 1000+j1000 ohms to 250+j250 ohms. You can see that the
>second set of values have a smaller absolute range than the first
>set, thus making them an easier match for the tuner.
>
>That's the simplified version. There are disadvantages to using
>baluns with a high transforming ratio.

But how good is the efficiency when the balun/transformer is working
between completely the wrong impedances (which will be most of the
time)? My understanding (and limited experience) is that most of your
power simply heats up the ferrite.
Ian.
--

452. Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 15:19:28 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <34d0hjF489tamU1@individual.net>
Source record: 83990
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

Some of us have encountered the wrath of our local planning committees when erecting antennae that seemed reasonable to us, but perhaps unreasonable to SFB neighbours.

Could we conceive of an antenna, even possible an HF beam, that folds away into a single rod-like structure when not in use?

I have in mind the way in which quite elaborate antennae and solar cells unfold from a satellite once it reaches orbit.

Such an antenna, if it were to be deployed only during the hours of darkness, might also serve the needs of those who are obliged to use stealth antennae due to restrictive covenants on the buildings used as their shacks!

453. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 15:23:18 UTC
From: Alf <genius@work.in.wales>
Message-ID: <crrinq$8r2$1@news7.svr.pol.co.uk>
Source record: 83992
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"news" wrote:
> I need to improve my ground system, and am thinking of burying some
> radials under the lawn.

Good idea. Bury anything that will conduct, eg biscuit tins! I spent ages unwinding and burying the coils from old TV CRTs. 40 years ago (I was a 160m nut) I bought a very large reel of bare 18 swg "garden wire" from local hardware store. It looked like copper but too light and seemed to be an ali alloy. It was buried in around 2"-4" slits in 100 - 150' lengths in clay-ish non-acid soil. Still looks in good shape. I used choc block connectors to join the wires in pairs or triplets, soldered the group and left a tail to make the next larger group. Used heavy auto earthing braid for final lead into ground floor shack.

Was it worth the trouble? Yes. With a ~200' inverted L (3/8th wave on topband), no problem working Ws on a 500mW transistor (germanium!) box. Dead band with earth disconnected.

Alf GW3SRG

454. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 15:26:23 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <mbi2u0dp82jucm55em2u5b73q2gck8gjkj@4ax.com>
Source record: 83991
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Sun, 09 Jan 2005 11:33:44 GMT, news <news@care4free.net> wrote:

>I need to improve my ground system, and am thinking of burying some
>radials under the lawn.
>
>[I realise this is not the most efficient way to do it from an
>electrical point of view,

Why not?

>Some practical questions:
>
>~~~~~~~~~~~~~~~~~~~~~~~~
>1. What is the "best" type of wire (or braid) to use for the radials?

Something that is cheap (so you can have lots of it) and non-corroding
(so you don't have to re-lay it every year).

>2. How do I bond the radials together? (I guess my 15-watt soldering
>iron won't be up to the job ...).

Use a car battery clamp and plenty of grease.

>3. What kind of solder and flux should I use?

None at all. See above.

>4. What precautions should I take to minimise the effects of corrosion
>at the joints?

See above.

>5. How deep should I bury the radials? Two inches, six inches, 12
>inches?

Whatever you find most convenient.

>6. Is there anything else I should know?

You will never lay enough radials to turn your garden into a
highly-conductive metallic mirror, the next best thing you can do is
to provide the lowest ohmic contact for your vertical. If your
vertical has a radiation resistance of R ohms and the ohmic contact
with the ground is Z ohms, the efficiency of your system is given by
R/(R+Z). Consider a short vertical with a ground rod might have R = 10
and Z = 150, you can see the efficiency is pretty low at ~6 percent.
So 94 percent of your RF is heating up the earthworms &c.

>We are on heavy clay soil that alternates between being very dry and
>very wet.

I suggest you start with a couple of tons of well-rotted farmyard
manure. You need to work on that clay and turn it into something
better both horticulturally and electrically.

>My main interest is in the lower hf bands (40/80/160) and possibly
>136kHz.

In that case at 136 kHz R above might be .0001 ohms or worse, and your
efficiency will be very low. Get as much metal in the ground as
possible. Avoid loops.

--
from
Aero Spike

455. Re: park ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 15:41:37 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <RgcEd.12739$_X7.9609@newssvr33.news.prodigy.com>
Source record: 83993

I don't think I'd worry about it. If it makes you
feel better to have a 'ground', then use a counterpose
for the band(s) of use. Or, make your self a nice spike.
'Doc

456. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 15:42:30 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <hBaWJPXmDV4BFA6f@ifwtech.co.uk>
Source record: 84000
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Ian J wrote:
>I need to improve my ground system, and am thinking of burying some
>radials under the lawn.
>
>[I realise this is not the most efficient way to do it from an
>electrical point of view, but the alternative approach of installing
>the radials above the ground is completely out of the question, for
>aesthetic reasons].
>
>Some practical questions:
>
>~~~~~~~~~~~~~~~~~~~~~~~~
>1. What is the "best" type of wire (or braid) to use for the radials?
>
Whatever you can get a lot of at a cheap price, and isn't going to
corrode immediately it's buried. That means NOT braid or bare stranded
either.

Bare or insulated solid wire is fine, and likewise insulated stranded
wire.

>2. How do I bond the radials together? (I guess my 15-watt soldering
>iron won't be up to the job ...).
>
I used a horizontal busbar of copper tube, supported by a token ground
rod. Each radial was looped round the busbar and secured with a twist,
and finally the whole lot was soldered with a blowtorch (used at a
careful distance).

>3. What kind of solder and flux should I use?
>
Ordinary tin/lead. I used Fluxite paste and rinsed it off afterwards.

>4. What precautions should I take to minimise the effects of corrosion
>at the joints?
>
Clear polyurethane spray has worked perfectly for several years. I chose
clear so I'd be able to check for corrosion underneath, but there hasn't
been any.

>5. How deep should I bury the radials? Two inches, six inches, 12
>inches?
>
Zero inches, if you can. Cut the grass very short in a few weeks' time,
and staple the radials down. This part of the question was discussed

here, only a week ago.

>6. Is there anything else I should know?
>
You're going to have backache.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

457. Re: Tuning a ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 15:44:46 UTC
From: stryped@hotmail.com
Message-ID: <1105285486.137924.112970@c13g2000cwb.googlegroups.com>
Source record: 83994

Howard wrote:
> On 8 Jan 2005 18:19:19 -0800, stryped@hotmail.com wrote:
>
> >How would you go about tuning a ground plane antenna? Is a ground
plane
> >a good antenna for 2 meters/440?
> >
> >On another note, I have read about discone's being very broad
banded.
> >Are these the best antenna for scanner listening?
>
>
> A 1/4 wave ground plane is tuned by varying the length of the
> radiating element. Calculate the length, add a bit for good measure,
> build it then tune it by pruning the length (in small increments).
> The tuning can be done using an SWR analyzer or as most of us do,
with
> a radio and an SWR meter.
>
> Discone's do offer broadband coverage, though I don't have direct
> experience to say they actually work well, great or poorly. I do
know
> that for my scanner I use a 1/4 wave ground plane that was built for
> 220 MHz and it works fine - for a reference point though I am in an
> urban area and most of what I listen to is within a 15 mile radius.
> In order to decide what's best you should first establish your
> purpose; are you in a fringe area, do you need directional coverage,
> do you scan a wide range of frequencies or are your listening
> interests all in the same "neck of the RF spectrum"?

Do 1/4 wave ground planes work well for 2 meters? (Send and receive).
Would they work as well as a j pole? What if you use different size
elements?

I just did not know what a discone would do for 2 meter send and
recieve compared to a ground plane.

On the scanner, I live in a fringe area for police but can pick up the
police on a homemade wire 1/4 wave for 450 mhz about 20 miles away.

What eventually I would like to do is pick up air traffic. And also
pick up various other frequencies like ambulance, state police, etc.
or your scanner do you use one antenna or several?

458. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 15:45:19 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <pRQUt5XPGV4BFAas@ifwtech.co.uk>
Source record: 83998

Thierry wrote:
>We know that during the emission of a radiotelescope (rare, for tests
>or to send SETI msg, Hi!), the radiation can sterilize people working
>in the dish.

Nonsense - we know nothing of the sort.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

459. Re: Tuning a ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 15:48:54 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <GncEd.47850$8e5.26157@fed1read07>
Source record: 83995

Please buy and READ some antenna books or search the web

It would take pages here to explain antennas to you.

--
Caveat Lector

<stryped@hotmail.com> wrote in message
news:1105285486.137924.112970@c13g2000cwb.googlegroups.com...
>
> Howard wrote:
>> On 8 Jan 2005 18:19:19 -0800, stryped@hotmail.com wrote:
>>
>> >How would you go about tuning a ground plane antenna? Is a ground
> plane
>> >a good antenna for 2 meters/440?
>> >
>> >On another note, I have read about discone's being very broad
> banded.
>> >Are these the best antenna for scanner listening?
>>
>>
>> A 1/4 wave ground plane is tuned by varying the length of the
>> radiating element. Calculate the length, add a bit for good measure,
>> build it then tune it by pruning the length (in small increments).
>> The tuning can be done using an SWR analyzer or as most of us do,
> with
>> a radio and an SWR meter.
>>
>> Discone's do offer broadband coverage, though I don't have direct
>> experience to say they actually work well, great or poorly. I do
> know
>> that for my scanner I use a 1/4 wave ground plane that was built for
>> 220 MHz and it works fine - for a reference point though I am in an
>> urban area and most of what I listen to is within a 15 mile radius.
>> In order to decide what's best you should first establish your
>> purpose; are you in a fringe area, do you need directional coverage,
>> do you scan a wide range of frequencies or are your listening
>> interests all in the same "neck of the RF spectrum"?
>
> Do 1/4 wave ground planes work well for 2 meters? (Send and receive).
> Would they work as well as a j pole? What if you use different size
> elements?
>
> I just did not know what a discone would do for 2 meter send and

> recieve compared to a ground plane.
>
> On the scanner, I live in a fringe area for police but can pick up the
> police on a homemade wire 1/4 wave for 450 mhz about 20 miles away.
>
> What eventually I would like to do is pick up air traffic. And also
> pick up various other frequencies like ambulance, state police, etc.
> or your scanner do you use one antenna or several?
>

460. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 15:51:13 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <RpcEd.12757$_X7.7945@newssvr33.news.prodigy.com>
Source record: 83996
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

As suggested, lots of wire. Doesn't matter to the RF if it's insulated or not (it will matter as far as corrosion is concerned). No soldering, use heavy clamps instead. Coat with some kind of noncorrosive 'goop'. Bury it deep enough so the lawn mower doesn't get into it. when you think you have enough metal in the ground, add another mile...
'Doc

PS - If you're going to use 136 Khz, make that 10 miles.

461. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 15:52:09 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <34d2esF49ea6kU1@individual.net>
Source record: 83999
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

I make the wavelength to be 2204 metres.

"'Doc" <w5lz@cwis.net> wrote in message
news:RpcEd.12757$_X7.7945@newssvr33.news.prodigy.com...

> PS - If you're going to use 136 Khz, make that 10 miles.

462. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 15:52:22 UTC
From: David Edmonds <dedmonds73@yahoo.co.uk>
Message-ID: <WqcEd.372$jX.337@newsfe5-win.ntli.net>
Source record: 83997
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Airy R. Bean wrote:

> Another way is to go to your local electrical wholesaler
> (assuming he will deal with you now we're past Jan 1st/Part P)
> and buy one of those chocolate-box-like strips for commoning
> up 6mm green-and-yellow to clamp all the wires together.

Also available from some branches of Wickes and B&Q Warehouses.

Not had any problems purchasing from electrical wholesalers as I fitted a shower for one of the daughters over Xmas and decided to put in one of the pull cord switches for her to isolate the shower - purchased this week (post 1/1/2005) from one of the larger suppliers with no questions asked.

Maybe it's the installation and not supplying that is under question - though typically our government bring in a silly law such as this - while they know that there is no right of entry to inspect.

David.

463. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 15:53:55 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <34d2j6F456kijU1@individual.net>
Source record: 84002
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Staples? Presumably fashion from short lengths of
fencing wire, or similar?

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:hBaWJPXmDV4BFA6f@ifwtech.co.uk...
> Zero inches, if you can. Cut the grass very short in a few weeks' time,
> and staple the radials down. This part of the question was discussed
> here, only a week ago.

464. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 15:57:42 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <v0l2u09gflm23fucgl7ooerv4vckf4g1it@4ax.com>
Source record: 84001
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Sun, 09 Jan 2005 15:52:22 GMT, David Edmonds
<dedmonds73@yahoo.co.uk> wrote:

>Maybe it's the installation and not supplying that is under question -
>though typically our government bring in a silly law such as this -
>while they know that there is no right of entry to inspect.

The problem arises when you try to sell your house. A prospective
purchaser's solicitor will ask for the certificates for any work you
admit to having been done post Jan 1.
--
from
Aero Spike

465. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 15:57:57 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <9wcEd.12766$_X7.222@newssvr33.news.prodigy.com>
Source record: 84003

Michael,
The TV antenna will probably help your reception. Try
the center conductor on the radio's terminal, or short
both inner/outer conductors and try that. Use whichever
works best. Inside/outside the house won't make as much
difference in what you hear as how high the antenna is.
'Doc

PS - Alternate method. Tie rock on end of a long piece of
wire. Throw rock over roof. Watch out for windows.

466. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 15:58:04 UTC
From: David Edmonds <dedmonds73@yahoo.co.uk>
Message-ID: <gwcEd.394$jX.124@newsfe5-win.ntli.net>
Source record: 84004
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

Airy R. Bean wrote:

> Some of us have encountered the wrath of our local planning
> committees when erecting antennae that seemed reasonable to us,
> but perhaps unreasonable to SFB neighbours.
>
> Could we conceive of an antenna, even possible an HF beam, that
> folds away into a single rod-like structure when not in use?

Have you never seen a _wind-up_ mast with a beam on top?

You really need to get out more!

David.

467. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 15:59:55 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <j6l2u0t33h69r3tbspket6gjeh462ilsht@4ax.com>
Source record: 84005
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Sun, 9 Jan 2005 15:52:09 -0000, "Airy R. Bean" <me@privacy.net>
wrote:

>
>"'Doc" <w5lz@cwis.net> wrote in message
>news:RpcEd.12757$_X7.7945@newssvr33.news.prodigy.com...
>
>> PS - If you're going to use 136 Khz, make that 10 miles.
>
>I make the wavelength to be 2204 metres.

Your point being what, exactly?
--
from
Aero Spike

468. Re: coax from cable company

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 16:00:53 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <VycEd.12771$_X7.6901@newssvr33.news.prodigy.com>
Source record: 84006

Ahh! But amplification is used for very long spans
of cable TV.
'Doc

469. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 16:02:51 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34d2t8F476le8U1@individual.net>
Source record: 84007
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"David Edmonds" <dedmonds73@yahoo.co.uk> wrote in message
news:WqcEd.372$jX.337@newsfe5-win.ntli.net...
> Airy R. Bean wrote:
>
> > Another way is to go to your local electrical wholesaler
> > (assuming he will deal with you now we're past Jan 1st/Part P)
> > and buy one of those chocolate-box-like strips for commoning
> > up 6mm green-and-yellow to clamp all the wires together.
>
> Also available from some branches of Wickes and B&Q Warehouses.
>
> Not had any problems purchasing from electrical wholesalers as I fitted
> a shower for one of the daughters over Xmas and decided to put in one of
> the pull cord switches for her to isolate the shower - purchased this
> week (post 1/1/2005) from one of the larger suppliers with no questions
> asked.
>
> Maybe it's the installation and not supplying that is under question -
> though typically our government bring in a silly law such as this -
> while they know that there is no right of entry to inspect.

"Part P" doesn't stop DIY electrical work but such work MAY need to be
inspected. In fact, some level of inspection has always been imposed- the
electricity supply company does a check before connecting the "meter tails".

I admit to mix views on Part P, unnecessary red tape for those of us who
either know the correct way to do things, or are prepared to learn them, but
it is protection from those who believe in polarised resistors ;-)

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

470. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 16:09:38 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <34d3fkF48o843U1@individual.net>
Source record: 84008
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

ISTR that the person who introduced the concept of
polarised resistors was you.

Yet again you make the Freudian Slip of uttering a rather
silly sneer that actually applies to yourself.

SFB, or what?!

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34d2t8F476le8U1@individual.net...
> I admit to mix views on Part P, unnecessary red tape for those of us who
> either know the correct way to do things, or are prepared to learn them,
but
> it is protection from those who believe in polarised resistors ;-)

471. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 16:13:05 UTC
From: David Edmonds <dedmonds73@yahoo.co.uk>
Message-ID: <lKcEd.2405$Rg1.2068@newsfe4-gui.ntli.net>
Source record: 84009
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Brian Reay wrote:

> I admit to mix views on Part P, unnecessary red tape for those of us who
> either know the correct way to do things, or are prepared to learn them,

I admit I would like to learn but prefer to spend my time doing other things - and admit that the house here is quite safe as we've had few electrical additions done apart from outside lighting. Everything else 'plugs in' so is not covered by the new regs.

> but
> it is protection from those who believe in polarised resistors ;-)

That was a low punch Brian - especially on a day when the design for the latest ground-breaking reinvention of the wheel in radio form is being proposed and discussed.

Sadly - like a plane with no engine - it won't ever get off the ground.

David.

472. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 16:23:56 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34d44qF49m6rpU1@individual.net>
Source record: 84010
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"David Edmonds" <dedmonds73@yahoo.co.uk> wrote in message
news:lKcEd.2405$Rg1.2068@newsfe4-gui.ntli.net...
> Brian Reay wrote:
>
> > I admit to mix views on Part P, unnecessary red tape for those of us who
> > either know the correct way to do things, or are prepared to learn them,
>
> I admit I would like to learn but prefer to spend my time doing other
> things - and admit that the house here is quite safe as we've had few
> electrical additions done apart from outside lighting. Everything else
> 'plugs in' so is not covered by the new regs.
>
> > but
> > it is protection from those who believe in polarised resistors ;-)
>
> That was a low punch Brian - especially on a day when the design for the
> latest ground-breaking reinvention of the wheel in radio form is being
> proposed and discussed.

Sorry but nobody is perfect.

Seriously, I still quote the (in)famous line about knowing one end of a
resistor from another in training courses. Always gets a laugh and, as you
probably know, a little humour in a lesson works wonders.

>Sadly - like a plane with no engine - it won't ever get off the ground.

In this case I think train not leaving the station as the signals don't work
is more appropriate.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

473. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 16:25:42 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <34d4dpF48r85vU1@individual.net>
Source record: 84012
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Then more fool you, if you don't understand the
necessity of reading the colour code from the
correct end.

(I wonder if you hold, or have ever held, a licence
issued under the gangrenous degeneration that is
the M3/CB Fools' Licence scheme? You certainly
make yourself out as stupid and as ignorant enough.)

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34d44qF49m6rpU1@individual.net...
> Seriously, I still quote the (in)famous line about knowing one end of a
> resistor from another in training courses.

474. Re: park ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 16:27:11 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <crrm0v$i11$1@sparta.btinternet.com>
Source record: 84011

> I'll be going into a park, operating from a park bench via battery
> ft897d and a nice dipole strung up in the trees
>
> wondering should i have some sort of ground to my rig or what ever while
> sitting on this bench?
>
> how would i achiee that take a copper spike and wack it into the ground

==========

A ground connection is unnecessary with a dipole, whether the feedline is coaxial or twin wire. You are not mains operated or running a kilowatt..

A single earth spike is useles for a ground connection whatever the circumstances.

If it makes you feel safer, while sitting on your parkbench, you could connect the ground terminal on your transmitter to a 2-feet long earth spike via a 3-feet length of 18-gauge, flexible, multi-strand, plastic insulated wire.

Don't forget to take an umbrella with you!

Reg.

475. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 16:33:06 UTC
From: Steve H <g0lmv@yahoo.co.uk>
Message-ID: <41e15cd5_2@mk-nntp-1.news.uk.worldonline.com>
Source record: 84013
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Airy R. Bean" <me@privacy.net> wrote in message
news:34d0hjF489tamU1@individual.net...
> Some of us have encountered the wrath of our local planning
> committees when erecting antennae that seemed reasonable to us,
> but perhaps unreasonable to SFB neighbours.
> Could we conceive of an antenna, even possible an HF beam, that
> folds away into a single rod-like structure when not in use?
> I have in mind the way in which quite elaborate antennae and solar
> cells unfold from a satellite once it reaches orbit.
> Such an antenna, if it were to be deployed only during the hours
> of darkness, might also serve the needs of those who are obliged
> to use stealth antennae due to restrictive covenants on the buildings
> used as their shacks!
>
>
Simple Gareth, buy a scam mast, less than 12 foot tall so no planning
problems. even Liz might approve...
Or you could try an underground dipole, perfect for inter G on the lower
bands, No RFI and a nice quiet receive. Even in your 70 foot garden you
should be able to fit an 80M dipole in a straight line.

Steve H

476. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 16:41:12 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34d556F47uo9qU1@individual.net>
Source record: 84014
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

```
--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

"Steve H" <g0lmv@yahoo.co.uk> wrote in message
news:41e15cd5_2@mk-nntp-1.news.uk.worldonline.com...
> "Airy R. Bean" <me@privacy.net> wrote in message
> news:34d0hjF489tamU1@individual.net...
> > Some of us have encountered the wrath of our local planning
> > committees when erecting antennae that seemed reasonable to us,
> > but perhaps unreasonable to SFB neighbours.
> > Could we conceive of an antenna, even possible an HF beam, that
> > folds away into a single rod-like structure when not in use?
> > I have in mind the way in which quite elaborate antennae and solar
> > cells unfold from a satellite once it reaches orbit.
> > Such an antenna, if it were to be deployed only during the hours
> > of darkness, might also serve the needs of those who are obliged
> > to use stealth antennae due to restrictive covenants on the buildings
> > used as their shacks!
> >
> >
> Simple Gareth, buy a scam mast, less than 12 foot tall so no planning
> problems. even Liz might approve...
> Or you could try an underground dipole, perfect for inter G on the lower
> bands, No RFI and a nice quiet receive. Even in your 70 foot garden you
> should be able to fit an 80M dipole in a straight line.
>

There is also a commercial 'roll out' antenna about. I'm sure someone
competent with a model engineering workshop could emulate it.

I've used the flat metal tape from a retractable tape measure in the past
for antenna elements- this could be the basis of a 'roll out' design.
--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898
```

477. WTB: DPDT latching relay

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 16:52:47 UTC
From: k9sqg@aol.com
Message-ID: <20050109115247.28921.00000002@mb-m27.aol.com>
Source record: 84015

Need that relay for antenna work. Forgot to mention that coil voltage isn't important, but prefer NOS relay.

73s,

Evan

478. Re: coax from cable company

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 16:59:10 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <bJzzCiIeLW4BFw8B@g3ohx.demon.co.uk>
Source record: 84016

In message <01b2u0h3l7lefhdmmk3ju45m1jjtj3pv8b@4ax.com>, Wes Stewart
<n7ws_@_yahoo.com> writes
>On Sat, 08 Jan 2005 19:30:03 GMT, "Phil" <Phil@letskillspam.be> wrote:
>
>|
>|"art" <aunwin@insightbb.com> wrote in message
>|news:1105152593.809723.286370@c13g2000cwb.googlegroups.com...
>|> I was just given a coil of 7/8 hardline coax that I have not seen
>|> before.
>|> It has plastic discs inside to separate the core from the outer
>|> aluminum tube which I suppose uses air as the dielectric. Anybody got
>|> any info on this stuff
>|> and any advantages it may have over the normal hardline cable?
>|> Regards
>|> Art
>|>
>|
>|Look on Google for "fused disc" AND "cable".
>|
>|Most Cable TV companies stopped using it when they started using frequencies
>|above 300 MHz.
>|
>|This cable acts as a filter around 350 MHz.
>
>How so?
>

The discs have a higher dielectric constant than the air. There is
therefore an increase of capacitance where there are (so the Zo dips
slightly).

As the discs are located at regular interval, where this spacing is one
wavelength, the repetitive higher capacitance adds up in parallel
(although buffered somewhat by the losses loss of the cable). The effect
is to produce a sharp suckout at the frequency of that wavelength (and
at multiples thereof). This effect is also referred to as 'Structural
Return Loss' (well, it's one of the causes). It sets the maximum
frequency at which the coax can be used.

The closer the spacing of the discs, the higher will be the suckout. If
the spacing is zero, the frequency will be infinite. However, you will
have just invented solid dielectric coax!

Ian.
--

479. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 17:07:58 UTC
From: "M5WJF@GB7MAX.#28.GBR.EU" <M5WJF@GB7MAX.#28.GBR.EU>
Message-ID: <b926e$41e164e9$5397d286$31631@nf4.news-service.com>
Source record: 84017
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

Steve H wrote:

>
> Simple Gareth, buy a scam mast, less than 12 foot tall so no planning
> problems. even Liz might approve...

Not so, GPDO 1995 states that structures (masts and antennas) under 3m (~9'9") do not require planning permission, if sited at least 2m (~6'6") from any boundary, and at least 5m (~16'3") from a neighbours building. This is modified to the height of your ridge line (not chimney) visible by an average sized adult standing on the pavement at the front of your dwelling, if you have the structure attached to one of the existing walls of your property (not the front wall visible from the pavement). Exclusions are made for non-commercial antennas that are similar in size to a Broadcast TV Antenna & Mast, which may be erected on the chimney (I've had a 2 ele 6m beam on a rotator excluded under this provision).

At my last QTH, I had no planning permission for a ground mounted Butternut HF9V, the Planning Enforcement Officer that made a visit, said that an application was not required as it was under 4m tall (~13'0")?!?

I'm still within the area managed by the same Planning Authority, ;-)

M5WJF

480. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 17:18:37 UTC
From: Steve H <g0lmv@yahoo.co.uk>
Message-ID: <41e16787$1_3@mk-nntp-1.news.uk.worldonline.com>
Source record: 84018
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34d556F47uo9qU1@individual.net...
>
>
> --
> Brian Reay
> www.g8osn.org.uk
> www.amateurradiotraining.org.uk
> FP#898
>
> "Steve H" <g0lmv@yahoo.co.uk> wrote in message
> news:41e15cd5_2@mk-nntp-1.news.uk.worldonline.com...

> There is also a commercial 'roll out' antenna about. I'm sure someone
> competent with a model engineering workshop could emulate it.
>
> I've used the flat metal tape from a retractable tape measure in the past
> for antenna elements- this could be the basis of a 'roll out' design.
> --
> Brian Reay
> www.g8osn.org.uk
> www.amateurradiotraining.org.uk
> FP#898
>
>
Nice idea, what about combining that with the feed mechanism from an old
printer. I was going to dump an old OKI microline printer, the feed motor is
a reversible stepper motor so should be PC controllable.

Steve H

481. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 17:22:33 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34d7ioF494ottU1@individual.net>
Source record: 84019
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Steve H" <g0lmv@yahoo.co.uk> wrote in message
news:41e16787$1_3@mk-nntp-1.news.uk.worldonline.com...

> > There is also a commercial 'roll out' antenna about. I'm sure someone
> > competent with a model engineering workshop could emulate it.
> >
> > I've used the flat metal tape from a retractable tape measure in the
past
> > for antenna elements- this could be the basis of a 'roll out' design.
> >
> >
> Nice idea, what about combining that with the feed mechanism from an old
> printer. I was going to dump an old OKI microline printer, the feed motor
is
> a reversible stepper motor so should be PC controllable.
>

Sounds good.

I'd thought of using a similar motor for a remote ATU.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

482. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 17:28:28 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <faq2u0hs4644eain212c3dnvkfernh259b@4ax.com>
Source record: 84020
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Sun, 9 Jan 2005 16:02:51 -0000, "Brian Reay"
<brian.reay@(spamstopper)bigfoot.com> wrote:

>"Part P" doesn't stop DIY electrical work but such work MAY need to be
>inspected. In fact, some level of inspection has always been imposed- the
>electricity supply company does a check before connecting the "meter tails".
>
>I admit to mix views on Part P, unnecessary red tape for those of us who
>either know the correct way to do things, or are prepared to learn them, but
>it is protection from those who believe in polarised resistors ;-)

Yes, I take your point.

Do you remember the chappie on uk.radio.amateur who recommended an
earth connection to the yellow plastic water main ;-)?

I'm sure this sort of thing is done to protect the next occupiers of
his house.
--
from
Aero Spike

483. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 17:31:01 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34d82lF40cefgU1@individual.net>
Source record: 84021
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Spike" <Aero.Spike@Speed.invalid> wrote in message
news:faq2u0hs4644eain212c3dnvkfernh259b@4ax.com...
> On Sun, 9 Jan 2005 16:02:51 -0000, "Brian Reay"
> <brian.reay@(spamstopper)bigfoot.com> wrote:
>
> >"Part P" doesn't stop DIY electrical work but such work MAY need to be
> >inspected. In fact, some level of inspection has always been imposed- the
> >electricity supply company does a check before connecting the "meter
tails".
> >
> >I admit to mix views on Part P, unnecessary red tape for those of us who
> >either know the correct way to do things, or are prepared to learn them,
but
> >it is protection from those who believe in polarised resistors ;-)
>
> Yes, I take your point.
>
> Do you remember the chappie on uk.radio.amateur who recommended an
> earth connection to the yellow plastic water main ;-)?
>

Do they use yellow in Wiltshire then? In Kent water is blue and gas yellow.

> I'm sure this sort of thing is done to protect the next occupiers of
> his house.

When the company fails, that may not be far away.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

484. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 17:33:53 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <tlq2u0hr8ev6a12cki1p4rmt76rijpp33n@4ax.com>
Source record: 83872
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Sun, 9 Jan 2005 16:25:42 -0000, "Airy R. Bean" <me@privacy.net>
wrote:

>Then more fool you.....

>You certainly make yourself out as stupid and as ignorant enough.

I like the demonstration of the gentlemanly approach.....
--
from
Aero Spike

485. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 17:37:47 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e16bf8$1_1@127.0.0.1>
Source record: 83873

Richard Clark wrote:
> "Crazy George"
> <muNnscOh@attSglPobaAl.nMet> wrote:
>>Now, here the three channel monopulse technique appears in a discussion of AUTOMOBILE TAIL LIGHTS for gosh sakes.
>
> A sucker post is how we got there.

I asked two simple questions out of curiosity: Has anyone
else ever noticed those taillights? & What would be the
advantage to that design? I finally got an answer to the
second question. Nobody else has reported seeing them but
they definitely exist. I suspect you still don't know what
I am talking about.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

486. Re: park ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 17:43:19 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e16d44$1_1@127.0.0.1>
Source record: 83874

ml wrote:
> I'll be going into a park, operating from a park bench via battery
> ft897d and a nice dipole strung up in the trees
>
> wondering should i have some sort of ground to my rig or what ever while
> sitting on this bench?

For portable operation with a balanced antenna, lots of hams
don't even bother with an earth ground - I don't.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

487. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 17:51:32 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <10u2rpnb9avss0c@corp.supernews.com>
Source record: 83875

Cecil Moore wrote:

> Richard Clark wrote:
>
>> "Crazy George"
>> <muNnscOh@attSglPobaAl.nMet> wrote:
>>
>>> Now, here the three channel monopulse technique appears in a
>>> discussion of AUTOMOBILE TAIL LIGHTS for gosh sakes.
>>
>>
>> A sucker post is how we got there.
>
>
> I asked two simple questions out of curiosity: Has anyone
> else ever noticed those taillights? & What would be the
> advantage to that design? I finally got an answer to the
> second question. Nobody else has reported seeing them but
> they definitely exist. I suspect you still don't know what
> I am talking about.

Yes I have seen these taillights. According to a news article about them there is a significant difference in how fast the new lights work compared to the older conventional lamps. One time I was following a truck that had diode lights on its trailer and conventional lamps on the tractor. There was a very noticeable difference in the two tail lights. The diode lamps were full on while the conventional lamps were still thinking about glowing. Supposedly this converts to about 17 feet difference at 55-65 miles per hour on the highway.

Dave N

488. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 17:57:45 UTC
From: Micky Taker <micky.t@ker>
Message-ID: <tgeEd.89138$48.13618@fe1.news.blueyonder.co.uk>
Source record: 83876
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Airy R. Bean wrote:
> ISTR that the person who introduced the concept of
> polarised resistors was you.
>
> Yet again you make the Freudian Slip of uttering a rather
> silly sneer that actually applies to yourself.
>
> SFB, or what?!
>
> "Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
> news:34d2t8F476le8U1@individual.net...
>
>>I admit to mix views on Part P, unnecessary red tape for those of us who
>>either know the correct way to do things, or are prepared to learn them,
>
> but
>
>>it is protection from those who believe in polarised resistors ;-)
>

No it was definitely YOU who said something like - M3/CB blah blah
"wouldn't know one end of a resistor from the other".

I don't know how to search for old messages but I'm sure someone can
find it for you.

Cheers,

Micky

--
E&OE (C) 2005 Micky Taker
Micky Taker accepts no responsibility for any personal injury or
emotional distress that may occur as a result of reading the contents of
this message.

489. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 18:08:33 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34daejF4a5i3vU1@individual.net>
Source record: 83878
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

s'OK - the spikeful Old Mother-Hen Nugatory RVMJ-Binaryera,
which is the true identity of the person to whom you responded,
doesn't know anything technical, never contributes anything of value,
and only ever sneers in a rather silly paranoid way.

Bad luck, Jack! You fell into her trap!

"Jack Painter" <223bthp@cox.net> wrote in message
news:VqeEd.11987$B95.4079@lakeread02...
> "Spike" <Aero.Spike@Speed.invalid> wrote
> > >2. How do I bond the radials together? (I guess my 15-watt soldering
> > >iron won't be up to the job ...).
> > Use a car battery clamp and plenty of grease.
> Never, ever use "Grease" (or any other lubricant/protectant) in an
> electrical connection for RF. Grease is a dialectric (so is silicone) and
it
> will ensure you have practically no electrical connection at all.
> There are copper and other metal-alloy pastes available for making
> mechanical lightning protection and RF connections. They are the only
thing
> that should ever be used to make up mechanical joints. If you don't have
> them, make the joints dry and leave them that way. Copper oxide (normally
> green) that forms outside of bare copper from oxidation is conductive and
> causes very little difference in conductivity. Aluminum oxides and carbon
> steel rust are not very conductive, although not much different than poor
> soil that most radials are buried in.

490. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 18:08:53 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <VqeEd.11987$B95.4079@lakeread02>
Source record: 83877
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Spike" <Aero.Spike@Speed.invalid> wrote
> >2. How do I bond the radials together? (I guess my 15-watt soldering
> >iron won't be up to the job ...).
>
> Use a car battery clamp and plenty of grease.

Never, ever use "Grease" (or any other lubricant/protectant) in an electrical connection for RF. Grease is a dialectric (so is silicone) and it will ensure you have practically no electrical connection at all.

There are copper and other metal-alloy pastes available for making mechanical lightning protection and RF connections. They are the only thing that should ever be used to make up mechanical joints. If you don't have them, make the joints dry and leave them that way. Copper oxide (normally green) that forms outside of bare copper from oxidation is conductive and causes very little difference in conductivity. Aluminum oxides and carbon steel rust are not very conductive, although not much different than poor soil that most radials are buried in.

Jack Painter
Virginia Beach, Virginia

491. Re: Why the 4:1 or 9:1 baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 18:13:12 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e17445$1_1@127.0.0.1>
Source record: 83879

Ian Jackson wrote:
> But how good is the efficiency when the balun/transformer is working
> between completely the wrong impedances (which will be most of the
> time)? My understanding (and limited experience) is that most of your
> power simply heats up the ferrite.

Sorry, I don't know the answer. I operate my W2DU choke into close
to a pure resistance that varies between 28 ohms and 90 ohms. I
once measured the temperature of a #2 iron-core 4:1 commercial
voltage balun and got no appreciable temperature rise under varying
conditions but I don't know what conclusion can be drawn.

How to operate your all-HF-band dipole with a purely resistive
load of 28-90 ohms is described on my web page below.
--
73, Cecil http://www.qsl.net/w5dxp/notuner.htm

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

492. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 18:20:47 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34db00F49095cU1@individual.net>
Source record: 83880
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Jack Painter" <223bthp@cox.net> wrote in message
news:VqeEd.11987$B95.4079@lakeread02...
>
> "Spike" <Aero.Spike@Speed.invalid> wrote
> > >2. How do I bond the radials together? (I guess my 15-watt soldering
> > >iron won't be up to the job ...).
> >
> > Use a car battery clamp and plenty of grease.
>
> Never, ever use "Grease" (or any other lubricant/protectant) in an
> electrical connection for RF. Grease is a dialectric (so is silicone) and
it
> will ensure you have practically no electrical connection at all.
>

If there is a conductive path before the grease is applied does it matter?

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

493. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 18:23:21 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e176a7$1_2@127.0.0.1>
Source record: 83881

David G. Nagel wrote:
> Yes I have seen these taillights. According to a news article about them
> there is a significant difference in how fast the new lights work
> compared to the older conventional lamps. One time I was following a
> truck that had diode lights on its trailer and conventional lamps on the
> tractor. There was a very noticeable difference in the two tail lights.
> The diode lamps were full on while the conventional lamps were still
> thinking about glowing. Supposedly this converts to about 17 feet
> difference at 55-65 miles per hour on the highway.

Hi David, I'm not talking about conventional LED taillights. I'm
talking about LED taillights that are pulsed and maybe pulse-width
modulated between the taillight function and the brakelight function.
This seems to be something new on maybe one manufacturer's 2005
models. They may have a 1/3 duty cycle for taillights and a 2/3
duty cycle for brakelights, or something akin to that. It's a
mystery to me that I am trying to solve.

Some lights on towers and some roadside warning lights are pulsed on
and off at a ballpark rate of 100 Hz. If you sweep your eyes from
side to side, these pulsed lights appear as a dotted line in your
vision. That's the kind of taillights I am talking about. If you
sweep your eyes from side to side, the trail they leave on your
retina looks something like this:

---- ---- ---- ---- ---- ---- ---- ----

--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

494. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 18:28:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7pt2u0td3dhkt1vch2jo8rdtcuqvmr0ndd@4ax.com>
Source record: 83882

On Sun, 09 Jan 2005 11:37:47 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:
>I suspect you still don't know what I am talking about.
Logic chips are a far cry from EM emissions, much less antennas.

495. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 18:28:36 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e177e2$1_2@127.0.0.1>
Source record: 83883
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Brian Reay wrote:
> If there is a conductive path before the grease is applied does it matter?

Back in the 50's, it was common practice to smear grease on
automobile battery terminals to keep them from corroding.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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496. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 18:38:44 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34dc1lF4a5amaU1@individual.net>
Source record: 83884
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41e177e2$1_2@127.0.0.1...
> Brian Reay wrote:
> > If there is a conductive path before the grease is applied does it
matter?
>
> Back in the 50's, it was common practice to smear grease on
> automobile battery terminals to keep them from corroding.

Still is in the UK. Also I assume in the USA, one of my cars was made in the
USA and came with grease on the terminals.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

497. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 18:52:32 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <Dn$+QeGw1X4BFAdc@ifwtech.co.uk>
Source record: 83885
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Airy R. Bean wrote:
>"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
>news:hBaWJPXmDV4BFA6f@ifwtech.co.uk...
>> Zero inches, if you can. Cut the grass very short in a few weeks' time,
>> and staple the radials down. This part of the question was discussed
>> here, only a week ago.
>
>Staples? Presumably fashion from short lengths of
>fencing wire, or similar?
>
You've got the idea.

The original reference to the thread was:
http://groups-beta.google.com/group/rec.radio.amateur.antenna/browse_frm/thread/67f88578a6f58a9a/1191189b9db0a400?q=staple+radial+group:rec.radio.amateur.antenna&_done=%2Fgroups%3Fas_q%3Dstaple+radial%26safe%3Dimages%26as_ugroup%3Drec.radio.amateur.antenna%26as_drrb%3Db%26as_mind%3D25%26as_minm%3D12%26as_miny%3D2004%26as_maxd%3D9%26as_maxm%3D1%26as_maxy%3D2005%26lr%3D%26hl%3Den%26&_doneTitle=Back+to+Search&&d#1191189b9db0a400

Or alternatively:
http://tinyurl.com/4dnhg

(Tinyurl.com really is the best thing since.... well, since Google Newsgroups Search, I suppose.)

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

498. Re: Why the 4:1 or 9:1 baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 18:53:44 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <crrujo$61b$1@sparta.btinternet.com>
Source record: 83886

> But how good is the efficiency when the balun/transformer is working
> between completely the wrong impedances (which will be most of the
> time)? My understanding (and limited experience) is that most of your
> power simply heats up the ferrite.
> Ian.
==========
Ian, both your understanding and experience of how a balun works are limited. But don't be disheartened - you are in good company! ;o)

They are not simple transformers. The windings are in fact transmission lines consisting of a pair of wires running in parallel, either coaxial or balanced-twin - it doesn't matter which although balanced-twin is slightly more efficient and physically more easy to construct.

Their full name is "Transmission Line Transformers".

They have a wider bandwidth and a higher HF response than ordinary primary-and-secondary HF transformers. This is because the normal capacitance between turns and between windings is incorporated in the transmission lines instead of being directly in shunt with winding inductance.

They are inherently very low loss devices because there's only short lengths of high-conductivity copper involved.

In theory, there is no loss in the ferrite core because the currents in the transmission line wires flow, adjacent to each other, in oposite directions and the flux cancels out in the core. But cancellation is never completely perfect and HF-quality ferrite core material should be used. However, LF grade materials found in the junk box often work quite satisfactorily.

Cancellation is better with coaxial lines than with balanced twin but this is hardly a matter of importance. Ferrite rods require more turns to achieve the same inductance than rings at the low frequency end.

The ordinary inductance of the windings considered as single wires, in conjunction with the nominated terminating resistances, sets the low frequency response of a balun transformer in the usual way.

The high frequency end of the range is limited by the physical length of the line winding. Line length should be small in relation to the wavelength along the line. Upper frequency response and ratio begin to fall off when line length exceeds about 1/8 or 1/10 of a wavelength at its own velocity. Not free space velocity. This allows a frequency range of 1.8 to 30 MHz on a core of ordinary proportions with permeability in the range 200 to 400.

The performance and behaviour of an X-to-Y ohm balun, as with ordinary transformers, goes haywire if it is not operated between its designed-for resistances. Or at least resistances in the right ball-park.

Hence the futility at HF of using one between a multi-band antenna and any sort of transmission line or tuner. The range of impedances to be covered is even greater than those listed by our good friend Cecil.

A choke balun, a single short length of transmission line wound on a ring or rod, is a different kettle of fish. Its range of impedances is unlimited.

Reg, G4FGQ

499. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 18:59:40 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncu2vos.ehs.bit-bucket@shell.config.com>
Source record: 83887
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

On Sun, 9 Jan 2005 15:19:28 -0000, Airy R. Bean wrote:
> Some of us have encountered the wrath of our local planning
> committees when erecting antennae that seemed reasonable to us,
> but perhaps unreasonable to SFB neighbours.
>
> Could we conceive of an antenna, even possible an HF beam, that
> folds away into a single rod-like structure when not in use?
>
> I have in mind the way in which quite elaborate antennae and solar
> cells unfold from a satellite once it reaches orbit.

...and, achieves zero gravity, zero wind resistance, and zero
local bureaucratic control. HI!HI!

HNY
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

500. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 19:01:01 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <crrv1d$2lj$1@titan.btinternet.com>
Source record: 83888
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

> >6. Is there anything else I should know?
> >
> You're going to have backache.
>
==========

In all probability he will lay down far more and longer than necessary,
anyway.

Is Sloan's Liniment still available?

501. Re: Why the 4:1 or 9:1 baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 19:01:21 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <i1u2u0hl4hrq2tor3urus9hfg4vug2i87j@4ax.com>
Source record: 83889

On Sun, 9 Jan 2005 15:06:59 +0000, Ian Jackson
<IanJacksonRemoveThisBit@g3ohx.demon.co.uk> wrote:
>But how good is the efficiency when the balun/transformer is working
>between completely the wrong impedances (which will be most of the
>time)? My understanding (and limited experience) is that most of your
>power simply heats up the ferrite.

Hi Ian,

In a current BalUn it is the Common Mode current that is absorbed by the BalUn as a choke (one purpose of two purposes to use it). The current BalUn is designed to add R rather than X to the Common Mode path (although, any additional X that comes down the pike is not shrugged off). Thus the product of that current and that resistance is heat. However, if you have a sufficient R, it snubs the I before you get to many Watts. A string of 20 beads can present upwards to 1000 Ohms resistance, but I wouldn't try to dissipate more than 20W throughout.

Now, as to efficiency. I presume the load is a nominal 50 Ohms, and that it is paralleled by that choke's 1000 Ohms. If we were in a condition where that same 1000 Ohms were dissipating 20W then it follows that the load is dissipating 400W. This is about the time when some Hams begin to tear their hair and fulminate at the BalUn (which is doing its job faithfully) rather than asking themselves the question:
"why is my antenna system trying to pump
that current down the transmission line?"

If they solved that question, then they would have more power available for their intended load. Others who would have reflected on that question naturally, they would have shrugged their shoulders and figure chasing that last 5% efficiency exceeded the small price they paid for the BalUn - which was working quite well.

Now, consider if that BalUn were to suddenly vanish. The same current which formerly saw 1000 Ohms, would see none. We can all work out the equivalent resistance of 0 Ohms paralleled to the intended load of 50 Ohms to observe where the power would eventually go. This is so extreme as to be absurd (or at least rare). Such a radical possibility necessarily presumes a rather disastrous implication in the state of the antenna's design - or damage.

However, none of this actually answers your question about "wrong impedances," but it does respond to the worst efficiency you could expect. By and large, when you are in the middle-to-near fringes of

the BalUn's operational range, efficiencies are exceptionally high (95% to 99+%). Whatever power that is lost to improper matching occurs in far greater abundance elsewhere.

73's
Richard Clark, KB7QHC

502. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 19:14:46 UTC
From: jonny <nospam@spam0junk.com>
Message-ID: <GofEd.8930$HA5.1029554@juliett.dax.net>
Source record: 83890
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

The man next door has a large erection in the back garden, which is unsightly and dangerous. !!
Is This is the sort of complaint they send to the council, Mr Bean ??

503. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 19:15:50 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <ULK7L7ImLY4BFAs2@ifwtech.co.uk>
Source record: 83891
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

M5WJF@GB7MAX.#28.GBR.EU wrote:
>Steve H wrote:
>
>> Simple Gareth, buy a scam mast, less than 12 foot tall so no
>>planning
>> problems. even Liz might approve...
>
>Not so, GPDO 1995 states that structures (masts and antennas) under 3m
>(~9'9") do not require planning permission, if sited at least 2m
>(~6'6") from any boundary, and at least 5m (~16'3") from a neighbours
>building. This is modified to the height of your ridge line (not
>chimney) visible by an average sized adult standing on the pavement at
>the front of your dwelling, if you have the structure attached to one
>of the existing walls of your property (not the front wall visible from
>the pavement). Exclusions are made for non-commercial antennas that
>are similar in size to a Broadcast TV Antenna & Mast, which may be
>erected on the chimney (I've had a 2 ele 6m beam on a rotator excluded
>under this provision).
>
>At my last QTH, I had no planning permission for a ground mounted
>Butternut HF9V, the Planning Enforcement Officer that made a visit,
>said that an application was not required as it was under 4m tall
>(~13'0")?!?

Sounds like when he actually saw it, he realised it wasn't worth bothering about after all. Since he couldn't change the law for you, he re-valued the metre instead.

Actually Planning Officers have more discretion about "minor developments" than they will readily admit to. By going in for an informal chat, and taking along some mocked-up digital photographs showing what the proposed antennas would look like, I got a letter formally stating that my small crank-up mast and VHF yagis would not require planning permission.

The Planning Officer came out with a big multi-part ring binder (something along the lines of "How To Become A Planning Officer In 26 Weekly Instalments"). This had a whole chapter on amateur radio antennas, including photos of masts and antennas that had received planning permission, and even bigger ones that had gone through on appeal. After he had compared those with my own modest proposal, he became much more co-operative.

Your experience may vary, but an informal preliminary chat with the help
of some mocked-up images can never do any harm.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

504. Re: Why the 4:1 or 9:1 baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 19:34:46 UTC
From: AaronJ <noemail@noemail.com>
Message-ID: <crv2u0lppk8i5hbod7uki9tcn9o8m4gmrs@4ax.com>
Source record: 83892

Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk> wrote:

>But how good is the efficiency when the balun/transformer is working
>between completely the wrong impedances (which will be most of the
>time)?

I use a 4:1 balun under such conditions. I use it simply to make my autotuner happy (which makes bandhopping easier). I have run extensive tests with the balun in and out on the HF bands and have yet to find anyone on the other end who could tell a difference.

>My understanding (and limited experience) is that most of your
>power simply heats up the ferrite.

My KW rated balun does get warm, even at 50 watts on some bands.

Of course tuners can also eat up considerable power on large mismatches. If you want (or need) a simple antenna system to work on all bands then you will likely have to absorb some loss no matter how you do it to get there. And the reason many don't have a big problem with this is even if you do lose *half* you power, that's still not a real big difference on the S meter at the other end...

505. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 20:01:55 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <34dgt8F4a9celU1@individual.net>
Source record: 83893
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Brian Reay wrote:
>
> When the company fails, that may not be far away.
>
Nah, the chances are that, like so many other cowboys, he'll just open
another company and carry on regardless.
--
;>)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

506. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 20:06:16 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34dh5tF49gq4cU1@individual.net>
Source record: 83894
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Frank Turner-Smith G3VKI" <g3vki@turner-smith.co.uk> wrote in message
news:34dgt8F4a9celU1@individual.net...
> Brian Reay wrote:
> >
> > When the company fails, that may not be far away.
> >
> Nah, the chances are that, like so many other cowboys, he'll just open
> another company and carry on regardless.

Unless they get banned from holding directorships.

Not unknown for someone with a score to settle to buy up the debts of a
small company and send it to the wall. If done correctly, the wayward
director is them in the p***

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

507. Re: park ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 20:12:09 UTC
From: W9DMK <w9dmk@crosslink.net>
Message-ID: <41e18ee6.21380713@news.crosslink.net>
Source record: 83895

On Sun, 09 Jan 2005 14:39:12 GMT, ml <m@di.net> wrote:

>Hi
>
>I'll be going into a park, operating from a park bench via battery
>ft897d and a nice dipole strung up in the trees
>
>wondering should i have some sort of ground to my rig or what ever while
>sitting on this bench?
>
>how would i achiee that take a copper spike and wack it into the ground
>connect to rig?
>
>thanks

Dear ml,

Not a bad idea. However, consider finding a chain link fence and tying your ground post to one of the chain link fence posts. Do not allow the ground wire from the rig to the earth exceed 1/12th wavelength at your frequency of operation - otherwise you will be elevated slightly above ground and other complications will begin to take place as you get closer and closer to 1/4 wavelength. At 1/4 wavelength you have an open circuit between the rig and the earth - which is real bad.

Note that even tho you are using a dipole, there will be RF coming down the outer shield of the coax which will find its way to earth one way or another. You prefer it not to be through the body.

Bob, W9DMK, Dahlgren, VA
http://www.qsl.net/w9dmk

508. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 20:17:59 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-BFD533.11180409012005@netnews.worldnet.att.net>
Source record: 83896

In article <41e1316f@news.vo.lu>, "Thierry" <-> wrote:

> We know that during the emission of a radiotelescope (rare, for tests or to
> send SETI msg, Hi!), the radiation can sterilize people working in the dish.

If "We" know all this, "We" should not be in the dish when these test
are being conducted. Duhhhh.....

Me

509. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 20:18:26 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <34dhs7F499hteU1@individual.net>
Source record: 83898
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

Airy R. Bean wrote:

> Some of us have encountered the wrath of our local planning
> committees when erecting antennae that seemed reasonable to us,
> but perhaps unreasonable to SFB neighbours.
>
> Could we conceive of an antenna, even possible an HF beam, that
> folds away into a single rod-like structure when not in use?
>
> I have in mind the way in which quite elaborate antennae and solar
> cells unfold from a satellite once it reaches orbit.
>
> Such an antenna, if it were to be deployed only during the hours
> of darkness, might also serve the needs of those who are obliged
> to use stealth antennae due to restrictive covenants on the buildings
> used as their shacks!
>
>

I know the ideal 'antenna' for you, Beanie, it's called a 'dummy load',
affordable even on benefits from your local CB shop. You could also try
replacing your broadband modem with a dummy load and leave Usenet in peace.
...(_!_)...

510. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 20:20:14 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <34dhviF499hteU2@individual.net>
Source record: 83897
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

jonny wrote:

> The man next door has a large erection in the back garden, which is
> unsightly and dangerous. !!
> Is This is the sort of complaint they send to the council, Mr Bean ??
>
>
Are you sure this relates to Beanie? 'Unsightly and dangerous', YES, but
'large erection'?
--
;>)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

511. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 20:33:31 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <34diofF46repcU1@individual.net>
Source record: 83899
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Brian Reay wrote:

> "Frank Turner-Smith G3VKI" <g3vki@turner-smith.co.uk> wrote in message
> news:34dgt8F4a9celU1@individual.net...
>
>>Brian Reay wrote:
>>
>>>When the company fails, that may not be far away.
>>>
>>
>>Nah, the chances are that, like so many other cowboys, he'll just open
>>another company and carry on regardless.
>
>
> Unless they get banned from holding directorships.
>
> Not unknown for someone with a score to settle to buy up the debts of a
> small company and send it to the wall. If done correctly, the wayward
> director is them in the p***
>
How would that work? Surely you'd just be buying written off debts from
a liquidated company. More fun to liquidate the offending Director.
--
;>)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

512. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 21:35:20 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <tshEd.12128$B95.7695@lakeread02>
Source record: 83900
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote
> "Cecil Moore" <w5dxp@hotmail.com> wrote in message
> news:41e177e2$1_2@127.0.0.1...
> > Brian Reay wrote:
> > > If there is a conductive path before the grease is applied does it
> matter?
> >
> > > Back in the 50's, it was common practice to smear grease on
> > automobile battery terminals to keep them from corroding.
>
> Still is in the UK. Also I assume in the USA, one of my cars was made in
the
> USA and came with grease on the terminals.

Guys, the last time I checked, this was not rec.car.battery. We're talking about antennas and RF, not DC connections to your car battery. Using grease, even outside the made connection, will eventually penetrate the spaces. Maybe this doesn't matter to the 50-100w user, but it matters to high power connections, the most notable of which is lightning.

Jack Painter
Virginia Beach, Virginia

513. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 21:36:44 UTC
From: "aunwin@insightbb.com"
Message-ID: <MthEd.82581$k25.36161@attbi_s53>
Source record: 83901
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

I may have missed something here but in my case I only have a 1/2 acre
'clear' under my tower. Because of the limited area
I chose to use a grid system of insulated solid wire an inch below the
surface with spacing of 3 feet per side of the grids.
I then removed insulation ar cross over points and crimped the wires
together, the crimping then made it quite easy for the solder to flow.
Tree roots have pushed up the wire in a couple of places but the rest is
unseen. I don't do to much work with verticals so I can't comment on the
sutability of this type of ground and have not read anywhere of any
comparisons to the normal radial
type ground especially for use over ALL of the amateur bands.
Food for thought. Judging by the number of responses recieved by the poster
there is a whole bunch of knoweledge out there on how to mess up your lawn
(yard over here)
P.S. get a mechanised pizza cutter to make the wire slots and place it on
the wheel of a wheel barrow so as not to alarm the neigbourhood
Cheers
ART

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:crrv1d$2lj$1@titan.btinternet.com...
>> >6. Is there anything else I should know?
>> >
>> You're going to have backache.
>>
> ============================
>
> In all probability he will lay down far more and longer than necessary,
> anyway.
>
> Is Sloan's Liament still available?
>
>

514. Re: Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 21:52:48 UTC
From: "Eike Lantzsch, ZP6CGE" <eikelan@gmx.net>
Message-ID: <slrncu39tg.473.eikelan@ID-77364.user.individual.net>
Source record: 83903

stryped@hotmail.com wrote:
>
> Eike Lantzsch, ZP6CGE wrote:
> > stryped@hotmail.com wrote:
[snip]

> So, does a j pole need to be insulated from the antenna mast?
>
No. For lightning protection grounding is recommended but it does
nothing to the function of the J-pole.

Kind regards, Eike

515. hi swr low loss??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 22:07:00 UTC
From: ml <m@di.net>
Message-ID: <m-95F015.17065209012005@news.verizon.net>
Source record: 83902

i was reading some technical spec's on a ladder line feed.

the numbers showed it had sorta hi swr around 5 yet the power loss was
really low for it's run, like about 2watts

this confuses me, i always thought that high swr automatically ment
'loss' so what is the piece i am missing?

even stranger was the same equation as above but run for coax, which had
lower swr but higher power lost, which i then attrib to something like
the resistane of the coax?

boy i am mixed up

516. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 22:36:56 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <10u3cggoh1nl44c@corp.supernews.com>
Source record: 83904

Cecil Moore wrote:
> David G. Nagel wrote:
>
>> Yes I have seen these taillights. According to a news article about
>> them there is a significant difference in how fast the new lights work
>> compared to the older conventional lamps. One time I was following a
>> truck that had diode lights on its trailer and conventional lamps on
>> the tractor. There was a very noticeable difference in the two tail
>> lights. The diode lamps were full on while the conventional lamps were
>> still thinking about glowing. Supposedly this converts to about 17
>> feet difference at 55-65 miles per hour on the highway.
>
>
> Hi David, I'm not talking about conventional LED taillights. I'm
> talking about LED taillights that are pulsed and maybe pulse-width
> modulated between the taillight function and the brakelight function.
> This seems to be something new on maybe one manufacturer's 2005
> models. They may have a 1/3 duty cycle for taillights and a 2/3
> duty cycle for brakelights, or something akin to that. It's a
> mystery to me that I am trying to solve.
>
> Some lights on towers and some roadside warning lights are pulsed on
> and off at a ballpark rate of 100 Hz. If you sweep your eyes from
> side to side, these pulsed lights appear as a dotted line in your
> vision. That's the kind of taillights I am talking about. If you
> sweep your eyes from side to side, the trail they leave on your
> retina looks something like this:
>
> ---- ---- ---- ---- ---- ---- ---- ----
>
Thanks for your response. No, I have not seen the lights you describe. I
can see how they would work though. I'll keep my eyes out for them.

Dave

517. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 22:44:35 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <FeXvesRTPb4BFAfn@ifwtech.co.uk>
Source record: 83906
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Reg Edwards wrote:
>> >6. Is there anything else I should know?
>> >
>> You're going to have backache.
>>
>==========
>
>In all probability he will lay down far more and longer than necessary,
>anyway.
>
If that Ian's garden is anything like this Ian's, in some directions he will probably be forced to lay down fewer and shorter radials than he'd like, and he may try to make up for that by overdoing it in other directions.

He'll probably give up when his back gives out... and still trying to work out exactly what you meant by "necessary".

>Is Sloan's Liniment still available?
>
Certainly, from any good horse-doctor.

I do recall that once upon a time in Yorkshire, two completely new products came out in similar-sized tubes. One was Deep Heat Rub for bad backs; the other was Evo-Stik Impact Adhesive. Lighting were bad i' them days. You can guess the rest...

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

518. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 22:45:18 UTC
From: "M5WJF@GB7MAX.#28.GBR.EU" <M5WJF@GB7MAX.#28.GBR.EU>
Message-ID: <b3eba$41e1b3f8$5397d286$23249@nf4.news-service.com>
Source record: 83905
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

Ian White, G3SEK wrote:

>
> Your experience may vary, but an informal preliminary chat with the help
> of some mocked-up images can never do any harm.
>
>

Yes, the very approach I'm considering for two masts in the garden, one at 20ft to support one end of a 180ft doublet, and the other at 30ft to support some VHF/UHF antennas, a 2.4GHz fixed dish towards an VHF NFD Contest Site (line-of-sight at 23Km!), and I'm also considering another Dipole or Inverted-V for HF.

The 20ft mast will shadow an existing BT telegraph pole (had thought about using it!), and shouldn't be a problem in terms of planning or interference (well my telephone isn't connected to it), but the 30ft mast will have to be a wind up design as I want to experiment, and because I'm a long way down the rear garden, it could be 60ft tall and still wouldn't be seen from the pavement at the front of the house. 30ft or 40ft would be ample here as I'm on a hill anyway, and shall only initially be using two small beams on a rotator, for 2m and 23cms.

M5WJF

519. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 22:51:14 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <lObnaHSiVb4BFAaR@ifwtech.co.uk>
Source record: 83908
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

aunwin@insightbb.com wrote:
>get a mechanised pizza cutter to make the wire slots and place it on
>the wheel of a wheel barrow

Art, you're a genius!

SM2CEW's website describes a radial plough which attaches to the back of a tractor, and can lay a full-sized Top Band radial in 2 minutes. I had been lamenting the lack of a Volvo tractor (or the space to lay such long radials) but a blade attached to a wheelbarrow might just do it... or even to the lawn mower.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

520. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 22:59:14 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <old3u05k3ec91c10p1udran2a8hjl0aoaa@4ax.com>
Source record: 83907
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Sun, 9 Jan 2005 13:08:53 -0500, "Jack Painter" <223bthp@cox.net>
wrote:

>Never, ever use "Grease" (or any other lubricant/protectant) in an
>electrical connection for RF. Grease is a dialectric (so is silicone) and it
>will ensure you have practically no electrical connection at all.

Not if you make the electrical connection first, and then coat with
grease.

You wouldn't paint the radials ends and then make the joint.

OTOH, perhaps you would.

PS: Paint can be a dielectric too......
--
from
Aero Spike

521. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 23:02:51 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <nsd3u057atekqknroj7r8b46tq806u19ik@4ax.com>
Source record: 83909
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Sun, 9 Jan 2005 18:20:47 -0000, "Brian Reay"
<brian.reay@(spamstopper)bigfoot.com> wrote:

>"Jack Painter" <223bthp@cox.net> wrote in message
>news:VqeEd.11987$B95.4079@lakeread02...
>>
>> "Spike" <Aero.Spike@Speed.invalid> wrote
>> > >2. How do I bond the radials together? (I guess my 15-watt soldering
>> > >iron won't be up to the job ...).
>> >
>> > Use a car battery clamp and plenty of grease.
>>
>> Never, ever use "Grease" (or any other lubricant/protectant) in an
>> electrical connection for RF. Grease is a dialectric (so is silicone) and
>it
>> will ensure you have practically no electrical connection at all.
>>
>
>If there is a conductive path before the grease is applied does it matter?

Thanks for the injection of sense, Brian. As I say elsewhere, you
wouldn't paint it first then make the connection.

OTOH, perhaps that's whey no-one has heard Bean on the bands.....
--
from
Aero Spike

522. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 23:04:58 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <rP106gVaib4BFA6Q@ifwtech.co.uk>
Source record: 83910
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

M5WJF@GB7MAX.#28.GBR.EU wrote:
>Ian White, G3SEK wrote:
>
>> Your experience may vary, but an informal preliminary chat with the
>>help of some mocked-up images can never do any harm.
>>
>
>Yes, the very approach I'm considering for two masts in the garden, one
>at 20ft to support one end of a 180ft doublet, and the other at 30ft to
>support some VHF/UHF antennas, a 2.4GHz fixed dish towards an VHF NFD
>Contest Site (line-of-sight at 23Km!), and I'm also considering another
>Dipole or Inverted-V for HF.
>
>The 20ft mast will shadow an existing BT telegraph pole (had thought
>about using it!), and shouldn't be a problem in terms of planning or
>interference (well my telephone isn't connected to it), but the 30ft
>mast will have to be a wind up design as I want to experiment, and
>because I'm a long way down the rear garden, it could be 60ft tall and
>still wouldn't be seen from the pavement at the front of the house.
>30ft or 40ft would be ample here as I'm on a hill anyway, and shall
>only initially be using two small beams on a rotator, for 2m and 23cms.

OK then, try to get into the neighbours' gardens and take some
photographs you can draw on.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

523. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 23:14:05 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <qie3u0pvi986nquo8cujottpcgrkc7d8a9@4ax.com>
Source record: 83911
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Sun, 9 Jan 2005 16:35:20 -0500, "Jack Painter" <223bthp@cox.net>
wrote:

>Guys, the last time I checked, this was not rec.car.battery. We're talking
>about antennas and RF, not DC connections to your car battery. Using grease,
>even outside the made connection, will eventually penetrate the spaces.
>Maybe this doesn't matter to the 50-100w user, but it matters to high power
>connections, the most notable of which is lightning.

Here in the UK I'll think you'll find the lightning conductors have
greased joints.

I always thought it was the origin of the term 'greased lightning'....

(only joking)

--
from
Aero Spike

524. J pole vs ground plane? Which better for base?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 23:16:39 UTC
From: stryped@hotmail.com
Message-ID: <1105312599.482663.54080@c13g2000cwb.googlegroups.com>
Source record: 83912

I am wanting a base antenna to put atop my tv tower. I am considering building a j pole or a ground plane. Which in your opeiong is better and why?

Also, most ground planes I see are for 1/4 wave. Is a 5/8 wave better? What about a full wave?

I plan on using 2 meters and maybe 440.

525. Ice storm - rebuilding antenna farm - advice needed!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 23:19:48 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <n_iEd.17594$ph.13027@okepread01>
Source record: 83913

I lost all my antennas this week in an ice storm. Shows how bad my decision was stringing them up in the trees.

Oh, well - it's just wire... Luckily, the lightweight cord that was holding up one end of my 160/80m trap dipole failed before the trees did so when the branches came down, there was no damage.

Now - to the rebuilding! I don't operate much above 40m and my B&W rotary antenna switch was destroyed. I'm also left with much fewer branches to hang dipoles from.

Before, I had plenty of trees, coax & wire. I had single or dualband (fan) inverted V's for each HF band. Now that's out - no antenna switch and no tree space for more than 2-3 antennas.

Which would be better - adding 40m traps to my 160/80m antenna or leaving it as is and buying a tuner? How well would a 160/80 trap dipole up 25-30' work on the higher bands when used with a tuner? When I speak higher bands, I'm referring to 40 to 6 meters. I'll add a cushcraft MA5B and V/UHF antennas later.

The current antenna is about 220' of #14 wire with 3.9mhz traps. The traps are 8.33 turns of RG58 around a 3.5" form. The antenna is fed directly with 60' of RG58 and so far has proven to be a good performer on 160 & 80 meters. It has low SWR at 1.88 and 3.9 mhz.

Any ideas, folks?

Ken KG0WX

526. Re: hi swr low loss??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 23:22:19 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <L0jEd.2271$C52.384@newsread2.news.atl.earthlink.net>
Source record: 83914

"ml" <m@di.net> wrote in message
news:m-95F015.17065209012005@news.verizon.net...
> i was reading some technical spec's on a ladder line feed.
>
> the numbers showed it had sorta hi swr around 5 yet the power loss was
> really low for it's run, like about 2watts
>
> this confuses me, i always thought that high swr automatically ment
> 'loss' so what is the piece i am missing?
>
>
> even stranger was the same equation as above but run for coax, which had
> lower swr but higher power lost, which i then attrib to something like
> the resistane of the coax?
>
>
> boy i am mixed up

High SWR does sort of mean loss. It is just that with ladder line the loss is very low compaired to coax. If you have almost no loss and multiply it by 10 due to high swr you still have very small loss. If you start out with coax and have a much larger loss to start with and multiply it by the same number , you will have much larger loss.

527. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 23:23:41 UTC
From: Matthew Haigh <$matthaigh{News07}$@haigh.org>
Message-ID: <vyscVds9zb4BFwph@local.gcrsoft.com>
Source record: 83916
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

In article <lObnaHSiVb4BFAaR@ifwtech.co.uk>, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> writes
>aunwin@insightbb.com wrote:
>>get a mechanised pizza cutter to make the wire slots and place it on
>>the wheel of a wheel barrow
>
>Art, you're a genius!
>
>SM2CEW's website describes a radial plough which attaches to the back
>of a tractor, and can lay a full-sized Top Band radial in 2 minutes. I
>had been lamenting the lack of a Volvo tractor (or the space to lay
>such long radials) but a blade attached to a wheelbarrow might just do
>it... or even to the lawn mower.

And if you attach it to the lawnmower, the XYL won't even know that you
are playing radio - so you get brownie points for cutting the lawn
without being asked too!

Matt
--
Matthew Haigh --$matthaigh{News07}$@haigh.org--
GCRSoft, providing SMS solutions since 1996...
http://www.gcrsoft.com http://www.moretext.com

528. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 23:24:56 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34dsq7F4adm6rU1@individual.net>
Source record: 83915
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Spike" <Aero.Spike@Speed.invalid> wrote in message
news:qie3u0pvi986nquo8cujottpcgrkc7d8a9@4ax.com...
> On Sun, 9 Jan 2005 16:35:20 -0500, "Jack Painter" <223bthp@cox.net>
> wrote:
>
>>Guys, the last time I checked, this was not rec.car.battery. We're
>>talking
>>about antennas and RF, not DC connections to your car battery. Using
>>grease,
>>even outside the made connection, will eventually penetrate the spaces.
>>Maybe this doesn't matter to the 50-100w user, but it matters to high
>>power
>>connections, the most notable of which is lightning.
>
> Here in the UK I'll think you'll find the lightning conductors have
> greased joints.
>
> I always thought it was the origin of the term 'greased lightning'....
>

Plus, of course, the issue isn't so much the power as the current when
thinking of high resistance connections. The cranking current drawn via a
car battery terminal is around 100A. If the grease ingress caused a high
resistance connection, the car wouldn't start. In practice, ungreased
connections tend to 'go high' due to corrosion.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

529. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 23:39:17 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20050109183917.09863.00000012@mb-m18.aol.com>
Source record: 83917

>
>Thierry wrote:
>>We know that during the emission of a radiotelescope (rare, for tests
>>or to send SETI msg, Hi!), the radiation can sterilize people working
>>in the dish.
>
>Nonsense - we know nothing of the sort.
>
>
>--
>73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)

No-nonsense, it is sense. RF exposure causes temporary sterility, kinda birth control. Too much RF can cook us.

Yuri, K3BU.us

530. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 23:48:30 UTC
From: fractenna@aol.com
Message-ID: <20050109184830.09470.00000011@mb-m13.aol.com>
Source record: 83918

A radio telescope is a receive-only device. It is incapable of rendering anything sterile.

A radar telescope--using a dish--can be dangerous and the EIRP can be megawatts. In this case, a number of health dangers apply. Fortunately those most likely to be exposed are the best informed, and I am not familiar with a single case of dangerous exposure.

SETI has nothing to do with this.

73,
Chip N1IR

531. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 23:51:37 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10u3gscpn9275e2@corp.supernews.com>
Source record: 83919

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20050109183917.09863.00000012@mb-m18.aol.com...
> >
>>Thierry wrote:
>>>We know that during the emission of a radiotelescope (rare, for tests
>>>or to send SETI msg, Hi!), the radiation can sterilize people working
>>>in the dish.
>>
>>Nonsense - we know nothing of the sort.
>>
>>
>>--
>>73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
>
> No-nonsense, it is sense. RF exposure causes temporary sterility, kinda
> birth
> control. Too much RF can cook us.
>
> Yuri, K3BU.us
>

Yuri
Depends on the fequency.
The fact that you're still here confirms it's not too bad.
73

532. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 23:55:30 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105314930.413220.215160@c13g2000cwb.googlegroups.com>
Source record: 83920
Cross-posted to: uk.radio.amateur, rec.radio.amateur.antenna

Oh dear Bean's on the Wacky Backy again. - Stick to Special Brew OM !!

533. Re: Ice storm - rebuilding antenna farm - advice needed!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-09 23:56:56 UTC
From: "Edward A. Feustel" <efeustel@direcway.com>
Message-ID: <41e1c41b$1_1@127.0.0.1>
Source record: 83921

"Ken Bessler" <kg0wx@NOSPAMyahoo.com> wrote in message
news:n_iEd.17594$ph.13027@okepread01...
> Any ideas, folks?
>
> Ken KG0WX
>

Ken,
Sorry to hear about your ice storm.
Can you make the antenna 240 feet long? I use a centerfed dipole with w7fg
600 ohm balanced feed that long. It tunes well on 160 to 10 meters with a
Ten Tec 229 tuner and balun. Of course the antenna pattern may not be what
you want.

I use #10 copperweld, 750 lb Dacron supporting rope, and 5 1 gallon
containers of anti-freeze on the pulley end.

Regards,
Ed, N5EI
Ed, N5EI

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

534. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 00:07:50 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105315670.028828.266290@c13g2000cwb.googlegroups.com>
Source record: 83922
Cross-posted to: uk.radio.amateur, rec.radio.amateur.antenna

What if you don't have a pavement at the front of the dwelling (serious question). Incidentally none of the antennas are visable from the front of my "dwelling" (it looks like a tall ship race at the back mind) so I guess I am ok.

Can I insist that my neighbour removes the two 80 foot oak trees he has grown in his garden?

535. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 00:55:41 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <iokEd.12141$B95.7913@lakeread02>
Source record: 83923
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Spike" <Aero.Spike@Speed.invalid> wrote

> Here in the UK I'll think you'll find the lightning conductors have
> greased joints.
>
> I always thought it was the origin of the term 'greased lightning'....
>
> (only joking)
>
> --
> from
> Aero Spike

That is funny. But since this has now become rec.batteries.car (just kidding):

The reaction from battery acids, air and dirt are minimized with grease. But mechanics who grease the inside of the cable-clamp and outside of the battery post *before the connection is made* are not helping the electrical connection - they're applying preventative maintenance for idiots - who never clean their battery posts. Conductive paste is much more expensive than grease. Those who know what they are doing use the former. Conductive paste is specified in US Lightning protection (NEC-70/NFPA-780), and grease is not allowed to be used in any mechanical connection there. Back to antennas for a moment, we all know that grease (or conductive pate) does not provide waterproofing of any kind. And most of you will accept that grease is a dialectric, not a conductor. But after making a mechanical joint with conductive paste (ensuring no air enters the joint, and conductivity remains per the connected materials), and proper waterproofing is applied, you have a safe and maintenance-free joint that will last for years. Or it would anyway, if the same codes didn't require you to expose and mechanically tighten every such joint once a year. That's why the expensive exothermic (welding) of all grounding electrode conductor joints becomes a savings in the long run. Unfortunately that is never practical along rooflines up on masts and towers. So those mechanical joints must provide as little impedance as possible, and survival of the equipment depends on this.

Because all transmitter antenna radials automatically become a part of the lightning protection system, the materials used should be the best you could afford, not the cheapest you can find. And the connections should likewise be the best possible. The transmission system will be more efficient, and safer.

Jack Painter
Virginia Beach, Virginia

536. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 01:00:33 UTC
From: "Jock." <real_class_a2003@yahoo.fr>
Message-ID: <msk3u0dle00fpu0holpu3k92c7u4igg0mc@4ax.com>
Source record: 83924
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Sun, 9 Jan 2005 22:51:14 +0000, "Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote:

>aunwin@insightbb.com wrote:
>>get a mechanised pizza cutter to make the wire slots and place it on
>>the wheel of a wheel barrow
>
>Art, you're a genius!
>
>SM2CEW's website describes a radial plough which attaches to the back of
>a tractor, and can lay a full-sized Top Band radial in 2 minutes. I had
>been lamenting the lack of a Volvo tractor (or the space to lay such
>long radials) but a blade attached to a wheelbarrow might just do it...
>or even to the lawn mower.

Opens up a whole new perspective on mowing the lawn.

Jock.

--

"Education is a progressive discovery of our
own ignorance."
- Will Durant

537. Re: J pole vs the TROLL

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 01:06:14 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <bykEd.12143$B95.10098@lakeread02>
Source record: 83925

<stryped@hotmail.com> wrote in message
news:1105312599.482663.54080@c13g2000cwb.googlegroups.com...
> I am wanting a base antenna to put atop my tv tower. I am considering
> building a j pole or a ground plane. Which in your opeiong is better
> and why?
>
> Also, most ground planes I see are for 1/4 wave. Is a 5/8 wave better?
> What about a full wave?
>
> I plan on using 2 meters and maybe 440.
>

It doesn't appear you plan on doing anything except asking redundant
questions.

538. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 01:57:14 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <mmn3u0dvb7sdcij00e241h5k93tu2amid0@4ax.com>
Source record: 83926
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Sun, 9 Jan 2005 22:51:14 +0000, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> wrote:

>aunwin@insightbb.com wrote:
>>get a mechanised pizza cutter to make the wire slots and place it on
>>the wheel of a wheel barrow
>
>Art, you're a genius!
>
>SM2CEW's website describes a radial plough which attaches to the back of
>a tractor, and can lay a full-sized Top Band radial in 2 minutes. I had
>been lamenting the lack of a Volvo tractor (or the space to lay such
>long radials) but a blade attached to a wheelbarrow might just do it...
>or even to the lawn mower.

I just checked one of my catalogs from a restaurant supply store
(Bridge Kitchenware in New York City), and I notice they sell pizza
cutters with wheels as big as 5 inches in diameter. If you used hose
clamps to attach the handle of a pizza cutter to the end of a broom
handle, I bet that would make a dandy lawn slit cutter for laying
radials.

Bob
k5qwg

539. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 02:15:56 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <bylEd.1839$tF.725@bignews6.bellsouth.net>
Source record: 83927

We recommend getting a vasectomy instead of microwaving yourself. Its less painful, and cleaner.

540. Re: hi swr low loss??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 02:21:43 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <o0p3u09lp8uh7o7u1dtpb1lkhqs1lplo9b@4ax.com>
Source record: 83928

On Sun, 09 Jan 2005 22:07:00 GMT, ml <m@di.net> wrote:
>this confuses me, i always thought that high swr automatically ment
>'loss' so what is the piece i am missing?
>even stranger was the same equation as above but run for coax,

Hi OM,

Line loss is only specified into a matched load (equal to the Zo of the line). Into other loads, you have to calculate/measure it for yourself (SWR multiplies line loss).

Loss is in the resistance of the copper wire. The copper wire of the center conductor of coax is the limiting factor. Except for the largest ($$$) grade of coax, that copper center conductor is usually smaller than the average (ï¿½ï¿½ï¿½) grade of twin lead's conductors.

Given the same SWR, you probably can now appreciate why one is less lossy than the other. If your twin lead still has too much loss, replace it with larger conductor (still ï¿½ï¿½ï¿½ at most bulk wire outlets).

73's
Richard Clark, KB7QHC

541. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 02:27:16 UTC
From: "M5WJF@GB7MAX.#28.GBR.EU" <M5WJF@GB7MAX.#28.GBR.EU>
Message-ID: <58798$41e1e7fe$5397d286$12341@nf4.news-service.com>
Source record: 83929
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

G1LVN wrote:
> What if you don't have a pavement at the front of the dwelling (serious
> question). Incidentally none of the antennas are visable from the front
> of my "dwelling" (it looks like a tall ship race at the back mind) so I
> guess I am ok.

Well, the Planning Enforcement Officer must make a determination of
which side of your house is the front, and view the house from standing
at least 6ft from your boundary.

>
> Can I insist that my neighbour removes the two 80 foot oak trees he has
> grown in his garden?
>

Possibly not, but you may erect an 80ft mast and almost certainly gain
approved planning, since stating that he has two 80ft trees next door
will allow you to maintain that the visual impact of your tower/antennas
various, will not be over-powering to the local area. ;-)

M5WJF

542. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 03:40:46 UTC
From: Alun <elektros@yahoo.com>
Message-ID: <Xns95D9E65ACB953elektrosmdonet@130.133.1.4>
Source record: 83930
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Spike <Aero.Spike@Speed.invalid> wrote in
news:v0l2u09gflm23fucgl7ooerv4vckf4g1it@4ax.com:

> On Sun, 09 Jan 2005 15:52:22 GMT, David Edmonds
> <dedmonds73@yahoo.co.uk> wrote:
>
>>Maybe it's the installation and not supplying that is under question -
>>though typically our government bring in a silly law such as this -
>>while they know that there is no right of entry to inspect.
>
> The problem arises when you try to sell your house. A prospective
> purchaser's solicitor will ask for the certificates for any work you
> admit to having been done post Jan 1.

So you don't admit to any!

543. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 03:52:38 UTC
From: Alun <elektros@yahoo.com>
Message-ID: <Xns95D9E85E25BCelektrosmdonet@130.133.1.4>
Source record: 83931
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in
news:34dsq7F4adm6rU1@individual.net:

>
> "Spike" <Aero.Spike@Speed.invalid> wrote in message
> news:qie3u0pvi986nquo8cujottpcgrkc7d8a9@4ax.com...
>> On Sun, 9 Jan 2005 16:35:20 -0500, "Jack Painter" <223bthp@cox.net>
>> wrote:
>>
>>>Guys, the last time I checked, this was not rec.car.battery. We're
>>>talking about antennas and RF, not DC connections to your car battery.
>>>Using grease, even outside the made connection, will eventually
>>>penetrate the spaces. Maybe this doesn't matter to the 50-100w user,
>>>but it matters to high power connections, the most notable of which
>>>is lightning.
>>
>> Here in the UK I'll think you'll find the lightning conductors have
>> greased joints.
>>
>> I always thought it was the origin of the term 'greased lightning'....
>>
>
> Plus, of course, the issue isn't so much the power as the current when
> thinking of high resistance connections. The cranking current drawn via
> a car battery terminal is around 100A. If the grease ingress caused a
> high resistance connection, the car wouldn't start. In practice,
> ungreased connections tend to 'go high' due to corrosion.
>
>
>

It's not normally grease, it's vaseline, which is conductive. I don't know
how vaseline behaves at RF, though. Maybe not too well?

544. Re: hi swr low loss??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 04:43:50 UTC
From: dplatt@radagast.org
Message-ID: <10u4206d8fmrm1e@corp.supernews.com>
Source record: 83932

In article <o0p3u09lp8uh7o7u1dtpb1lkhqs1lplo9b@4ax.com>,
Richard Clark <kb7qhc@comcast.net> wrote:

>Loss is in the resistance of the copper wire. The copper wire of the
>center conductor of coax is the limiting factor. Except for the
>largest ($$$) grade of coax, that copper center conductor is usually
>smaller than the average (���) grade of twin lead's conductors.
>
>Given the same SWR, you probably can now appreciate why one is less
>lossy than the other. If your twin lead still has too much loss,
>replace it with larger conductor (still ��� at most bulk wire
>outlets).

It's not just the wire gauge. Twinlead and ladder line and open-wire
line have a higher characteristic impedance than coax. Assuming a
matched source and load, the ladder line will carry any given amount
of power with a higher voltage across the line, and a lower current
through the line, than a coax will.

Losses are proportional to (I^2*R), and so you can decrease the losses
by either decreasing the resistance (larger wire gauge), or using a
higher-impedance matched feedline (lower currents).

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

545. LET'S HELP EACH OTHER MAKE MONEY

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 05:25:30 UTC
From: jjrvn@hotmail.com
Message-ID: <1105334730.445633.293240@c13g2000cwb.googlegroups.com>
Source record: 83933
Cross-posted to: rec.sport.billiard, rec.arts.sf.written.robert-jordan, rec.models.rc.air, rec.pets.dogs.behavior, rec.radio.amateur.antenna

I'm sure you've read these letters asking you to send $1 to six different addresses. Putting your home address or mailing address on the internet can be risky, but through PayPal all you have to provide is your email address. It's safe and easy. Just go to www.paypal.com and set up your FREE account! No credit card is needed. I am not a gullible person and have never trusted things like this, but I gave it a try. Hey it's only $6. I figured at least 6 people would respond out of the millions of people that use the internet. You should give it a try too! You have nothing to lose, and thousands to gain! Read on for the letter that I found (of course, I added my PayPal e-mail on #6)...

HOW TO TURN $6 INTO $6,000+!!! THIS REALLY CAN MAKE YOU EASY MONEY!!! IT WORKS!!! BUT YOU HAVE TO FOLLOW IT TO THE LETTER FOR IT TO WORK!!!! A little while back, I was browsing through newsgroups, just like you are now and came across an article similar to this that said you could make thousands of dollars within weeks with only an initial investment of $6.00! So I thought, "Yeah, right, this must be some kind of scam" but like most of us, I was curious, so I kept reading. Anyway, it said that you send $1.00 though PayPal to each of the emails stated in the article. You then place your own email address in the bottom of the list at #6, and post the article in at least 200 news groups. (There are thousands) No catch. That was it. So after thinking it over, and talking to few people first, I thought about trying it. I figured what have I got to lose except $6.00, right? Like most of us I was a little skeptical and a little worried about the legal aspects of it. It follows the same regulations as the "mailed chain letters, which according to the U.S. Post Office (1-800-725-2161) is indeed legal! Then I invested the measly $6.00. Well GUESS WHAT!!? Within 7 days, I started getting money in my PayPal account! I was shocked! I figured it would end soon, but the money just kept coming in. In my first week, I made about $20.00. By the end second week I had made a total over $1,200.00!!! In the third week I had over $10,000.00 and it's still growing. This is now my fourth week and I have made a total of just over $36,000.00 and it's still coming in rapidly. It's Certainly worth $6.00. I have spent more than that on the lottery!! Let me tell you how this works and most importantly, why it works? Also, make sure you print a copy of this article now, so that you can get the information off of it as you need it.

$$

REQUIREMENTS: You must have a confirmed PayPal account. If you do not have a PayPal account you can go to www.paypal.com and follow the

instructions to set up a free account. In order to place the initial $6 into your account, you will have to confirm your bank account with PayPal (which may take a few days). PayPal is 100% secure and is used my millions of people world wide. Confirming a www.paypal.com account simply means (1) PayPal will first ask you to confirm the email you used to sign up your PayPal account by sending you an email with a link for you to click to that email. As soon as you click that link your email is confirmed. (2) PayPal will then make two small deposits into your bank account if you set up your PayPal account with a checking or savings bank account. Or PayPal will make two small deposits to your credit card if you set up your PayPal account with your credit card. Then after a few days (it takes up to a few days for these deposits to appear in your bank account or on your credit card statement) then after a few days you go back to the www.paypal.com website and sign in. Then you click where it says this account is not yet confirmed. A screen will pop up that gives you 2 boxes to fill in. You then enter the numbers of the 2 small deposit amounts (two separate 2 digit numbers) that were deposited to your bank account or credit card. Now you have a working and confirmed PayPal account and can receive payments.

$$

[STEP 1]
Send, though PayPal, $1.00 to each email on the below list. Make the subject of the payment "Email List" and in the comments, write "PLEASE PUT ME ON YOUR EMAIL LIST." What you are doing is creating a service by this - and best of all you are not giving your address to anyone you do not know. THIS IS ABSOLUTELY LEGAL!! YOU ARE CREATING A SERVICE. Here are the latest PayPal e-mails on the e-mail lists:

#1)brittany...@excite.com

#2) mth...@renc.igs.net

#3) Mishav...@aol.com

#4) nike31...@aol.com

#5) careent...@hotmail.com

#6) jjrvn...@hotmail.com

www.paypal.com

Subject of Payment: ***Email List***

Comments: ***PLEASE PUT ME ON YOUR EMAIL LIST***

[STEP 2]
Now take the #1) email off the list that you see above, move the other addresses up one (6 becomes 5 & 5 becomes 4, etc) the put YOUR email address (the one used in your PayPal account) as #6) on the list. **MAKE SURE THE EMAIL YOU SUPPLY IS EXACTLY AS IT APPEARS IN YOUR

PAYPAL ACCOUNT**

[STEP 3]
Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups, message boards, etc. (I think there are close to 32,000 groups) All you need is 200, but remember, the more you post, the more money you make - as well as everyone else on the list! In this situation your job is to let as many people see this letter as possible. So they will make you and me reach!!!! You can even start posting the moment your email is confirmed. Payments will still appear in your PayPal account even while your bank account is being confirmed.

$$

DIRECTIONS ON HOW TO POST TO NEWSGROUPS/MESSAGE BOARDS.

[Step 1]
You do not need to re-type this entire letter to do your own posting. Simply put your CURSOR at the beginning of this letter and drag your CURSOR to the bottom of this document, and select 'copy' from the edit menu. This will copy the entire letter into your computer's temporary memory.

[Step 2]
Open a blank Notepad file and place your cursor at the top of the blank page. From the 'Edit' menu select 'Paste'. This will paste a copy of the letter into notepad so that you can add your email to the list.

[Step 3]
Save your new Notepad file as a .txt file. If you want to do your postings in different sittings, you'll always have this file to go back to.

[Step 4]
Use Netscape or Internet Explorer and try searching for various newsgroups, on-line forums, message boards, bulletin boards, chat sites, discussions, discussion groups, online communities, etc. EXAMPLE: go to any search engine like yahoo.com, google.com, altavista.com, excite.com, then search with subjects like "millionaire message board" or "money making message board" or "opportunity message board" or "money making discussions" or "business bulletin board" or "money making forum" etc. You will find thousands and thousands of message boards. Click them one by one then you will find the option to post a new message.

[Step 5]
Visit these message boards and post this article as a new message by highlighting the text of this letter and selecting 'Paste' from the 'Edit' menu. Fill in the Subject, this will be the header that everyone sees as they scroll thru the list of postings in a particular group, click the post message button. You're done with your first one! Congratulations! THAT'S IT!! All you have to do is jump to different

newsgroups and post away. After you get the hang of it, it will take about 30 seconds for each newsgroup! **REMEMBER, THE MORE NEWSGROUPS AND/OR MESSAGE BOARDS YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200** That's it! You will begin receiving money within days! **JUST MAKE SURE THE EMAIL YOU SUPPLY IS EXACTLY AS IT APPEARS ON PAYPAL.**

Have fun!

546. Re: Why the 4:1 or 9:1 baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 05:26:00 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e211f4$1_3@127.0.0.1>
Source record: 83934

Reg Edwards wrote:
> A choke balun, a single short length of transmission line wound on a ring or
> rod, is a different kettle of fish. Its range of impedances is unlimited.

The more I think about it, the more it seems likely that a common-mode
wave travels down the outside of the braid until it encounters the
choke impedance and is reflected, at least partially. That would
create common-mode standing waves. When the weather clears up, I
think I will see if the common-mode current goes through a maximum
and minimum up and down the coax.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

547. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 05:33:59 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e213d3$1_4@127.0.0.1>
Source record: 83936

Richard Clark wrote:

> Cecil Moore <w5dxp@hotmail.com> wrote:
>>I suspect you still don't know what I am talking about.
>
> Logic chips are a far cry from EM emissions, much less antennas.

Assuming the auto LEDs have three states, off, taillight, and
brakelight, that is taking data from three different input
sources and combining them into one time-shared output. That,
my friend, meets the definition of multiplexing even if only
trivially.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

548. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 05:36:43 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <10u454e64on7rad@corp.supernews.com>
Source record: 83935

Fractenna wrote:
> A radio telescope is a receive-only device. It is incapable of rendering
> anything sterile.
>
> A radar telescope--using a dish--can be dangerous and the EIRP can be
> megawatts. In this case, a number of health dangers apply. Fortunately those
> most likely to be exposed are the best informed, and I am not familiar with a
> single case of dangerous exposure.
>
> SETI has nothing to do with this.
>
> 73,
> Chip N1IR
According to a article I read sometime ago the people that built the
BWMEWS system in Greenland used to stand in front of the antenna and
warm up.

Dave WD9BDZ

549. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 05:37:53 UTC
From: "aunwin@insightbb.com"
Message-ID: <RwoEd.32785$wu4.20142@attbi_s52>
Source record: 83937
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Bob
The idea is to not mess up the lawn PLUS controlling the depth of the cut.
When the slicer is on the wheel the main weight of the barrow is directly
over the slicer thus making it easir to slice the lawn at a controled depth
reducing the possibility of jamming at a lower depth.
The whole idea is not to mess up the lawn and by taking some flower pots
from one end and changing them over at the other end will look like you are
working hard in the garden and shaming the neigbors in front of yjeir wifes.
Cheers
Art
I might add I used a tractor system when I did mine which also inserted the
wire but you just don't mess with an English lawn or you will lose the
impression of perfection
and where wifes are known to use treezers for the final touch.
Reminds me of a story where a yank admired a particular lawn
at some notable tourist site.
He asked the ground keeper how he could duplicate it when he got home,
Certainly the groundskeeper replied but firt you must start the lawn several
centeries ago!
"Bob Miller" <NOSPAM@neosoft.com> wrote in message
news:mmn3u0dvb7sdcij00e241h5k93tu2amid0@4ax.com...
> On Sun, 9 Jan 2005 22:51:14 +0000, "Ian White, G3SEK"
> <G3SEK@ifwtech.co.uk> wrote:
>
>>aunwin@insightbb.com wrote:
>>>get a mechanised pizza cutter to make the wire slots and place it on
>>>the wheel of a wheel barrow
>>
>>Art, you're a genius!
>>
>>SM2CEW's website describes a radial plough which attaches to the back of
>>a tractor, and can lay a full-sized Top Band radial in 2 minutes. I had
>>been lamenting the lack of a Volvo tractor (or the space to lay such
>>long radials) but a blade attached to a wheelbarrow might just do it...
>>or even to the lawn mower.
>
> I just checked one of my catalogs from a restaurant supply store
> (Bridge Kitchenware in New York City), and I notice they sell pizza
> cutters with wheels as big as 5 inches in diameter. If you used hose
> clamps to attach the handle of a pizza cutter to the end of a broom
> handle, I bet that would make a dandy lawn slit cutter for laying
> radials.
>

> Bob
> k5qwg
>
>

550. Re: hi swr low loss??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 05:44:15 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e21640$1_3@127.0.0.1>
Source record: 83938

ml wrote:

> i was reading some technical spec's on a ladder line feed.
>
> the numbers showed it had sorta hi swr around 5 yet the power loss was
> really low for it's run, like about 2watts
>
> this confuses me, i always thought that high swr automatically ment
> 'loss' so what is the piece i am missing?
>
> even stranger was the same equation as above but run for coax, which had
> lower swr but higher power lost, which i then attrib to something like
> the resistane of the coax?
>
> boy i am mixed up

The losses at HF are primarily proportional to current. Current is
inversely proportional to the characteristic impedance of the feedline,
i.e. I=V/Z0

So I=V/450 is nine times lower than I=V/50. Even with an "SWR around
5" on the ladder-line and 1:1 on the coax, V/450 is probably lower
than V/50. In fact, for the current to be the same on 450 ohm ladder-
line and 50 ohm coax (for the same power) The RMS voltage on the
ladder-line would need to be nine times the RMS voltage on the
coax. So you see ladder-line can tolerate a relatively high SWR
before its RMS current equals the RMS coax current.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

551. Re: J pole vs ground plane? Which better for base?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 05:47:18 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6254u09gth6ape5h1tdmlqc6snlrmgq8ld@4ax.com>
Source record: 83939

On 9 Jan 2005 15:16:39 -0800, stryped@hotmail.com wrote:
>Also, most ground planes I see are for 1/4 wave. Is a 5/8 wave better?
>What about a full wave?
>I plan on using 2 meters and maybe 440.

Perhaps you should check up on the Muhlenberg County Amateur Radio Club to see what they use - or as far away as the Owensboro Amateur Radio Club. Some of the hams in your neck of the woods should certainly have good advice about UHF/VHF, terrain, and local conditions.

73's
Richard Clark, KB7QHC

552. why are they yagi antennas on some bridges.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 05:48:57 UTC
From: dx440@webtv.net
Message-ID: <7478-41E21749-3@storefull-3276.bay.webtv.net>
Source record: 83942

does any body no why .i have seen a cross yagi type beam along the bridge .my guess will be to monitor the water level umm maybe not 73s not really a pirate ok only on the sea

553. Re: coax from cable company

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 05:52:11 UTC
From: W2RAC <rcook31@cfl.rr.com>
Message-ID: <4v54u0dgqf2iq1kucujsg2mj8ii81tshub@4ax.com>
Source record: 83940

On my links page I have some links on how to adapt normal so239 and N
ends onto this cable.
Can be used for TX just fine.
www.qsl.net/w2rac

On 7 Jan 2005 18:49:53 -0800, "art" <aunwin@insightbb.com> wrote:

>I was just given a coil of 7/8 hardline coax that I have not seen
>before.
>It has plastic discs inside to separate the core from the outer
>aluminum tube which I suppose uses air as the dielectric. Anybody got
>any info on this stuff
>and any advantages it may have over the normal hardline cable?
>Regards
>Art

554. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 05:56:34 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <mOoEd.345$8Z1.115@newssvr14.news.prodigy.com>
Source record: 83941

Yuri Blanarovich wrote:

>>Thierry wrote:
>>
>>>We know that during the emission of a radiotelescope (rare, for tests
>>>or to send SETI msg, Hi!), the radiation can sterilize people working
>>>in the dish.
>>
>>Nonsense - we know nothing of the sort.
>>
>>
>>--
>>73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
>
>
> No-nonsense, it is sense. RF exposure causes temporary sterility, kinda birth
> control. Too much RF can cook us.
>
> Yuri, K3BU.us
>

I wouldn't depend on it, Yuri. You'd have better luck with the
rhythm method.
73,
Tom Donaly, KA6RUH

555. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 05:59:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ct54u0pqafmg9bam8naa9l70hmo1haadau@4ax.com>
Source record: 83943

On Sun, 09 Jan 2005 23:33:59 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:
>Assuming the auto LEDs have three states ... That,
>my friend, meets the definition of multiplexing even if only
>trivially.
OK, a trivial sidebar of unrelated trinary logic: Yes/No/Maybe
Wasn't this Galileo's plea before the Holy See?

556. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 06:00:43 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e21a17$1_2@127.0.0.1>
Source record: 83944
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

jonny wrote:
> The man next door has a large erection in the back garden, which is
> unsightly and dangerous. !!
> Is This is the sort of complaint they send to the council, Mr Bean ??

Has anybody ever erected an antenna with slanted poles and
straight down guy wires? That would allow the antenna to
be as long as the lot.

```
----------------------------------------
|\ antenna /|
| \ / |
| \ / |
| \pole pole/ |guy
| \ / |
| \ / |
```

--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

557. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 06:18:05 UTC
From: news <news@care4free.net>
Message-ID: <J1pknlDl3h4BFwN7@care4free.net>
Source record: 83945
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Following up all these comments, I hadn't expected such a comprehensive and useful set of responses! Commiserations to the guy with "only" half an acre. If only my yard were anything like as big as that.

Many thanks to everyone. Now where do I find the nearest horse doctor ...?

--
73
Ian, G3NRW
g3nrw@yahoo.co.uk

558. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 06:25:05 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34ele0F48tahtU1@individual.net>
Source record: 83946
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Alun" <elektros@yahoo.com> wrote in message
news:Xns95D9E85E25BCelektrosmdonet@130.133.1.4...
>>
>> Plus, of course, the issue isn't so much the power as the current when
>> thinking of high resistance connections. The cranking current drawn via
>> a car battery terminal is around 100A. If the grease ingress caused a
>> high resistance connection, the car wouldn't start. In practice,
>> ungreased connections tend to 'go high' due to corrosion.
>
> It's not normally grease, it's vaseline, which is conductive. I don't know
> how vaseline behaves at RF, though. Maybe not too well?

If it isn't in the the current path (ie between the mating surfaces) and
also not acting as an unwanted path (eg between the earth clap and the
antenna), does it matter? OK, you may get some local absortion of RF energy,
but how much grease are you going to use? Not enough to absorb much RF and
the mass of grease (or vaseline) will be far less than other unquantified RF
conductors and absorbers in the vicinity.

You need to look at things like this in the context of the problem.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

559. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 08:25:24 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <1se4u0psn384gabt606b8mo8rcs5eu2ngr@4ax.com>
Source record: 83947
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On 10 Jan 2005 03:40:46 GMT, Alun <elektros@yahoo.com> wrote:

>Spike <Aero.Spike@Speed.invalid> wrote in
>news:v0l2u09gflm23fucgl7ooerv4vckf4g1it@4ax.com:
>
>> On Sun, 09 Jan 2005 15:52:22 GMT, David Edmonds
>> <dedmonds73@yahoo.co.uk> wrote:
>>
>>>Maybe it's the installation and not supplying that is under question -
>>>though typically our government bring in a silly law such as this -
>>>while they know that there is no right of entry to inspect.
>>
>> The problem arises when you try to sell your house. A prospective
>> purchaser's solicitor will ask for the certificates for any work you
>> admit to having been done post Jan 1.
>
>So you don't admit to any!

You got it in one ;-)

That's why people in-the-know are buying up twin-and-earth, and
electrical fittings (many of which have a moulding date-code on them)
just in case.....
--
from
Aero Spike

560. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 08:28:21 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <C0rEd.19166$yW5.3007@fed1read02>
Source record: 83948

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20050109183917.09863.00000012@mb-m18.aol.com...
> >
>>Thierry wrote:
>>>We know that during the emission of a radiotelescope (rare, for tests
>>>or to send SETI msg, Hi!), the radiation can sterilize people working
>>>in the dish.
>>
>>Nonsense - we know nothing of the sort.
>>
>>
>>--
>>73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
>
> No-nonsense, it is sense. RF exposure causes temporary sterility, kinda
> birth
> control. Too much RF can cook us.
>
> Yuri, K3BU.us
>

First, let's agree on nomenclature; a radio telescope is a receiving device only, it is not an emitter. Feel free to coin a new term for a highly directional, high power emitter used for astronomical research.

RF exposure can cause many things, from nothing sensible to boiling to carbonization to vaporization. It all depends on the RF power, the absorption and the time of exposure. Absorption is dependent on frequency and conductivity of the sample. Heating is dependent on the power, the absorption and the ability to transfer heat from the sample.

For instance, 14 GHz exposure will result in most radiation reflecting off a human body; move the exposure to 2.4 GHz, and the effective depth of heating will be several inches into the tissues. Move down to 960 MHz, and you will get even deeper heating. (Consider why industrial microwave ovens are at 960 MHz.)

Some body tissues are more exposed to RF, and, having only modest blood circulation, have a poor ability to transfer heat. Assuming you are male, those tissues at risk would include your earlobes, fingertips, nose, corneas, elbows, penis, scrotum, testicles and toes. Your earlobes, nose, fingers and scrotum have good circulation, so the blood cooling helps to protect them. Your toes are usually electrically close to the ground, and in a region of lower power density. Your penis is also well cooled and poorly exposed, unless RF exposure gives you a woodie. And who cares what happens

to your elbows? So that leaves your corneas and testicles as the most vulnerable tissues.

Canadian Safety Code 6 is a well-written document that will also teach you a lot about RF emissions, RF measurement and biological effects. It's limits are based on old ANSI C95.3-1991 work, which has been codified as IEEE STD C95.1-1999. The USA FCC also uses the IEEE standard. Both the IEEE and ANSI want to charge you for access, but Industry Canada courteously provides a free download at:

http://www.hc-sc.gc.ca/hecs-sesc/ccrpb/pdf/99ehd237.pdf

Thanks, Canada!

So we see that RF can do essentially nothing, it can sterilize, it can cook, it can kill, and it can destroy. It's all a matter of power, frequency, target and time.

Ed
wb6wsn

561. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 08:31:12 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <k7f4u0pqf42emu4a64vsmeaupv49a23g0j@4ax.com>
Source record: 83949
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

On Mon, 10 Jan 2005 00:00:43 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Has anybody ever erected an antenna with slanted poles and
>straight down guy wires? That would allow the antenna to
>be as long as the lot.

True. But in your design the antenna wire will be carrying serious
tension loads in addition to its own weight, and you would need aerial
components suitably rated for this.
--
from
Aero Spike

562. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 08:33:31 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <JbrEd.19167$yW5.13313@fed1read02>
Source record: 83950
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"jonny" <nospam@spam0junk.com> wrote in message
news:GofEd.8930$HA5.1029554@juliett.dax.net...
> The man next door has a large erection in the back garden, which is
> unsightly and dangerous. !!
> Is This is the sort of complaint they send to the council, Mr Bean ??
>

Is that Mr. Hugh E. Rection?

563. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 08:45:02 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <R3Q6kJIOCk4BFAP1@ifwtech.co.uk>
Source record: 83951
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Jack Painter wrote:

[...]

Jack is absolutely right about grease being non-conductive! It only keeps air and moisture out of the areas where the metal is already touching.

The same is true of the special conductive greases - the particles of metal provide the conductivity, and the grease only serves to seal around the contact surfaces.

Let's drive a stake through this stupid urban myth. Vaseline (pure soft petroleum jelly) is a mixture of hydrocarbons, and is a very close relative of polyethylene, polypropylene, beeswax and other well-known insulators.

Still don't believe it?

Creak... stomp stomp stomp... medicine cabinet... jar of Vaseline... stomp stomp stomp... multimeter... 20 megohm range... test prods... WELL OF COURSE it's bloody non-conductive!!!!!

Two touching greased surfaces still read >20M until you grind them together and force the grease out. And unless you DO force two greased metal surfaces together, they will be almost perfectly insulated from each other!

[...]

Just one further comment on Jack's posting:

>Because all transmitter antenna radials automatically become a part of
>the lightning protection system, the materials used should be the best
>you could afford, not the cheapest you can find. And the connections
>should likewise be the best possible.

In principle that is correct, but heavy-duty radials are not cost-effective for ham installations, because there are so many of them (even in a small system). Also, heavy-duty radials are not necessary for the main purpose, which is RF grounding for normal operation. For a ham installation, it seems much more realistic to install enough ground rods to qualify as a lightning ground in their own right (as if there weren't any radials at all). Then you can treat the radials as being purely for RF grounding. They will of course contribute to lightning grounding, but you don't have to rely on them for that purpose.

We're moving house, so I am just about to tear up the radial system here - and also pull out the 8ft ground rod that goes 5-6ft into groundwater. The next QTH will have much more space, so this discussion comes at just the right time.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

564. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 08:53:19 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <MnM9gSJ$Jk4BFAt$@ifwtech.co.uk>
Source record: 83952

Yuri Blanarovich wrote:
>>
>>Thierry wrote:
>>>We know that during the emission of a radiotelescope (rare, for tests
>>>or to send SETI msg, Hi!), the radiation can sterilize people working
>>>in the dish.
>>
>>Nonsense - we know nothing of the sort.
>>
>>
>>--
>>73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
>
>No-nonsense, it is sense. RF exposure causes temporary sterility, kinda birth
>control. Too much RF can cook us.

TOO MUCH certainly can, and of course there are many documented cases.

It's Thierry's use of "we know" that bugs me. Does anyone actually
know of any case where:

People have been working in (inside) a radiotelescope dish
AND
The transmitter has been on (most radiotelescopes don't even have one)
AND
They have become sterile?

No, I thought not. That's because it's pure techno-folklore.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

565. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 09:09:35 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <ung1gZKPZk4BFAot@ifwtech.co.uk>
Source record: 83953

Fractenna wrote:
>A radar telescope--using a dish--can be dangerous and the EIRP can be
>megawatts.

More techno-folklore.

The only heating power available is the power supplied up the feedline.
"Magnification" by the antenna is irrelevant, and EIRP figures only
serve to scare people.

Actually, the exact opposite is true. RF hazards are a function of power density (mW/cm^2 or W/m^2). The higher the antenna gain is, and the higher the far-field EIRP, the larger the aperture area must be and therefore the lower the power density becomes.

The most dangerous antenna is the smallest, for example, an open-ended waveguide or a small horn. That is because all the available power is concentrated into such a small area. Looking into an open waveguide is like looking into the barrel of a gun - you don't do it until you've made darn sure about the other end!

But if you take that horn outside and mount it on a big dish where it's hard to come anywhere near, it is immediately much safer. And the larger the dish is, the smaller the RF hazard becomes.

Bottom line: "EIRP" and "RF hazard" don't belong in the same sentence - except this one.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

566. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 09:23:46 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <hrf4u0lsn0q0ho1ksh0pncemkjnfu73a03@4ax.com>
Source record: 83955
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Sun, 9 Jan 2005 19:55:41 -0500, "Jack Painter" <223bthp@cox.net>
wrote:

>The reaction from battery acids, air and dirt are minimized with grease. But
>mechanics who grease the inside of the cable-clamp and outside of the
>battery post *before the connection is made* are not helping the electrical
>connection - they're applying preventative maintenance for idiots - who
>never clean their battery posts. Conductive paste is much more expensive
>than grease. Those who know what they are doing use the former.

Jack, many thanks for your informative post, it was certainly an
interesting read, and deserves a response.

I'd like to quote what Brian Reay said in reply to another poster on
this topic. He said "If it isn't in the current path (i.e. between the
mating surfaces) and also not acting as an unwanted path (eg between
the earth clamp and the antenna), does it matter? OK, you may get some
local absorption of RF energy, but how much grease are you going to
use? Not enough to absorb much RF and the mass of grease (or vaseline)
will be far less than other unquantified RF conductors and absorbers
in the vicinity.

You need to look at things like this in the context of the problem."

Now I don't doubt that everyone who has contributed is right in their
own way, but look at the wider problems of the Radio Amateur's
vertical antenna that demand attention. Only having one element, it
has to work against something, which in this case is the ground or
earth. To work with some efficiency it has to make good contact with
said ground or earth, and I did some calculations elsewhere showing in
simple terms how this can vary with the ohmage of the earth path.
Hence the advice about radials wires, cost, corrosion, and all the
other things.

But this antenna has to live outside and cope with wind, rain, snow,
ice, hail, frost, dog pee, etc, the whole nine yards, and this has to
be taken into account in the design and construction phases. What you
wind up with is a compromise, and everyone's choices will likely be
different. I doubt that anyone puts up a vertical antenna designed to
cope with a lightning strike - and very many antenna designs (such as
balanced dipoles) might have either no DC earth path or only a
fortuitous one - or even a 1000 ohm resistor as a static leakage
path....it just doesn't feature as a major topic.

Just to illustrate the point about what is incorporated in antenna designs, we've had some bad weather here in the UK over the last few days. One amateur on here had his wire doublet aerial anchored in a tree, which blew over in the wind. It pulled his aerial along, together with the length of feeder to his radio. Result was everything on the shelf was pulled off onto the floor. So although this amateur had an off-the-shelf design of aerial, he had no snap-line in place that would have broken when the tree went over. I'll bet there wasn't much lightning protection either.....

It comes down at the end of the day to the art of the possible. While a storm-proof, lightning-resistant, non-corroding, highly efficient vertical antenna could be designed and constructed, it would cost a fortune, and at the end of the day you'd still have 'only' a vertical antenna - which anyway is not an all-round solution to working other amateur stations.

I myself had a vertical antenna for some decades, the earth system of which was constructed along the lines I mentioned elsewhere. It withstood everything thrown at it, including the 'great storm' of 1987 with hurricane-force winds. On those occasions when licensed amateurs used it, there was negligible fall-off in the aerial current over its life-span, which told me that the earth system was not deteriorating. In the end the 'maintenance' of this aerial consisted of an occasional spray of WD40 (shock, horror) - but when finally dismantled, *all* the mating connections were bright and tight....it served me well and I don't think I could have asked for more.
--
from
Aero Spike

567. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 09:23:48 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <4ai4u01m62ibumslpj4m55dsulugt6m9n5@4ax.com>
Source record: 83954
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Mon, 10 Jan 2005 06:25:05 -0000, "Brian Reay"
<brian.reay@(spamstopper)bigfoot.com> wrote:

>You need to look at things like this in the context of the problem.

Brian,

I replied to Jack Painter elsewhere (q.v.) in which I quoted your
posting as part of my reply. Hope you don't mind.
--
from
Aero Spike

568. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 10:10:38 UTC
From: David J Windisch <davidw@copper.net>
Message-ID: <41e254e2_1@newsfeed.slurp.net>
Source record: 83956

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:ct54u0pqafmg9bam8naa9l70hmo1haadau@4ax.com...
SNIP
> Wasn't this Galileo's plea before the Holy See?

Nah. The Holy See wanted proof, which Galileo didn't have. WTHDTSHTDW
r.r.a.a.?

569. Resonant radials

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 10:12:33 UTC
From: David J Windisch <davidw@copper.net>
Message-ID: <41e25559_1@newsfeed.slurp.net>
Source record: 83957

Hi, all interested:

For a demo on the subject, catch N0FW's act on 160M.

73, Dave, N3HE

570. Re: WTB: DPDT latching relay

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 10:17:20 UTC
From: David J Windisch <davidw@copper.net>
Message-ID: <41e25676_5@newsfeed.slurp.net>
Source record: 83958

Hi, Evan:

Got one, but not NOS, simply "O", already mounted in a 3X4X5 aluminum box,
with 2 SO239s and 2 BNCs for r-f, and a 7-pin Amphenol connector for the
6VDC at about 1A relay coil
control signals. It's got that same gray-tan ceramic-like insulation as
the old Johnson coils, and it's about the same size as, or maybe a hair
bigger than, those non-latching relays you sold me a year or two ago.
Contacts are about 3/16ths, and they are silver. I can tell by the oxide
;o)

If you're interested, I'd trade it and $20 for one of those DPDT knife
switches you may still have.

73, Dave, N3HE

"K9SQG" <k9sqg@aol.com> wrote in message
news:20050109115247.28921.00000002@mb-m27.aol.com...
> Need that relay for antenna work. Forgot to mention that coil voltage
> isn't
> important, but prefer NOS relay.
>
> 73s,
>
> Evan

571. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 10:58:43 UTC
From: news <news@care4free.net>
Message-ID: <RyrSGlOt$l4BFwOE@care4free.net>
Source record: 83959
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

In message <hrf4u0lsn0q0ho1ksh0pncemkjnfu73a03@4ax.com>, Spike
<Aero.Spike@Speed.invalid> writes

> but when finally dismantled, *all* the
>mating connections were bright and tight....it served me well and I
>don't think I could have asked for more.

Remind me, Spike, what precautions you took to ensure all the
connections remained pristine.

--
73
Ian, G3NRW

572. Re: hi swr low loss??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 12:15:27 UTC
From: ml <m@di.net>
Message-ID: <m-8B869C.07153310012005@news.verizon.net>
Source record: 83960

In article <m-95F015.17065209012005@news.verizon.net>, ml <m@di.net>
wrote:

> i was reading some technical spec's on a ladder line feed.
>
> the numbers showed it had sorta hi swr around 5 yet the power loss was
> really low for it's run, like about 2watts
>
> this confuses me, i always thought that high swr automatically ment
> 'loss' so what is the piece i am missing?
>
>
> even stranger was the same equation as above but run for coax, which had
> lower swr but higher power lost, which i then attrib to something like
> the resistane of the coax?
>
>
> boy i am mixed up

hmm thanks to all that replyed, i guess i do understand what you
explaned, as it was straight fwd, but i am still feeling strange about
it, i'll run the numbers again, and if i don't 'see the light' perhaps
i can post it more specifically here again

guess the part that bothers me is having such a high swr in the ladder
and such a low loss, i followed mathmatically what youall said, that
adds up, but justt seems well i guess i just thought mentally that say a
5 or 6 swr had to mean some loss greaater than 4watts "100ft run
don't know why i thought that guess it depends "" on all the factors
you guys mentioned

cool thing we have modeling sofware

m

573. Re: Why the 4:1 or 9:1 baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 12:27:43 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <crtsbv$j7j$1@titan.btinternet.com>
Source record: 83961

"Cecil Moore" wrote
> Reg Edwards wrote:
> > A choke balun, a single short length of transmission line wound on a
ring or
> > rod, is a different kettle of fish. Its range of impedances is
unlimited.
>
> The more I think about it, the more it seems likely that a common-mode
> wave travels down the outside of the braid until it encounters the
> choke impedance and is reflected, at least partially. That would
> create common-mode standing waves. When the weather clears up, I
> think I will see if the common-mode current goes through a maximum
> and minimum up and down the coax.
> --
==========

Cec, its obvious even to a citizens bander that when the common-mode current and volts encounters the choke, or anything else, it is reflected. There's no need to risk your neck to detect it.

You won't prove anything anyway. Your particular antenna might not suffer from noticeable common-mode effects. And you can't deliberately inject a test signal at any place because it would upset circuit conditions.

Furthermore, the choke does NOT do what the old-wives say it does, ie., stop radiation from the line and prevent noise pick-up. It might even make matters worse. The choke merely shifts the volts and amps standing waves to other places along the line.

Have I upset the apple cart again?

Reg.

574. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 12:58:22 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <9su4u0l85lg3rjd7mdalvh5a3eo7jfdtee@4ax.com>
Source record: 83962
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Mon, 10 Jan 2005 10:58:43 GMT, news <news@care4free.net> wrote:

>In message <hrf4u0lsn0q0ho1ksh0pncemkjnfu73a03@4ax.com>, Spike
><Aero.Spike@Speed.invalid> writes
>
>> but when finally dismantled, *all* the
>>mating connections were bright and tight....it served me well and I
>>don't think I could have asked for more.
>
>Remind me, Spike, what precautions you took to ensure all the
>connections remained pristine.

The subject of great debate atm.....chassis grease. Some joints were
overtaped with Lasso tape. All got WD40'd at some time or another....
--
from
Aero Spike

575. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 13:17:07 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34feboF49ke07U1@individual.net>
Source record: 83965
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

It depends on each council - many of them have delegated
powers for minor permissions to the officers. If you google on such,
you find a large number of minutes of meetings when the
delegation was voted in.

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:ULK7L7ImLY4BFAs2@ifwtech.co.uk...
> Actually Planning Officers have more discretion about "minor
> developments" than they will readily admit to.

576. Re: Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 13:24:48 UTC
From: stryped@hotmail.com
Message-ID: <1105363488.058545.308700@c13g2000cwb.googlegroups.com>
Source record: 83963

Dan Richardson wrote:
> On 8 Jan 2005 18:16:02 -0800, stryped@hotmail.com wrote:
>
> >What type of verticle are you talking about, like a ground plane?
Would
> >a ground plane be a better antenna for 2meters?
>
> A ¼-wave groundplane, a ½-wave dipole, a J-Pole or 5/8-wave ground
> plane in most typical installations according to NEC analysis will
not
> vary more than a dB at best.
>
> Remember a receiving station can hardly detect a dB difference.
>
> Danny, K6MHE

So, about any omni is as good as another? Thanks for yoru info. Are
there any other advantages to building one or another?

577. Re: hi swr low loss??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 13:30:23 UTC
From: W9DMK <w9dmk@crosslink.net>
Message-ID: <41e2835f.3064837@news.crosslink.net>
Source record: 83964

Dear ml

Here is the part that no on this thread has come right out and talked about, and it is the answer to what is bothering you.

If you have an IDEAL transmission line - that is, one with no resistivity in the conductors and no dielectric loss in the insulation, then the SWR can be sky high, but there will be NO LOSSES.

SWR is nothing more than an unfortunate summation of voltages and currents that cause the voltages and currents to look more like a roller coaster than a straight line. Voltages and currents do not necessarily multiply to give power. Sometimes they multiply to zero - when the angle between them is 90 degrees. And that's what you have when there are no losses.

OK?

Bob, W9DMK, Dahlgren, VA
http://www.qsl.net/w9dmk

578. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 13:35:38 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34fer6F479i6eU1@individual.net>
Source record: 83966
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Mr.Reay shouts a lot.

"news" <news@care4free.net> wrote in message
news:J1pknlDl3h4BFwN7@care4free.net...
> Now where do I find the nearest horse doctor

579. Re: Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 13:42:53 UTC
From: stryped@hotmail.com
Message-ID: <1105364573.378017.51390@c13g2000cwb.googlegroups.com>
Source record: 83967

Why does this guy say his j po;e have 3 db gain over a ground plane?
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=4672&item=5743095997&rd=1

580. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 13:54:17 UTC
From: tox <nospam@nospamming.co.com>
Message-ID: <dOvEd.334$AY4.15@newsfe5-gui.ntli.net>
Source record: 83968
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"G1LVN" <google@g1lvn.org.uk> wrote in message
news:1105315670.028828.266290@c13g2000cwb.googlegroups.com...
>
> Can I insist that my neighbour removes the two 80 foot oak trees he has
> grown in his garden?
>

If your neighbour 'has grown' two 80 foot oak trees, he must have some
pretty spectacular manure...Probably, recycled 'Airy Bean' postings ;-)

Regards
tox

581. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 13:54:38 UTC
From: "Jock." <real_class_a2003@yahoo.fr>
Message-ID: <m725u09lv277vd8esjs169tunc61guitg4@4ax.com>
Source record: 83969
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On 10 Jan 2005 03:52:38 GMT, Alun <elektros@yahoo.com> wrote:

>It's not normally grease, it's vaseline, which is conductive. I don't know
>how vaseline behaves at RF, though. Maybe not too well?

What about silicon grease?

Jock.

--

"The graveyards are full of indispensable men."
- Charles de Gaulle (1890-1970)

582. Re: Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 14:06:33 UTC
From: Dan Richardson <dwr@mailinator.com>
Message-ID: <mu25u0l6fqilriu44vmvr2hmtvqn9ucs7i@4ax.com>
Source record: 83970

On 10 Jan 2005 05:42:53 -0800, stryped@hotmail.com wrote:

>Why does this guy say his j po;e have 3 db gain over a ground plane?
>http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=4672&item=5743095997&rd=1

Why don't you ask him?

583. Re: Tuning a ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 14:32:51 UTC
From: stryped@hotmail.com
Message-ID: <1105367571.870452.249430@c13g2000cwb.googlegroups.com>
Source record: 83971

Howard wrote:
> On 8 Jan 2005 18:19:19 -0800, stryped@hotmail.com wrote:
>
> >How would you go about tuning a ground plane antenna? Is a ground
plane
> >a good antenna for 2 meters/440?
> >
> >On another note, I have read about discone's being very broad
banded.
> >Are these the best antenna for scanner listening?
>
>
> A 1/4 wave ground plane is tuned by varying the length of the
> radiating element. Calculate the length, add a bit for good measure,
> build it then tune it by pruning the length (in small increments).
> The tuning can be done using an SWR analyzer or as most of us do,
with
> a radio and an SWR meter.
>
> Discone's do offer broadband coverage, though I don't have direct
> experience to say they actually work well, great or poorly. I do
know
> that for my scanner I use a 1/4 wave ground plane that was built for
> 220 MHz and it works fine - for a reference point though I am in an
> urban area and most of what I listen to is within a 15 mile radius.
> In order to decide what's best you should first establish your
> purpose; are you in a fringe area, do you need directional coverage,
> do you scan a wide range of frequencies or are your listening
> interests all in the same "neck of the RF spectrum"?

What if you are trying to tune a ground plane for the aircraft band? I
mean, you cant transmit on this. I just want to listen.

584. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 15:22:04 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <10u57d0a7tec3f@corp.supernews.com>
Source record: 83822

David J Windisch wrote:
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:ct54u0pqafmg9bam8naa9l70hmo1haadau@4ax.com...
> SNIP
>
>>Wasn't this Galileo's plea before the Holy See?
>
>
> Nah. The Holy See wanted proof, which Galileo didn't have. WTHDTSHTDW
> r.r.a.a.?
>
>
Actually the Holy See didn't want proof, Which Galileo DID have.

Dave N.

585. Re: coax from cable company

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 15:27:40 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <jf65u0p9d355nahdifu1o8ncmv4bp9rcvo@4ax.com>
Source record: 83823

On Sun, 9 Jan 2005 16:59:10 +0000, Ian Jackson
<IanJacksonRemoveThisBit@g3ohx.demon.co.uk> wrote:

|In message <01b2u0h3l7lefhdmmk3ju45m1jjtj3pv8b@4ax.com>, Wes Stewart
|<n7ws_@_yahoo.com> writes
|>On Sat, 08 Jan 2005 19:30:03 GMT, "Phil" <Phil@letskillspam.be> wrote:
|>
|>|
|>|"art" <aunwin@insightbb.com> wrote in message
|>|news:1105152593.809723.286370@c13g2000cwb.googlegroups.com...
|>|> I was just given a coil of 7/8 hardline coax that I have not seen
|>|> before.
|>|> It has plastic discs inside to separate the core from the outer
|>|> aluminum tube which I suppose uses air as the dielectric. Anybody got
|>|> any info on this stuff
|>|> and any advantages it may have over the normal hardline cable?
|>|> Regards
|>|> Art
|>|>
|>|
|>|Look on Google for "fused disc" AND "cable".
|>|
|>|Most Cable TV companies stopped using it when they started using frequencies
|>|above 300 MHz.
|>|
|>|This cable acts as a filter around 350 MHz.
|>
|>How so?
|>
|
|The discs have a higher dielectric constant than the air. There is
|therefore an increase of capacitance where there are (so the Zo dips
|slightly).

Okay, I guess this stuff doesn't use the compensation that I am
familiar with where either/or/both conductor diameters are modified to
account for the dielectric constant difference and the locations are
not at regular intervals.

Some of the missiles I've worked on used beaded coax at 10 Ghz.

|
|As the discs are located at regular interval, where this spacing is one
|wavelength, the repetitive higher capacitance adds up in parallel
|(although buffered somewhat by the losses loss of the cable). The effect

|is to produce a sharp suckout at the frequency of that wavelength (and
|at multiples thereof). This effect is also referred to as 'Structural
|Return Loss' (well, it's one of the causes). It sets the maximum
|frequency at which the coax can be used.

The "suck out" you refer to is primarily due to mismatch loss. For the case at hand (ham operation, i.e., a narrow-band system) I don't think this is an issue.

Wes

586. Re: Why the 4:1 or 9:1 baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 16:14:39 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e2a9fb$1_1@127.0.0.1>
Source record: 83824

Reg Edwards wrote:
> Cec, its obvious even to a citizens bander that when the common-mode current
> and volts encounters the choke, or anything else, it is reflected. There's
> no need to risk your neck to detect it.

Judging from some of the assertions on the subject, some people consider
common-mode current to be a series circuit problem, not a distributed
network problem.

> You won't prove anything anyway. Your particular antenna might not suffer
> from noticeable common-mode effects. And you can't deliberately inject a
> test signal at any place because it would upset circuit conditions.

I'm running a G5RV right now. All I have to do to gin-up common-mode
currents on at least one of the eight HF bands is to remove the choke
at the coax to ladder-line junction.

> Furthermore, the choke does NOT do what the old-wives say it does, ie., stop
> radiation from the line and prevent noise pick-up. It might even make
> matters worse. The choke merely shifts the volts and amps standing waves to
> other places along the line.

I use a choke to reduce common-mode problems in the shack and it does
that apparently by causing reflection of common-mode waves back toward
the antenna which, as you say, wouldn't decrease feedline radiation
between the choke and the antenna.

> Have I upset the apple cart again?

Where does the common-mode power go? :-) If differential reflected
power can be almost 100% delivered to the antenna by matching, how
about common-mode power? What happens to the common-mode reflected
power when it gets back to the antenna?
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

587. Re: Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 16:32:49 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e2ae3e$1_1@127.0.0.1>
Source record: 83825

stryped@hotmail.com wrote:
> So, about any omni is as good as another?

Nope, he didn't say that. Stacked phased vertical elements,
as exist in repeater antennas, can offer a tremendous amount
of gain over a 1/4WL ground plane. I have an old Comet 2x4MAX
and the gain over a 1/4WL ground plane is amazing.

The Diamond NR22L for 2m, is 97" long and is two elements of
5/8WL each and thus will have about 3 dB gain over a 1/4WL
ground plane, about the same as an Extended Double Zepp.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

588. In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 16:48:37 UTC
From: stryped@hotmail.com
Message-ID: <1105375717.775527.190100@c13g2000cwb.googlegroups.com>
Source record: 83826

I have seen some with 4 elements, some with 5. Also is the spacing between them important?

589. Re: Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 16:49:43 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e2b234$1_4@127.0.0.1>
Source record: 83827

stryped@hotmail.com wrote:
> Why does this guy say his j pole have 3 db gain over a ground plane?
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=4672&item=5743095997&rd=1

He might be making the J-Pole one-wavelength long which would
indeed result in about 3 dB of gain but at a relatively useless
take-off-angle.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

590. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 17:15:31 UTC
From: fractenna@aol.com
Message-ID: <20050110121531.09898.00000023@mb-m18.aol.com>
Source record: 83828

>>A radar telescope--using a dish--can be dangerous and the EIRP can be
>>megawatts.
>
>More techno-folklore.
>
>The only heating power available is the power supplied up the feedline.
>

Well, why don't you go on the catwalk at Arecibo and see if they'll let you try
a little experiment while the radar is on.

I am speaking from knowledge, my friend.

73,
Chip N1IR

591. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 17:29:18 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34fsb6F4atrk5U1@individual.net>
Source record: 83829
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Spike" <Aero.Spike@Speed.invalid> wrote in message
news:4ai4u01m62ibumslpj4m55dsulugt6m9n5@4ax.com...
> On Mon, 10 Jan 2005 06:25:05 -0000, "Brian Reay"
> <brian.reay@(spamstopper)bigfoot.com> wrote:
>
> >You need to look at things like this in the context of the problem.
>
> Brian,
>
> I replied to Jack Painter elsewhere (q.v.) in which I quoted your
> posting as part of my reply. Hope you don't mind.

Not at all, I'll send a bill for my normal fee ;-)
--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

592. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 17:42:16 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34ft3gF491lcjU1@individual.net>
Source record: 83830
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"news" <news@care4free.net> wrote in message
news:J1pknlDl3h4BFwN7@care4free.net...
> Following up all these comments, I hadn't expected such a comprehensive
> and useful set of responses! Commiserations to the guy with "only" half
> an acre. If only my yard were anything like as big as that.

Remember, you have to mow it. (or pay a gardener, of course).

> Many thanks to everyone. Now where do I find the nearest horse doctor

I'm told the down and outs also drink the stuff you are thinking of. I'm
sure one will be along before too long ;-)

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

593. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 18:41:15 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <27i5u0hue8fhdfp9rso7lkn9tjka53j2bg@4ax.com>
Source record: 83831

On Mon, 10 Jan 2005 09:09:35 +0000, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> wrote:
>Bottom line: "EIRP" and "RF hazard" don't belong in the same sentence -
>except this one.

Hi Ian,

Even more remote is EIRP and nearness (EIRP demands the source appear
to be a point so that all phases from the reflector add to produce the
EIRP).

Another boner is that "a radio telescope is a receive-only device."
This bald statement would consign Arecibo to the ash heap of radio
telescopes because it has a 430 MHz radar system built into it. I
suppose by the same logic, a radar is a receive-only device between
pulses.

73's
Richard Clark, KB7QHC

594. WANTED: B&W Portable Antenna AP-10A or AP-10B

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 18:53:15 UTC
From: ebohnn@gmail.com
Message-ID: <3ac0d1e7.0501101053.b7ff2e0@posting.google.com>
Source record: 83832

Hi,

I am looking for a B&W portable antenna model AP-10A or AP-10B.

If you have one available, please contact me at: ebohnn@gmail.com

I am located in the Denver area.

Thanks,

Bill

595. Re: WANTED: B&W Portable Antenna AP-10A or AP-10B

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 19:09:09 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <4lk5u015j316gg4v58pnnl76q73u371t03@4ax.com>
Source record: 83833

On 10 Jan 2005 10:53:15 -0800, ebohnn@gmail.com (Bill) wrote:

>Hi,
>
>I am looking for a B&W portable antenna model AP-10A or AP-10B.
>
>If you have one available, please contact me at: ebohnn@gmail.com
>
>I am located in the Denver area.
>
>Thanks,
>
>Bill

Used to have one -- good antenna for limited space.

AES sells 'em. You can also try the B&W web site.

Bob
k5qwg

596. Re: Does a j pole need grounding and/or a balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 19:19:35 UTC
From: dplatt@radagast.org
Message-ID: <10u5la7fu1j7u13@corp.supernews.com>
Source record: 83834

>http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=4672&item=5743095997&rd=1
>
>He might be making the J-Pole one-wavelength long which would
>indeed result in about 3 dB of gain but at a relatively useless
>take-off-angle.

I suspect that he's comparing a standard half-wave-radiator J-pole to
a typical "ground plane" antenna (a quarter-wave monopole, with one
set of quarter-wave radials, possibly tilted downwards for an
impedance match).

The latter sort of antenna falls somewhat short of behaving like
a true infinite-ground-plane antenna, as the radials are neither
horizontal nor infinite in extent. If I recall correctly, the
radiation pattern will be tilted upwards from the horizon by
a significant amount.

The J-pole will be close to 0 dBd, while the "ground plane" will
probably fall a few dB short of that figure out at the horizon.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

597. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 19:51:24 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34g4rhF4aeut9U1@individual.net>
Source record: 83835
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

Further thoughts....

In order to be able to both release and then fold up the
antenna, a mechanism based on two tendons, not too
dissimilar to the human knee and elbow joints would be
required.

Consider the flexing effect of each of your fingers - one
tendon at the back and one at the front.

And in order to maintain good RF contact across the joint,
perhaps the use of braid recovered from coax cable?

"Airy R. Bean" <me@privacy.net> wrote in message
news:34d0hjF489tamU1@individual.net...
> Could we conceive of an antenna, even possible an HF beam, that
> folds away into a single rod-like structure when not in use?

598. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 20:08:15 UTC
From: "Jock." <real_class_a2003@yahoo.fr>
Message-ID: <i4o5u0pn4u571clm5hi3fnelvjf5hj8a2p@4ax.com>
Source record: 83836
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

On Mon, 10 Jan 2005 13:54:17 GMT, "tox" <nospam@nospamming.co.com> wrote:

>
>"G1LVN" <google@g1lvn.org.uk> wrote in message
>news:1105315670.028828.266290@c13g2000cwb.googlegroups.com...
>>
>> Can I insist that my neighbour removes the two 80 foot oak trees he has
>> grown in his garden?
>>
>
>If your neighbour 'has grown' two 80 foot oak trees, he must have some
>pretty spectacular manure...Probably, recycled 'Airy Bean' postings ;-)

And has been around for some considerable time presumably.

Jock.

--

"The graveyards are full of indispensable men."
- Charles de Gaulle (1890-1970)

599. Re: In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 20:14:17 UTC
From: Dan Richardson <dwr@mailinator.com>
Message-ID: <0ln5u0trjip4dj7m5v4k17jif6ikdgljfr@4ax.com>
Source record: 83837

On 10 Jan 2005 08:48:37 -0800, stryped@hotmail.com wrote:

>I have seen some with 4 elements, some with 5. Also is the spacing
>between them important?

The ï¿½-wave groundplane was developed by George Brown 1938. Here's a partial quote from his book:

"... In our initial experiments we found that only two horizontal rods (ground rods) functioned as well as four. Many people from the Broadcast Sales organization came by to view our tests and they always expressed doubts as to the ability to radiate uniformly when only two ground rods were used. To quiet them, we used four ground rods for a while, thus stilling the criticism. When the antenna became really popular, we did not dare confess to our ruse."

There you have it from the inventor of the antenna.

73
Danny, K6MHE

600. Re: In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 20:27:34 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <ztmdnUWR6N2oeH_cRVn-iA@comcast.com>
Source record: 83838

"Dan Richardson" <dwr@mailinator.com> wrote in message
news:0ln5u0trjip4dj7m5v4k17jif6ikdgljfr@4ax.com...
> On 10 Jan 2005 08:48:37 -0800, stryped@hotmail.com wrote:
>
>>I have seen some with 4 elements, some with 5. Also is the spacing
>>between them important?
>
> The &#65533;-wave groundplane was developed by George Brown 1938. Here's a
> partial quote from his book:

[deleted]

Interesting... although while I'd certainly believe that, as far as Georbe Brown could tell in 1938 two radials performed just as well as four radials, I'd imagine that there is a measurable and simulatable different between the two systems!

(Hmm... I know... how about... three! ground radials? :-))

---Joel

601. Re: In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 20:43:21 UTC
From: "M. J. Powell" <mike@DeLeTe.pickmere.demon.co.uk>
Message-ID: <rrKhTBgpju4BFw54@pickmere.demon.co.uk>
Source record: 83844

In message <1105375717.775527.190100@c13g2000cwb.googlegroups.com>,
stryped@hotmail.com writes
>I have seen some with 4 elements, some with 5. Also is the spacing
>between them important?

A ground plane is an attempt to simulate the earth, with better
conduction, so the more radials the better.

Mike
--
M.J.Powell

602. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 21:12:44 UTC
From: SideBand <AINO8SPAMW@cac.net>
Message-ID: <gdCEd.7838$Vj3.7712@newssvr17.news.prodigy.com>
Source record: 83839

Cecil Moore wrote:
> Slightly off topic - I've seen a couple of new automobiles with
> time-multiplexed LED taillights. What would be the advantage of such a
> design in an automobile?
> --
> 73, Cecil, W5DXP
>
Aside from longer life of the LED's, nothing that I can see.

I've seen, in two Semi trucks, alot of RF coming from the
taillights/brake lights/turn signals/reverse lights... a .01uF cap from
the positive lead to ground has solved the problems on more than one
occasion in both my Ford and my Peterbilt.

-C

603. Yaesu FT-7800 E

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 21:23:34 UTC
From: Simon Smith <s.Smith@btinternet.com>
Message-ID: <crurol$32v$1@titan.btinternet.com>
Source record: 83840

Has anyone on the group got an opinion on this 2m-70cm mobile transceiver ?
I am almost ready to purchase one but thought I would ask for some feedback.
73's

John M3IIV
Cornwall - UK

604. Re: --------GET A LIFE, DOUGAY... YOU AKC's ARE NITWITS---------

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 21:23:38 UTC
From: Doug <N8WWM@arrl.net>
Message-ID: <41e2f25a$1@x-privat.org>
Source record: 83841
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

MY GRAND PAPPY WAS RUFUS

THEY CALL ME A DUFUS

MY PAPPY WAS BOBBY

I BOBBED ON HIS KNOBBY

"David Lawson" <David Lawson@Yahoo.com> wrote in message
news:41dc53b7$0$14514$8f2e0ebb@news.shared-secrets.com...
>
> "Psychiatrist to keyclowns"
>
> Aren't you n8wwm, "Psychiatrist to keyclowns"?
>
> Magic NetTrace results.
> Target :205.162.217.3
> Date:1/5/2005
>
> Domain Name: BUCKEYE-EXPRESS.COM
>
> Administrative Contact:
> Shryock, Paul (30011447I)
> Buckeye Cablevision, Inc.
> 5566 Southwyck Blvd
> Toledo, OH 43614-1576
> US
> (419) 724-9802 fax: (419) 724-7074
>
>
>
>

605. Re: Why the 4:1 or 9:1 baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 21:25:21 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <TIzKblYBLv4BFAd0@ifwtech.co.uk>
Source record: 83842

Cecil Moore wrote:
>
>> Furthermore, the choke does NOT do what the old-wives say it does, ie., stop
>> radiation from the line and prevent noise pick-up. It might even make
>> matters worse. The choke merely shifts the volts and amps standing waves to
>> other places along the line.
>
>I use a choke to reduce common-mode problems in the shack and it does
>that apparently by causing reflection of common-mode waves back toward
>the antenna which, as you say, wouldn't decrease feedline radiation
>between the choke and the antenna.
>
It isn't really helpful to think of it as "reflecting common-mode waves back". It is simply Ohm's law: a high series impedance reduces the amount of current that will flow.

Forcing a current minimum at one location on the feedline (usually right at the end of the coax) will change the current and voltage distribution not only on the feedline, but also on the antenna proper. The whole antenna-feedline system readjusts itself to take account of the fact that the choke impedance is there. This readjustment will also change the feedpoint impedance, so it's actually true that a balun will change the SWR of the antenna - it has become a different system that no longer involves the feedline.

Reg is right to say that the choke shifts the common-mode voltage and current standing waves to other places along the feedline. Depending on the location of the 'victim' equipment (TV etc) relative to those standing waves, the change can sometimes make RFI problems worse. Even so, a choke balun right at the end of the coax is almost always the right place to start. If it doesn't help, it may *still* make sense to leave it there, and try a second choke somewhere else as well.

A clip-on RF current probe can work wonders in showing you what really is happening.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

606. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 21:27:15 UTC
From: drbob92031@aol.com
Message-ID: <20050110162715.19458.00000029@mb-m06.aol.com>
Source record: 83843

I live in a "no antenna" gated community. So I use a vert. (removable) for 20 M. The radials are simply laid on the ground and they are insulated telephone wire. (I had plenty), they are twisted together at the base of the antenna and connected to the braid with an aligator clip. Real high tech here. But I get out all I want.(K.I.S.S.) All this with 100W and an old HW100.
Bob WA2EAW (retried in FL.)

607. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 21:44:44 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <TYwKv9ZMdv4BFAcQ@ifwtech.co.uk>
Source record: 83845

Fractenna wrote:
>>>A radar telescope--using a dish--can be dangerous and the EIRP can be
>>>megawatts.
>>
>>More techno-folklore.
>>
>>The only heating power available is the power supplied up the feedline.
>>
>
>Well, why don't you go on the catwalk at Arecibo and see if they'll let
>you try a little experiment while the radar is on.
>

It doesn't matter whether it's Arecibo or just an open waveguide, you cannot ever be heated by more energy than is being supplied by the transmitter.

The transmitter supplies all the available energy - there is no other energy source involved - and it all comes out of the feedhorn. If you're on the catwalk close to the feedhorn, and if there is enough energy, then of course you'll feel it.

But that interaction involves only the transmitter, the feedhorn and you. The dish and its gain have absolutely nothing to do with it. If the dish were completely removed, you would still experience exactly the same.

>I am speaking from knowledge, my friend.

I know that you possess the knowledge; but that's not where you're speaking from.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

608. Re: In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 21:59:04 UTC
From: stryped@hotmail.com
Message-ID: <1105394344.328448.206770@c13g2000cwb.googlegroups.com>
Source record: 83846

M. J. Powell wrote:
> In message <1105375717.775527.190100@c13g2000cwb.googlegroups.com>,
> stryped@hotmail.com writes
> >I have seen some with 4 elements, some with 5. Also is the spacing
> >between them important?
>
> A ground plane is an attempt to simulate the earth, with better
> conduction, so the more radials the better.
>
> Mike
> --
> M.J.Powell

Is that a joke?

On another note, why are some of the radials bent to a 45 degree angle
and some are not?

609. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 22:05:25 UTC
From: Philip de Cadenet <Philstheboss@thebbc.fslife.co.uk>
Message-ID: <Loi8XvDlwv4BFwMz@philstheboss.freeserve.co.uk>
Source record: 83847
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Ian,

>Some practical questions:
>
>~~~~~~~~~~~~~~~~~~~~~~~~
>1. What is the "best" type of wire (or braid) to use for the radials?
>
>2. How do I bond the radials together? (I guess my 15-watt soldering
>iron won't be up to the job ...).
>
>3. What kind of solder and flux should I use?
>
>4. What precautions should I take to minimise the effects of corrosion
>at the joints?
>
>5. How deep should I bury the radials? Two inches, six inches, 12
>inches?
>
>6. Is there anything else I should know?
____

Some ideas and answers here:

www.amgroundsystems.com
--
Philip de Cadenet G4ZOW
Transmitters 'R' Us
http://www.transmittersrus.com

610. Re: why are they yagi antennas on some bridges.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 22:06:00 UTC
From: cpierce@ust.net
Message-ID: <cpierce-1001051606020001@user-37kac4v.dialup.mindspring.com>
Source record: 83848

USGS installs these monitor sites for the water level, temp etc.....

You are correct

C.

In article <7478-41E21749-3@storefull-3276.bay.webtv.net>, dx440@webtv.net
(Free radio) wrote:

> does any body no why .i have seen a cross yagi type beam along the
> bridge .my guess will be to monitor the water level umm maybe not
> 73s not really a pirate ok only on the sea

611. Re: Why the 4:1 or 9:1 baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 22:14:52 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e2fe67$1_2@127.0.0.1>
Source record: 83849

Ian White, G3SEK wrote:
> It isn't really helpful to think of it as "reflecting common-mode waves
> back". It is simply Ohm's law: a high series impedance reduces the
> amount of current that will flow.

True for a bench circuit. Not necessarily true for a distributed
network. In fact, a choke that makes the outside braid of a
transmission look like an open circuit (best case), makes it look
like a short circuit 1/4WL back from that point. If the choke is
placed at an existing current minimum point, it will have little
effect.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

612. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 22:18:28 UTC
From: David Edmonds <dedmonds73@yahoo.co.uk>
Message-ID: <UaDEd.591$SN.320@newsfe6-gui.ntli.net>
Source record: 83850
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

Airy R.Bean wrote:

> And in order to maintain good RF contact across the joint,
> perhaps the use of braid recovered from coax cable?

Be nice to see the effect the weather would have on the braid though
after a few months - turn it nice and black.

David.

613. Re: hi swr low loss??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 22:46:24 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <4BDEd.4345$u47.3934@trnddc09>
Source record: 83851

"ml" <m@di.net> wrote in message
news:m-8B869C.07153310012005@news.verizon.net...
> In article <m-95F015.17065209012005@news.verizon.net>, ml <m@di.net>
> wrote:
>
>> i was reading some technical spec's on a ladder line feed.
>>
>> the numbers showed it had sorta hi swr around 5 yet the power loss was
>> really low for it's run, like about 2watts
>>
>> this confuses me, i always thought that high swr automatically ment
>> 'loss' so what is the piece i am missing?
>>
>>
>> even stranger was the same equation as above but run for coax, which had
>> lower swr but higher power lost, which i then attrib to something like
>> the resistane of the coax?
>>
>>
>> boy i am mixed up
>
> hmm thanks to all that replyed, i guess i do understand what you
> explaned, as it was straight fwd, but i am still feeling strange about
> it, i'll run the numbers again, and if i don't 'see the light' perhaps
> i can post it more specifically here again
>
> guess the part that bothers me is having such a high swr in the ladder
> and such a low loss, i followed mathmatically what youall said, that
> adds up, but justt seems well i guess i just thought mentally that say a
> 5 or 6 swr had to mean some loss greaater than 4watts "100ft run
> don't know why i thought that guess it depends "" on all the factors
> you guys mentioned
>
> cool thing we have modeling sofware
>
>
> m

m

Do you have access to a ARRL habdbook?? I see a very informative graph
on page 16-14 of the 1990 ARRL handbook that clearly indicates how
transmission line loss and VSWR are related.

Jerry

614. Re: In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 23:10:27 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <meudnf3ui9z5ln7cRVn-iw@comcast.com>
Source record: 83852

<stryped@hotmail.com> wrote in message
news:1105394344.328448.206770@c13g2000cwb.googlegroups.com...
> Is that a joke?

No, in most implementations, ground radials are very much attempting to simulate a solid, perfectly conducting plane under the antenna. Given enough of them, they do a reasonably good job.

> On another note, why are some of the radials bent to a 45 degree angle
> and some are not?

As you go to few and fewer radials, the 'pull' of the 'simulated' ground becomes 'weaker' in a sense and the radiation pattern of an antenna with horizontal radials tends to have its maximum at an angle significantly above the horizontal plane. By angling the radials downward, the radiation pattern is pulled back downward and the maximum radiation is again more or less horizontal.

(If you don't like this 'maybe intuitive to me and not at all to you' explanation, you can simulate an antenna with radials in, e.g., ezNEC and see what the actual results are...)

---Joel Kolstad

615. Re: why are they yagi antennas on some bridges.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 23:14:51 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <dradnQRroob2kX7cRVn-sg@comcast.com>
Source record: 83853

"C." <cpierce@ust.net> wrote in message
news:cpierce-10010516060200001@user-37kac4v.dialup.mindspring.com...
> USGS installs these monitor sites for the water level, temp etc.....

They usually seem to be pointed up into the sky (towards some satellite); is there information available about these satellites, their downlink frequencies, format of the data, etc.?

616. Re: In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 23:29:27 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <crv34n$95o$1@mail.specsol.com>
Source record: 83854

stryped@hotmail.com wrote:

> M. J. Powell wrote:
> > In message <1105375717.775527.190100@c13g2000cwb.googlegroups.com>,
> > stryped@hotmail.com writes
> > >I have seen some with 4 elements, some with 5. Also is the spacing
> > >between them important?
> >
> > A ground plane is an attempt to simulate the earth, with better
> > conduction, so the more radials the better.
> >
> > Mike
> > --
> > M.J.Powell

> Is that a joke?

I'd call it poorly put, but not a joke.

> On another note, why are some of the radials bent to a 45 degree angle
> and some are not?

To get a better match to 50 Ohms.

--
Jim Pennino

Remove -spam-sux to reply.

617. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 23:34:21 UTC
From: Thierry <.>
Message-ID: <41e31107@news.vo.lu>
Source record: 83855

"Fractenna" <fractenna@aol.com> wrote in message
news:20050109184830.09470.00000011@mb-m13.aol.com...
> A radio telescope is a receive-only device. It is incapable of rendering
> anything sterile.
>
> A radar telescope--using a dish--can be dangerous and the EIRP can be
> megawatts. In this case, a number of health dangers apply. Fortunately
those
> most likely to be exposed are the best informed, and I am not familiar
with a
> single case of dangerous exposure.
>
> SETI has nothing to do with this.

Yes it does.
My post states in the case of the RT is used (was sued) to send SETI msg,
like to Arecibo and others.
Please believe, I know what I say.
http://www.astrosurf.com/lombry/menu-seti.htm

Thierry

>
> 73,
> Chip N1IR

618. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 23:37:48 UTC
From: Thierry <.>
Message-ID: <41e311d6$1@news.vo.lu>
Source record: 83856

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:ung1gZKPZk4BFAot@ifwtech.co.uk...
> Fractenna wrote:
> >A radar telescope--using a dish--can be dangerous and the EIRP can be
> >megawatts.
>
> More techno-folklore.
>
> The only heating power available is the power supplied up the feedline.
> "Magnification" by the antenna is irrelevant, and EIRP figures only
> serve to scare people.
>
> Actually, the exact opposite is true. RF hazards are a function of power
> density (mW/cm^2 or W/m^2). The higher the antenna gain is, and the
> higher the far-field EIRP, the larger the aperture area must be and
> therefore the lower the power density becomes.

Ok Ian
I think that I can compute it now. I know the gain and MW sent by some RT,
the RF limits for the health, etc.

Thanks.
Thierry, ON4SKY

>
> The most dangerous antenna is the smallest, for example, an open-ended
> waveguide or a small horn. That is because all the available power is
> concentrated into such a small area. Looking into an open waveguide is
> like looking into the barrel of a gun - you don't do it until you've
> made darn sure about the other end!
>
> But if you take that horn outside and mount it on a big dish where it's
> hard to come anywhere near, it is immediately much safer. And the larger
> the dish is, the smaller the RF hazard becomes.
>
> Bottom line: "EIRP" and "RF hazard" don't belong in the same sentence -
> except this one.
>
>
> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

619. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 23:39:29 UTC
From: Thierry <.>
Message-ID: <41e3123b$1@news.vo.lu>
Source record: 83857

"Me" <Me@shadow.orgs> wrote in message
news:Me-BFD533.11180409012005@netnews.worldnet.att.net...
> In article <41e1316f@news.vo.lu>, "Thierry" <-> wrote:
>
> > We know that during the emission of a radiotelescope (rare, for tests or
to
> > send SETI msg, Hi!), the radiation can sterilize people working in the
dish.
>
> If "We" know all this, "We" should not be in the dish when these test
> are being conducted. Duhhhh.....
>

remark very useful to answer the question

> Me

620. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 23:43:56 UTC
From: Thierry <.>
Message-ID: <41e31345$1@news.vo.lu>
Source record: 83859

"Ed Price" <edprice@cox.net> wrote in message
news:C0rEd.19166$yW5.3007@fed1read02...
>
> "Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
> news:20050109183917.09863.00000012@mb-m18.aol.com...
> > >
> >>Thierry wrote:
>...

> Canadian Safety Code 6 is a well-written document that will also teach you
a
> lot about RF emissions, RF measurement and biological effects. It's limits
> are based on old ANSI C95.3-1991 work, which has been codified as IEEE STD
> C95.1-1999. The USA FCC also uses the IEEE standard. Both the IEEE and
ANSI
> want to charge you for access, but Industry Canada courteously provides a
> free download at:

Thanks. Note that my references at
http://www.astrosurf.com/lombry/qsl-em-radiation3.htm
list a C95.3-2002 now.

Thierry
>
> http://www.hc-sc.gc.ca/hecs-sesc/ccrpb/pdf/99ehd237.pdf
>
> Thanks, Canada!
>
> So we see that RF can do essentially nothing, it can sterilize, it can
cook,
> it can kill, and it can destroy. It's all a matter of power, frequency,
> target and time.
>
> Ed
> wb6wsn
>
>
>

621. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 23:47:54 UTC
From: Nimrod <nospamfor@me.com>
Message-ID: <34gigvF4arufcU1@individual.net>
Source record: 83858
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"David Edmonds" <dedmonds73@yahoo.co.uk> wrote in message
news:UaDEd.591$SN.320@newsfe6-gui.ntli.net...
> Airy R.Bean wrote:
>
> > And in order to maintain good RF contact across the joint,
> > perhaps the use of braid recovered from coax cable?
>
> Be nice to see the effect the weather would have on the braid though
> after a few months - turn it nice and black.

Another one of Gareth's not so good ideas.

Gareth, has ANYTHING of yours even worked?

622. Re: radiotelescope and sterility...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 23:51:57 UTC
From: Thierry <.>
Message-ID: <41e31526$1@news.vo.lu>
Source record: 83861

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:MnM9gSJ$Jk4BFAt$@ifwtech.co.uk...
> Yuri Blanarovich wrote:
> >>
>...
> It's Thierry's use of "we know" that bugs me. Does anyone actually
> *know* of any case where:
>
> People have been working in (inside) a radiotelescope dish
> AND
> The transmitter has been on (most radiotelescopes don't even have one)
> AND
> They have become sterile?
>
> No, I thought not. That's because it's pure techno-folklore.
>

Where is the problem ? Folkore ? Non sense.
You never work with maths ?, you know, these kind of relaiton useless... on
the air.
but without which there hadn't had antennas either.

Why are you all so off-subject ? Is this so hard to answer a question.
It is more simple maybe to be involved in controversy... pfff

>
> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

623. Copper vs Stainless?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-10 23:52:09 UTC
From: Glenn Ashmore <gashmore@cox.net>
Message-ID: <HyEEd.16418$EG1.2863@lakeread04>
Source record: 83860

Pardon an ignorant sailor butting in here but I have a question about antenna material. I have been experimenting with home brew QFH antennas to receive 137.5 Mhz weather satellite images. I built one out of copper tubing that works great. I can get good pictures from Hudson Bay to Puerto Rico. Then I tried to duplicate it with stainless tubing to use on the boat. The two antennas and baluns are identical but the stainless version has less than half the range. Any suggestions on how to modify or tune it to improve reception?

Or, failing that, what effect would powder coating the copper one have?

--
Glenn Ashmore

I'm building a 45' cutter in strip/composite. Watch my progress (or lack there of) at: http://www.rutuonline.com
Shameless Commercial Division: http://www.spade-anchor-us.com

624. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 00:06:13 UTC
From: James Bond <justmereally@hotmail.com>
Message-ID: <crv59lnsg1@sparta.btinternet.com>
Source record: 83862
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

do i have this read right?

you're planning to go down to the cemetry, dig up the dead bodies and chop off their legs and arms so you can use their two tendons for raising and lowering your mast?

great stuff beanie, you've surpassed yourself this time!

dr. x

> In order to be able to both release and then fold up the
> antenna, a mechanism based on two tendons, not too
> dissimilar to the human knee and elbow joints would be
> required.

625. Virus warning (was: Bill Gates as he presents the Windows Media Player system crash)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 00:12:43 UTC
From: David Ryeburn <ryeburn@sfu.caz>
Message-ID: <ryeburn-73A2FA.16124310012005@morgoth.sfu.ca>
Source record: 83863
Cross-posted to: rec.outdoors.national-parks,rec.outdoors.camping,alt.rec.hiking,rec.climbing,comp.sys.mac.misc,comp.sys.mac.system,comp.sys.mac.hardware.storage,rec.radio.amateur.antenna,alt.autos.subaru

Norton AntiVirus 9.0.3 says:

File: BillGates.mov.exe
Status: Infected
Comment: Contains a strain of Backdoor.Sdbot

David, whose Mac ignores such things, but feels that using NAV helps
keep it from acting as a Typhoid Mary

--
David Ryeburn
ryeburn@sfu.caz
To send e-mail, use "ca" instead of "caz".

626. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 00:29:36 UTC
From: Whatever <SHWJ123@blueyonder.co.uk>
Message-ID: <Q5FEd.99190$48.73506@fe1.news.blueyonder.co.uk>
Source record: 83864
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Why not use a roll of wire netting and bury that.

???
"news" <news@care4free.net> wrote in message
news:JUq0fdFoZR4BFwPh@care4free.net...
> I need to improve my ground system, and am thinking of burying some
> radials under the lawn.
>
> [I realise this is not the most efficient way to do it from an
> electrical point of view, but the alternative approach of installing the
> radials above the ground is completely out of the question, for
> aesthetic reasons].
>
> Some practical questions:
>
> ~~~~~~~~~~~~~~~~~~~~~~~~
> 1. What is the "best" type of wire (or braid) to use for the radials?
>
> 2. How do I bond the radials together? (I guess my 15-watt soldering
> iron won't be up to the job ...).
>
> 3. What kind of solder and flux should I use?
>
> 4. What precautions should I take to minimise the effects of corrosion
> at the joints?
>
> 5. How deep should I bury the radials? Two inches, six inches, 12
> inches?
>
> 6. Is there anything else I should know?
>
> ~~~~~~~~~~~~~~~~~~~~~~~~
>
> We are on heavy clay soil that alternates between being very dry and
> very wet.
>
> My main interest is in the lower hf bands (40/80/160) and possibly
> 136kHz.
>
> --
> 73
> Ian, G3NRW
> g3nrw@yahoo.co.uk

>

627. Re: EM emissions from auto taillights.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 00:34:14 UTC
From: David J Windisch <davidw@copper.net>
Message-ID: <41e31f4a$1_3@newsfeed.slurp.net>
Source record: 83865

Actually, Dave, what I should have written, is that Isaac Newton later provided the proof Galileo needed to support his hypothesis.

Further, it was to the Holy Office, at Rome, not to the Holy See, that Galileo presented himself.

Now, what is that proof of which you write?

73, Dave, N3HE

"David G. Nagel" <nagel@core.com> wrote in message news:10u57d0a7tec3f@corp.supernews.com...
SNIP
> Actually the Holy See didn't want proof, Which Galileo DID have.
>
> Dave N.

628. Re: why are they yagi antennas on some bridges.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 01:50:12 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns95DAB582FFFB6spectrumhogstarbandn@207.106.92.175>
Source record: 83866

> They usually seem to be pointed up into the sky (towards some
> satellite); is there information available about these satellites,
> their downlink frequencies, format of the data, etc.?
>

There are a zillion remote weather stations all over the country.
Many are for specific purpose such as providing info for Fire weather,
snow pack levels, and as you have seen, stream flow guages for water
management and flood control. Some of the remote weather stations
(RAWS) can be seen listed at:

http://raws.boi.noaa.gov/rawsidx.html

Do a Google search on "RAWS" weather data. Also, stream flow
stations and remote snow pack stations can often be found on your local
State's water management department.

Bottom line answer to your question, YES, the data you probably
would like to see is available on the Internet.

Ed K7AAT

629. Re: In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 01:55:07 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns95DAB65867769spectrumhogstarbandn@207.106.92.175>
Source record: 83867

> Interesting... although while I'd certainly believe that, as far as
> Georbe Brown could tell in 1938 two radials performed just as well as
> four radials, I'd imagine that there is a measurable and simulatable
> different between the two systems!
>
> (Hmm... I know... how about... three! ground radials? :-))

Actually, for decades, I have built and used 3 radial ground plane antennas for 2M and for 440. I simply used brass welding rods and SO-239 connectors to construct them. The reason I used 3 radials.... I too was under the misconception that 4 were best, but I had a slight difficulty adding the 4th radials to my SO-239s so I stuck with three. Incidently, I found the best 50 ohm match was made when I bent the radials down about 45 degrees. They worked extremely well when properly tuned and stood up to some pretty heavy weather, too.

Ed

630. Re: why are they yagi antennas on some bridges.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 01:55:51 UTC
From: cpierce@ust.net
Message-ID: <cpierce-1001051955520001@10.0.2.2>
Source record: 83868

I have never asked when the tech was working on the system, original install or serviceing it. I have only stoped to check on him while at work. In the days of this we have to watch out for the homeland security.

He stated that it worked off of low oberting satatlites but as far as frequency range I never asked. Drive by and chck with a frequency counter and see what comes up. It will be all packet data, with short transmit times.

C.

In article <dradnQRroob2kX7cRVn-sg@comcast.com>, "Joel Kolstad" <JKolstad71HatesSpam@Yahoo.Com> wrote:

> "C." <cpierce@ust.net> wrote in message
> news:cpierce-1001051606020001@user-37kac4v.dialup.mindspring.com...
> > USGS installs these monitor sites for the water level, temp etc.....
>
> They usually seem to be pointed up into the sky (towards some satellite); is
> there information available about these satellites, their downlink
> frequencies, format of the data, etc.?

631. LET'S HELP EACH OTHER MAKE MONEY

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 02:51:56 UTC
From: jjrvn@hotmail.com
Message-ID: <1105411916.879025.204210@f14g2000cwb.googlegroups.com>
Source record: 83869
Cross-posted to: rec.sport.billiard, rec.arts.sf.written.robert-jordan, rec.models.rc.air, rec.pets.dogs.behavior, rec.radio.amateur.antenna

I'm sure you've read these letters asking you to send $1 to six different addresses. Putting your home address or mailing address on the internet can be risky, but through PayPal all you have to provide is your email address. It's safe and easy. Just go to www.paypal.com and set up your FREE account! No credit card is needed. I am not a gullible person and have never trusted things like this, but I gave it a try. Hey it's only $6. I figured at least 6 people would respond out of the millions of people that use the internet. You should give it a try too! You have nothing to lose, and thousands to gain! Read on for the letter that I found (of course, I added my PayPal e-mail on #6)...

HOW TO TURN $6 INTO $6,000+!!! THIS REALLY CAN MAKE YOU EASY MONEY!!! IT WORKS!!! BUT YOU HAVE TO FOLLOW IT TO THE LETTER FOR IT TO WORK!!!! A little while back, I was browsing through newsgroups, just like you are now and came across an article similar to this that said you could make thousands of dollars within weeks with only an initial investment of $6.00! So I thought, "Yeah, right, this must be some kind of scam" but like most of us, I was curious, so I kept reading. Anyway, it said that you send $1.00 though PayPal to each of the emails stated in the article. You then place your own email address in the bottom of the list at #6, and post the article in at least 200 news groups. (There are thousands) No catch. That was it. So after thinking it over, and talking to few people first, I thought about trying it. I figured what have I got to lose except $6.00, right? Like most of us I was a little skeptical and a little worried about the legal aspects of it. It follows the same regulations as the "mailed chain letters, which according to the U.S. Post Office (1-800-725-2161) is indeed legal! Then I invested the measly $6.00. Well GUESS WHAT!!? Within 7 days, I started getting money in my PayPal account! I was shocked! I figured it would end soon, but the money just kept coming in. In my first week, I made about $20.00. By the end second week I had made a total over $1,200.00!!! In the third week I had over $10,000.00 and it's still growing. This is now my fourth week and I have made a total of just over $36,000.00 and it's still coming in rapidly. It's Certainly worth $6.00. I have spent more than that on the lottery!! Let me tell you how this works and most importantly, why it works? Also, make sure you print a copy of this article now, so that you can get the information off of it as you need it.

$$

REQUIREMENTS: You must have a confirmed PayPal account. If you do not have a PayPal account you can go to www.paypal.com and follow the

instructions to set up a free account. In order to place the initial $6 into your account, you will have to confirm your bank account with PayPal (which may take a few days). PayPal is 100% secure and is used my millions of people world wide. Confirming a www.paypal.com account simply means (1) PayPal will first ask you to confirm the email you used to sign up your PayPal account by sending you an email with a link for you to click to that email. As soon as you click that link your email is confirmed. (2) PayPal will then make two small deposits into your bank account if you set up your PayPal account with a checking or savings bank account. Or PayPal will make two small deposits to your credit card if you set up your PayPal account with your credit card. Then after a few days (it takes up to a few days for these deposits to appear in your bank account or on your credit card statement) then after a few days you go back to the www.paypal.com website and sign in. Then you click where it says this account is not yet confirmed. A screen will pop up that gives you 2 boxes to fill in. You then enter the numbers of the 2 small deposit amounts (two separate 2 digit numbers) that were deposited to your bank account or credit card. Now you have a working and confirmed PayPal account and can receive payments.

$$

[STEP 1]
Send, though PayPal, $1.00 to each email on the below list. Make the subject of the payment "Email List" and in the comments, write "PLEASE PUT ME ON YOUR EMAIL LIST." What you are doing is creating a service by this - and best of all you are not giving your address to anyone you do not know. THIS IS ABSOLUTELY LEGAL!! YOU ARE CREATING A SERVICE. Here are the latest PayPal e-mails on the e-mail lists:

#1)brittany...@excite.com

#2) mth...@renc.igs.net

#3) Mishav...@aol.com

#4) nike31...@aol.com

#5) careent...@hotmail.com

#6) jjrvn...@hotmail.com

www.paypal.com

Subject of Payment: ***Email List***

Comments: ***PLEASE PUT ME ON YOUR EMAIL LIST***

[STEP 2]
Now take the #1) email off the list that you see above, move the other addresses up one (6 becomes 5 & 5 becomes 4, etc) the put YOUR email address (the one used in your PayPal account) as #6) on the list. **MAKE SURE THE EMAIL YOU SUPPLY IS EXACTLY AS IT APPEARS IN YOUR

PAYPAL ACCOUNT**

[STEP 3]
Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups, message boards, etc. (I think there are close to 32,000 groups) All you need is 200, but remember, the more you post, the more money you make - as well as everyone else on the list! In this situation your job is to let as many people see this letter as possible. So they will make you and me reach!!!! You can even start posting the moment your email is confirmed. Payments will still appear in your PayPal account even while your bank account is being confirmed.

$$

DIRECTIONS ON HOW TO POST TO NEWSGROUPS/MESSAGE BOARDS.

[Step 1]
You do not need to re-type this entire letter to do your own posting. Simply put your CURSOR at the beginning of this letter and drag your CURSOR to the bottom of this document, and select 'copy' from the edit menu. This will copy the entire letter into your computer's temporary memory.

[Step 2]
Open a blank Notepad file and place your cursor at the top of the blank page. From the 'Edit' menu select 'Paste'. This will paste a copy of the letter into notepad so that you can add your email to the list.

[Step 3]
Save your new Notepad file as a .txt file. If you want to do your postings in different sittings, you'll always have this file to go back to.

[Step 4]
Use Netscape or Internet Explorer and try searching for various newsgroups, on-line forums, message boards, bulletin boards, chat sites, discussions, discussion groups, online communities, etc. EXAMPLE: go to any search engine like yahoo.com, google.com, altavista.com, excite.com, then search with subjects like "millionaire message board" or "money making message board" or "opportunity message board" or "money making discussions" or "business bulletin board" or "money making forum" etc. You will find thousands and thousands of message boards. Click them one by one then you will find the option to post a new message.

[Step 5]
Visit these message boards and post this article as a new message by highlighting the text of this letter and selecting 'Paste' from the 'Edit' menu. Fill in the Subject, this will be the header that everyone sees as they scroll thru the list of postings in a particular group, click the post message button. You're done with your first one! Congratulations! THAT'S IT!! All you have to do is jump to different

newsgroups and post away. After you get the hang of it, it will take about 30 seconds for each newsgroup! **REMEMBER, THE MORE NEWSGROUPS AND/OR MESSAGE BOARDS YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200** That's it! You will begin receiving money within days! **JUST MAKE SURE THE EMAIL YOU SUPPLY IS EXACTLY AS IT APPEARS ON PAYPAL.**

Have fun!

632. Re: Yaesu FT-7800 E

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 03:14:16 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <cwHEd.3531$KJ2.1926@newsread3.news.atl.earthlink.net>
Source record: 83870

Well John, I have an FT-7800 and am quite satisfied with mine,
it is easy to move around through the memories, and controls. A thousand
memories.............I don't quite know what i will do with all of
them.......

John WB7FFI

"Simon Smith" <s.Smith@btinternet.com> wrote in message
news:crurol$32v$1@titan.btinternet.com...
> Has anyone on the group got an opinion on this 2m-70cm mobile transceiver
> ?
> I am almost ready to purchase one but thought I would ask for some
> feedback.
> 73's
>
> John M3IIV
> Cornwall - UK
>

633. Re: Tuning a ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 03:22:48 UTC
From: Howard <mensch90249@yahoo.com>
Message-ID: <63h6u0tn7r381b8j6lg9n1i6pmjjodcavv@4ax.com>
Source record: 83871

On 10 Jan 2005 06:32:51 -0800, stryped@hotmail.com wrote:

>
>Howard wrote:
>> On 8 Jan 2005 18:19:19 -0800, stryped@hotmail.com wrote:
>>
>> >How would you go about tuning a ground plane antenna? Is a ground
>plane
>> >a good antenna for 2 meters/440?
>> >
>> >On another note, I have read about discone's being very broad
>banded.
>> >Are these the best antenna for scanner listening?
>>
>>
>> A 1/4 wave ground plane is tuned by varying the length of the
>> radiating element. Calculate the length, add a bit for good measure,
>> build it then tune it by pruning the length (in small increments).
>> The tuning can be done using an SWR analyzer or as most of us do,
>with
>> a radio and an SWR meter.
>>
>> Discone's do offer broadband coverage, though I don't have direct
>> experience to say they actually work well, great or poorly. I do
>know
>> that for my scanner I use a 1/4 wave ground plane that was built for
>> 220 MHz and it works fine - for a reference point though I am in an
>> urban area and most of what I listen to is within a 15 mile radius.
>> In order to decide what's best you should first establish your
>> purpose; are you in a fringe area, do you need directional coverage,
>> do you scan a wide range of frequencies or are your listening
>> interests all in the same "neck of the RF spectrum"?
>
>
>What if you are trying to tune a ground plane for the aircraft band? I
>mean, you cant transmit on this. I just want to listen.

Figure out the middle frequency of the range you are interested in,
cut your radiator & radials for that length, build it, install it,
listen with it. I wouldn't bother trying to tune it. Figuring that
traffic on VHF air is typically @ 120 - 136 MHz the end result is to
cut elements about 22 inches long. Being as you indicate you are also
interested in the 2 meter ham band you're probably about as well off
to just make it for that band and you can use it for both.

I really suggest you spend a few dollars on the ARRL Antenna book, you will find all your answers and more in that text as well as gaining a better overall understanding of antennas that will serve you well.

634. Re:ahhhh hi swr low loss??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 03:24:29 UTC
From: ml <m@di.net>
Message-ID: <m-492493.22242810012005@news.verizon.net>
Source record: 83772

In article <m-8B869C.07153310012005@news.verizon.net>, ml <m@di.net>
wrote:

> In article <m-95F015.17065209012005@news.verizon.net>, ml <m@di.net>
> wrote:
>
> > i was reading some technical spec's on a ladder line feed.
> >
> > the numbers showed it had sorta hi swr around 5 yet the power loss was
> > really low for it's run, like about 2watts
> >
> > this confuses me, i always thought that high swr automatically ment
> > 'loss' so what is the piece i am missing?
> >
> >
> > even stranger was the same equation as above but run for coax, which had
> > lower swr but higher power lost, which i then attrib to something like
> > the resistane of the coax?
> >
> >
> > boy i am mixed up
>
> hmm thanks to all that replyed, i guess i do understand what you
> explaned, as it was straight fwd, but i am still feeling strange about
> it, i'll run the numbers again, and if i don't 'see the light' perhaps
> i can post it more specifically here again
>
> guess the part that bothers me is having such a high swr in the ladder
> and such a low loss, i followed mathmatically what youall said, that
> adds up, but justt seems well i guess i just thought mentally that say a
> 5 or 6 swr had to mean some loss greaater than 4watts "100ft run
> don't know why i thought that guess it depends "" on all the factors
> you guys mentioned
>
> cool thing we have modeling sofware
>
>
> m

the posts are starting to add up, espically the latest posts, very
greatful for all the help i can see the math now, but need some more
quality time to think/study and try to see what is going on to fully
digest

man i am pisssed i didn't get to learn this stuff in school or anyplace elese it's all super neetOhh

thanks all

635. MAKE MONEY USING PAYPAL

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 03:28:16 UTC
From: jjrvn@hotmail.com
Message-ID: <1105414096.337923.42060@c13g2000cwb.googlegroups.com>
Source record: 83773
Cross-posted to: rec.sport.billiard, rec.arts.sf.written.robert-jordan, rec.models.rc.air, rec.pets.dogs.behavior, rec.radio.amateur.antenna

I'm sure you've read these letters asking you to send $1 to six different addresses. Putting your home address or mailing address on the internet can be risky, but through PayPal all you have to provide is your email address. It's safe and easy. Just go to www.paypal.com and set up your FREE account! No credit card is needed. I am not a gullible person and have never trusted things like this, but I gave it a try. Hey it's only $6. I figured at least 6 people would respond out of the millions of people that use the internet. You should give it a try too! You have nothing to lose, and thousands to gain! Read on for the letter that I found (of course, I added my PayPal e-mail on #6)...

HOW TO TURN $6 INTO $6,000+!!! THIS REALLY CAN MAKE YOU EASY MONEY!!! IT WORKS!!! BUT YOU HAVE TO FOLLOW IT TO THE LETTER FOR IT TO WORK!!!! A little while back, I was browsing through newsgroups, just like you are now and came across an article similar to this that said you could make thousands of dollars within weeks with only an initial investment of $6.00! So I thought, "Yeah, right, this must be some kind of scam" but like most of us, I was curious, so I kept reading. Anyway, it said that you send $1.00 though PayPal to each of the emails stated in the article. You then place your own email address in the bottom of the list at #6, and post the article in at least 200 news groups. (There are thousands) No catch. That was it. So after thinking it over, and talking to few people first, I thought about trying it. I figured what have I got to lose except $6.00, right? Like most of us I was a little skeptical and a little worried about the legal aspects of it. It follows the same regulations as the "mailed chain letters, which according to the U.S. Post Office (1-800-725-2161) is indeed legal! Then I invested the measly $6.00. Well GUESS WHAT!!? Within 7 days, I started getting money in my PayPal account! I was shocked! I figured it would end soon, but the money just kept coming in. In my first week, I made about $20.00. By the end second week I had made a total over $1,200.00!!! In the third week I had over $10,000.00 and it's still growing. This is now my fourth week and I have made a total of just over $36,000.00 and it's still coming in rapidly. It's Certainly worth $6.00. I have spent more than that on the lottery!! Let me tell you how this works and most importantly, why it works? Also, make sure you print a copy of this article now, so that you can get the information off of it as you need it.

$$

REQUIREMENTS: You must have a confirmed PayPal account. If you do not have a PayPal account you can go to www.paypal.com and follow the

instructions to set up a free account. In order to place the initial $6 into your account, you will have to confirm your bank account with PayPal (which may take a few days). PayPal is 100% secure and is used my millions of people world wide. Confirming a www.paypal.com account simply means (1) PayPal will first ask you to confirm the email you used to sign up your PayPal account by sending you an email with a link for you to click to that email. As soon as you click that link your email is confirmed. (2) PayPal will then make two small deposits into your bank account if you set up your PayPal account with a checking or savings bank account. Or PayPal will make two small deposits to your credit card if you set up your PayPal account with your credit card. Then after a few days (it takes up to a few days for these deposits to appear in your bank account or on your credit card statement) then after a few days you go back to the www.paypal.com website and sign in. Then you click where it says this account is not yet confirmed. A screen will pop up that gives you 2 boxes to fill in. You then enter the numbers of the 2 small deposit amounts (two separate 2 digit numbers) that were deposited to your bank account or credit card. Now you have a working and confirmed PayPal account and can receive payments.

$$

[STEP 1]
Send, though PayPal, $1.00 to each email on the below list. Make the subject of the payment "Email List" and in the comments, write "PLEASE PUT ME ON YOUR EMAIL LIST." What you are doing is creating a service by this - and best of all you are not giving your address to anyone you do not know. THIS IS ABSOLUTELY LEGAL!! YOU ARE CREATING A SERVICE. Here are the latest PayPal e-mails on the e-mail lists:

#1)brittany...@excite.com

#2) mth...@renc.igs.net

#3) Mishav...@aol.com

#4) nike31...@aol.com

#5) careent...@hotmail.com

#6) jjrvn...@hotmail.com

www.paypal.com

Subject of Payment: ***Email List***

Comments: ***PLEASE PUT ME ON YOUR EMAIL LIST***

[STEP 2]
Now take the #1) email off the list that you see above, move the other addresses up one (6 becomes 5 & 5 becomes 4, etc) the put YOUR email address (the one used in your PayPal account) as #6) on the list. **MAKE SURE THE EMAIL YOU SUPPLY IS EXACTLY AS IT APPEARS IN YOUR

PAYPAL ACCOUNT**

[STEP 3]
Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups, message boards, etc. (I think there are close to 32,000 groups) All you need is 200, but remember, the more you post, the more money you make - as well as everyone else on the list! In this situation your job is to let as many people see this letter as possible. So they will make you and me reach!!!! You can even start posting the moment your email is confirmed. Payments will still appear in your PayPal account even while your bank account is being confirmed.

$$

DIRECTIONS ON HOW TO POST TO NEWSGROUPS/MESSAGE BOARDS.

[Step 1]
You do not need to re-type this entire letter to do your own posting. Simply put your CURSOR at the beginning of this letter and drag your CURSOR to the bottom of this document, and select 'copy' from the edit menu. This will copy the entire letter into your computer's temporary memory.

[Step 2]
Open a blank Notepad file and place your cursor at the top of the blank page. From the 'Edit' menu select 'Paste'. This will paste a copy of the letter into notepad so that you can add your email to the list.

[Step 3]
Save your new Notepad file as a .txt file. If you want to do your postings in different sittings, you'll always have this file to go back to.

[Step 4]
Use Netscape or Internet Explorer and try searching for various newsgroups, on-line forums, message boards, bulletin boards, chat sites, discussions, discussion groups, online communities, etc. EXAMPLE: go to any search engine like yahoo.com, google.com, altavista.com, excite.com, then search with subjects like "millionaire message board" or "money making message board" or "opportunity message board" or "money making discussions" or "business bulletin board" or "money making forum" etc. You will find thousands and thousands of message boards. Click them one by one then you will find the option to post a new message.

[Step 5]
Visit these message boards and post this article as a new message by highlighting the text of this letter and selecting 'Paste' from the 'Edit' menu. Fill in the Subject, this will be the header that everyone sees as they scroll thru the list of postings in a particular group, click the post message button. You're done with your first one! Congratulations! THAT'S IT!! All you have to do is jump to different

newsgroups and post away. After you get the hang of it, it will take about 30 seconds for each newsgroup! **REMEMBER, THE MORE NEWSGROUPS AND/OR MESSAGE BOARDS YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200** That's it! You will begin receiving money within days! **JUST MAKE SURE THE EMAIL YOU SUPPLY IS EXACTLY AS IT APPEARS ON PAYPAL.**

Have fun!

636. superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 03:30:07 UTC
From: ml <m@di.net>
Message-ID: <m-BFC877.22301110012005@news.verizon.net>
Source record: 83774

i just wonder does anyone know of any links to articles on a small superconducting antenna say for hf frequencies

what would happen if i build say i'd have to stay physically small , so say a 1/4wave verticle on 10m and then made that antenna supercondutive?

the antenna would technically have like no resistance that i know then i get fuzzy

wonder what happens both technically speaking and if anyone tried it, was it a 'great' antenna rx or tx wise?? any pro's con's of such a design

aside from the obv cost and impracticaliaty of pumping Lhydr/liq helium or nitrog into it etc

637. Re: Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 04:04:10 UTC
From: aw10809@yahoo.com
Message-ID: <1105416250.659417.244030@f14g2000cwb.googlegroups.com>
Source record: 83775

thank you very much. i think it'll work - we live on top of a hill.

m

'Doc wrote:
> Michael,
> The TV antenna will probably help your reception. Try
> the center conductor on the radio's terminal, or short
> both inner/outer conductors and try that. Use whichever
> works best. Inside/outside the house won't make as much
> difference in what you hear as how high the antenna is.
> 'Doc
>
> PS - Alternate method. Tie rock on end of a long piece of
> wire. Throw rock over roof. Watch out for windows.

638. Re: In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 04:14:31 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <quj6u0pg7fmm03hpn41fg94mg2q4rpo47q@4ax.com>
Source record: 83776

Assuming the terminal resistance of a resonant dipole is 72 ohms,
then a ground plane separating the halves of the dipole means the
terminal resistance of each half is 36 ohms. Thus the terminal
resistance of the half-dipole over the ground plane is also 36 ohms.
The terminal resistance of the half dipole operating against the
radials bent down can then be any value between 36 and 72 ohms,
depending on the angle of the bending. If the bending changes the
angle from 90ï¿½ to 180ï¿½ the resistance has changed from 36 to 72 ohms.
The terminal resistance will be 50 ohms at some angle in between, and
is usually close to 45ï¿½.

Hope this helps in understanding what occurs from bending the radials
downward.

Walt, W2DU

639. Re: In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 04:18:50 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <7kk6u01v3d0g14vaf88ta7e9sru3llhlg7@4ax.com>
Source record: 83777

Sorry, fellas, I intended to mention in my previous post that I worked with Dr. George H. Brown in his antenna lab at the RCA Laboratories in Princeton, and he took great delight in telling me about the 'ruse' that Dan, K6MHE,related concerning the ground plane with only two radials. 'Ya got that right, Dan Boy!

Walt, W2DU

640. Re: Why are they yagi antennas on some bridges?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 04:33:12 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <H6idncAykYSVyn7cRVn-3w@comcast.com>
Source record: 83779

"Free radio" <dx440@webtv.net> wrote in message
news:7478-41E21749-3@storefull-3276.bay.webtv.net...
> does any body no why .i have seen a cross yagi type beam along the
> bridge .my guess will be to monitor the water level umm maybe not
> 73s not really a pirate ok only on the sea
>

In the Illinois, I see 2 primary systems.

The cross yagi - pointed skyward is for satellite reception of the data [southern sky - about 40 degree angle] for water levels of watersheds, streams and rivers. You will usually see them at dams, some bridges or confluences of streams/rivers.

The Dept of Transportation in Illinois (and many other states) have small weather stations along the tollways, interstates and major 2 lane highways for weather conditions throughout the state. They will have a small UHF yagi and it not unusual to see these small weather stations high traffic areas or bridges. Bridges allow for additional sensors to measure freezing conditions on bridges or water levels in flood prone areas (cooperatively sending data to NWS and other services).

The Army Corps of Engineers also has a number of stations for the Illinois and Mississippi River watersheds, for proper control and management of the lock and dam system above St. Louis (St. Louis, Rock Island, Omaha and St. Paul Districts).
http://www.mvr.usace.army.mil/

Many of these gauges are cooperatively managed by the Army Corps and other federal, state or municipal agencies, such as: USGS, NWS, universities.
This specific gauge is at the Hydraulics Laboratory (on the Iowa River) at the University of Iowa in Iowa City, IA
http://www2.mvr.usace.army.mil/WaterControl/stationinfo2.cfm?sid=IOWI4&fid=IOWI4&dt=S

gb

641. Re: In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 05:16:03 UTC
From: AaronJ <noemail@noemail.com>
Message-ID: <13o6u0dfj7o9q29e24tmihcdb49386drk3@4ax.com>
Source record: 83780

Walter Maxwell <w2du@iag.net> wrote:

>The terminal resistance will be 50 ohms at some angle in between, and
>is usually close to 45ï¿½.

Not to mention that's a damn handy angle when you need the
radials to double as guy wires... ;)

642. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 05:32:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10u6p7kerannc68@corp.supernews.com>
Source record: 83781

A number of superconducting antennas have been built and the results published. The ones I recall seeing were using the newer high temperature superconductors, although it can be done with conventional superconductors also.

It doesn't seem to be generally known that superconductors have zero resistance only at DC. Their resistance is finite at any frequency above zero. It increases with frequency, and it also increases as the temperature rises toward the critical temperature (at which the material ceases becoming a superconductor).

The resistivity of copper drops pretty dramatically at cryogenic temperatures, so copper becomes pretty hard to beat at RF, particularly if the temperature is getting anywhere near the critical temperature of the competing superconducting material.

The potential advantage to be gained from a lossless antenna is that a very small, efficient antenna can be made. The problems are:

1. You have a really tough matching problem, and will have severe loss in your matching network unless it's also superconducting.
2. If you do keep the antenna and matching network losses to a small value, a very small antenna will be very narrow banded.
3. You'll have to keep the temperature far below the critical temperature if you want to do much better than copper. This probably means cooling to a few degrees Kelvin, which is expensive and not compatible with putting antenna high and in the clear, let alone making one that can be rotated, for example. And the advantage of a small antenna is likely to be negated by the size of the cooling equipment.
4. Because the antenna will have finite resistance and presumably a small size, application of transmitter power will cause heating. This heat has to be removed by the refrigeration equipment to avoid raising the temperature too much.

A google search on "superconducting antenna" will bring you a lot of papers, but probably not much in the way of commercial products. While interesting in the laboratory, the above problems limit the practicality of the idea.

Roy Lewallen, W7EL

ml wrote:
> i just wonder does anyone know of any links to articles on a small
> superconducting antenna say for hf frequencies
>
>

>
> what would happen if i build say i'd have to stay physically small , so
> say a 1/4wave verticle on 10m and then made that antenna
> supercondutive?
>
> the antenna would technically have like no resistance that i know then
> i get fuzzy
>
>
> wonder what happens both technically speaking and if anyone tried it,
> was it a 'great' antenna rx or tx wise?? any pro's con's of such a
> design
>
> aside from the obv cost and impracticaliaty of pumping Lhydr/liq helium
> or nitrog into it etc

643. Re: Why are they yagi antennas on some bridges?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 05:52:25 UTC
From: jcooper874@webtv.net
Message-ID: <7477-41E36999-26@storefull-3276.bay.webtv.net>
Source record: 83783

it is a wonder no one has stoled any of the antennas on side of the
bridge a free ant i am not that brave

644. Re: In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 06:10:04 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns95DAE1928FDD2spectrumhogstarbandn@207.106.92.175>
Source record: 83782

>>The terminal resistance will be 50 ohms at some angle in between, and
>>is usually close to 45�.

> Not to mention that's a damn handy angle when you need the
> radials to double as guy wires... ;)

Not to mention further, it helps keep birds off!!

Ed

645. Re: why are they yagi antennas on some bridges.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 06:16:43 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns95DAE2B31BEC9spectrumhogstarbandn@207.106.92.175>
Source record: 83784

```
>
>> They usually seem to be pointed up into the sky (towards some
>> satellite); is there information available about these satellites,
>> their downlink frequencies, format of the data, etc.?
>>
```

All the satellite weather/water data ground stations I can think of use an uplink of around 401 MHz. (There is NO downlink to these ground stations; their TX is controlled by clock controlled TX time slot.)

The government geostationary satellites, like GOES 7, are downlinking the data to a Central site in Virginia on around 4 GHZ, I think, and higher. From there, the raw data is processed and sent back out to several differnet locations, including more satellites for relay.

Ed

646. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 06:49:20 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <CHv+YiEwb34BFAf3@ifwtech.co.uk>
Source record: 83786
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Whatever wrote:
>Why not use a roll of wire netting and bury that.
>
Good question. That method has a good reputation for portable 4-squares, as used by some MegaDXpeditions. Just roll it out, and away you go.

But it may not be so good for fixed stations, because once it's down there would be no way back. After the grass has started to grow through it, it will be impossible to rip up again. If the mesh began to rot after a few years, it would be very difficult to start again with conventional radials.

Looking further ahead, laying mesh would 'sterilize' the area for any kind of future cultivation, unless the whole top surface was planed off and dumped.

So the question is: how long will galvanized netting or mesh last in your particular soil?

It is an option I am seriously considering for the new site, but will take local advice about soil conditions.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

647. Television Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 06:54:39 UTC
From: Ross Anderson <ross_anderson@comcast.net>
Message-ID: <1105426479.318287.75350@f14g2000cwb.googlegroups.com>
Source record: 83785

Can anyone tell me the make and model number of this television
antenna?

http://home.comcast.net/~ross_anderson/TelevisionAntenna.htm
I want to model it using nec.

Thanks

Ross W1HBQ

648. park ground ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 07:22:39 UTC
From: remove_ok1sip@atlas.cz
Message-ID: <5f5159fa.0501102322.2a26f641@posting.google.com>
Source record: 83787

Hi, distinguish three types of grounding:
1/ RF ground. You do not need any with a dipole and QRP. Moreover, a spike in the soil a VERY poor RF grounding. Avoid ground plane and other antennas, requiring a huge radial system as an RF ground, for temporary installations. (There is one exception: 2 - 3 radials running directly into sea water are enough if you work on an ocean beach. A vertical is a perfect DX antenna in this case.)
2/ Lightning protection. You do not need any for portable operation. If a storm approaches, pack you equipment and leave the park. It is the best lightning protection not to be there :-)
3/ Static bleeding. It is a good idea to give the static in the dipole a ground path. The spike in the ground is O.K. for this purpose.Connect the case of your TRX to it by a thick, short, stranded wire.

73 Ivan OK1SIP

649. Re: In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 08:48:16 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34higcF4c235pU1@individual.net>
Source record: 83789

```
You only need two to result in field cancellation
to prevent radiation. However, that is only the
case in free space. Any near objects or objects
in electrical contact may distort
the field from one of the elements differently
from the other, so resulting in less-than-perfect
cancellation, especially in the case of ground radials.
```

"Dan Richardson" <dwr@mailinator.com> wrote in message
news:0ln5u0trjip4dj7m5v4k17jif6ikdgljfr@4ax.com...
> On 10 Jan 2005 08:48:37 -0800, stryped@hotmail.com wrote:
> >I have seen some with 4 elements, some with 5. Also is the spacing
> >between them important?
> The &#65533;-wave groundplane was developed by George Brown 1938. Here's a
> partial quote from his book:
> "... In our initial experiments we found that only two horizontal rods
> (ground rods) functioned as well as four. Many people from the
> Broadcast Sales organization came by to view our tests and they always
> expressed doubts as to the ability to radiate uniformly when only two
> ground rods were used. To quiet them, we used four ground rods for a
> while, thus stilling the criticism. When the antenna became really
> popular, we did not dare confess to our ruse."
> There you have it from the inventor of the antenna.

650. "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 08:50:27 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34higdF4c235pU2@individual.net>
Source record: 83788
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

```
Such an excellent and succint didactic exposition deserves
wider recognition.....
```

"Walter Maxwell" <w2du@iag.net> wrote in message
news:quj6u0pg7fmm03hpn41fg94mg2q4rpo47q@4ax.com...
> Assuming the terminal resistance of a resonant dipole is 72 ohms,
> then a ground plane separating the halves of the dipole means the
> terminal resistance of each half is 36 ohms. Thus the terminal
> resistance of the half-dipole over the ground plane is also 36 ohms.
> The terminal resistance of the half dipole operating against the
> radials bent down can then be any value between 36 and 72 ohms,
> depending on the angle of the bending. If the bending changes the
> angle from 90° to 180° the resistance has changed from 36 to 72 ohms.
> The terminal resistance will be 50 ohms at some angle in between, and
> is usually close to 45°.
> Hope this helps in understanding what occurs from bending the radials
> downward.
> Walt, W2DU

651. Re: In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 08:54:17 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34hinbF468n3sU1@individual.net>
Source record: 83790

```
PS. The same effect occurs in the so-called "capacity hat".
The waves rushing out and returning in both directions result
in field cancellation and no radiation from the hat in the
ideal case. "Capacity Hat"? - Because the delayed returning
waves in recombination at the top of the radiator behave
as though they have picked up a capacitive phase change.
```

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34higcF4c235pU1@individual.net...
> You only need two to result in field cancellation
> to prevent radiation. However, that is only the
> case in free space. Any near objects or objects
> in electrical contact may distort
> the field from one of the elements differently
> from the other, so resulting in less-than-perfect
> cancellation, especially in the case of ground radials.
>
> "Dan Richardson" <dwr@mailinator.com> wrote in message
> news:0ln5u0trjip4dj7m5v4k17jif6ikdgljfr@4ax.com...
> > On 10 Jan 2005 08:48:37 -0800, stryped@hotmail.com wrote:
> > >I have seen some with 4 elements, some with 5. Also is the spacing
> > >between them important?
> > The 1/4-wave groundplane was developed by George Brown 1938. Here's a
> > partial quote from his book:
> > "... In our initial experiments we found that only two horizontal rods
> > (ground rods) functioned as well as four. Many people from the
> > Broadcast Sales organization came by to view our tests and they always
> > expressed doubts as to the ability to radiate uniformly when only two
> > ground rods were used. To quiet them, we used four ground rods for a
> > while, thus stilling the criticism. When the antenna became really
> > popular, we did not dare confess to our ruse."
> > There you have it from the inventor of the antenna.
>
>

652. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 09:41:57 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <fi77u0dsigisj3066noeb9rv4emlca5v2u@4ax.com>
Source record: 83791
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Tue, 11 Jan 2005 08:50:27 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>Such an excellent and succint didactic exposition deserves
>wider recognition.....

Whilst an interesting contribution, for which thanks are due to the
OP, many of us knew this already. Didn't you, Bean? If you already
knew this, why have you not explained it before? Can't you write in
excellent, succinct, and/or didactic fashion? Or have you just gone up
the learning curve?

>"Walter Maxwell" <w2du@iag.net> wrote in message
>news:quj6u0pg7fmm03hpn41fg94mg2q4rpo47q@4ax.com...
>> Assuming the terminal resistance of a resonant dipole is 72 ohms,
>> then a ground plane separating the halves of the dipole means the
>> terminal resistance of each half is 36 ohms. Thus the terminal
>> resistance of the half-dipole over the ground plane is also 36 ohms.
>> The terminal resistance of the half dipole operating against the
>> radials bent down can then be any value between 36 and 72 ohms,
>> depending on the angle of the bending. If the bending changes the
>> angle from 90ï¿½ to 180ï¿½ the resistance has changed from 36 to 72 ohms.
>> The terminal resistance will be 50 ohms at some angle in between, and
>> is usually close to 45ï¿½.
>> Hope this helps in understanding what occurs from bending the radials
>> downward.
>> Walt, W2DU
>

--
from
Aero Spike

653. Re: Why are they yagi antennas on some bridges?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 11:41:51 UTC
From: "Ron, KC4YOY" <kc4yoy@carolina.rr.con>
Message-ID: <3YOEd.9811$hQ6.2070456@twister.southeast.rr.com>
Source record: 83792

"Re: Why are they yagi antennas on some bridges?"

Why are "they"???

HUH?

Ron

654. Re: Copper vs Stainless? *Ping Walter Maxwell

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 12:55:19 UTC
From: Glenn Ashmore <gashmore@cox.net>
Message-ID: <S0QEd.18071$EG1.4358@lakeread04>
Source record: 83793

I understand that you are the resident authority on QFH antennas. Can you help with this problem?

--
Glenn Ashmore

"Glenn Ashmore" <gashmore@cox.net> wrote in message news:HyEEd.16418$EG1.2863@lakeread04...
> Pardon an ignorant sailor butting in here but I have a question about
> antenna material. I have been experimenting with home brew QFH antennas to
> receive 137.5 Mhz weather satellite images. I built one out of copper
> tubing that works great. I can get good pictures from Hudson Bay to Puerto
> Rico. Then I tried to duplicate it with stainless tubing to use on the
> boat. The two antennas and baluns are identical but the stainless version
> has less than half the range. Any suggestions on how to modify or tune it
> to improve reception?
>
> Or, failing that, what effect would powder coating the copper one have?
>
> --
> Glenn Ashmore
>
> I'm building a 45' cutter in strip/composite. Watch my progress (or lack
> there of) at: http://www.rutuonline.com
> Shameless Commercial Division: http://www.spade-anchor-us.com
>
>

655. Re: In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 13:26:20 UTC
From: stryped@hotmail.com
Message-ID: <1105449980.413594.34470@f14g2000cwb.googlegroups.com>
Source record: 83794

Ok, I think I am learning something here. If radials simulate earth,
would using a solid steel plate instead of radials be better?

656. Re: Tuning a ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 13:29:15 UTC
From: stryped@hotmail.com
Message-ID: <1105450155.726031.50320@f14g2000cwb.googlegroups.com>
Source record: 83795

Just make it for 2 meters or the ham band?
What can I use to power my scanner and my radio with one antenna?

657. ANyone build a corner reflector for uhf

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 13:30:22 UTC
From: stryped@hotmail.com
Message-ID: <1105450222.665696.56860@f14g2000cwb.googlegroups.com>
Source record: 83796

I have seen designes for tv antennas but wondered if they would work well for uhf?

658. manual for pro 57b ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 13:46:30 UTC
From: wb4una@aol.com
Message-ID: <20050111084630.11282.00000033@mb-m10.aol.com>
Source record: 83797

anyone have a manual for the above Mosley antenna? I would like to have a copy if possible...

thanks Randy

ARS: WB4UNA
Randy Chavis
247 Goff Court
West Columbia
S.C. 29172

659. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 13:50:57 UTC
From: Andy Cowley <andy.cowley@uwe.ac.uk>
Message-ID: <IA5nsx.G7r@bath.ac.uk>
Source record: 83798

Ian White, G3SEK wrote:
> Whatever wrote:
>
>> Why not use a roll of wire netting and bury that.
>>
> Good question. That method has a good reputation for portable 4-squares,
> as used by some MegaDXpeditions. Just roll it out, and away you go.
>
> But it may not be so good for fixed stations, because once it's down
> there would be no way back. After the grass has started to grow through
> it, it will be impossible to rip up again. If the mesh began to rot
> after a few years, it would be very difficult to start again with
> conventional radials.
>
> Looking further ahead, laying mesh would 'sterilize' the area for any
> kind of future cultivation, unless the whole top surface was planed off
> and dumped.
>
> So the question is: how long will galvanized netting or mesh last in
> your particular soil?
>
> It is an option I am seriously considering for the new site, but will
> take local advice about soil conditions.
>
>
Galvanised conductors are really not as good as copper at RF, conductivity
is much lower. Probably not much of a problem for a 50 ohm or more antenna
but for an electrically short one, as might well be used on the lower bands,
the increase in resistance can be significant. Copper is a better choice if
the increased cost is not too significant. Tinned copper is really tin wire
at RF so it is not as good as plain copper.

The smaller the burial depth the better the ground plane will be, in general.
In fact much better results have been obtained with elevated (usually about
6 ft.) radials, but 'the powers that be' usually reject this alternative.
Disguise as a pergola or frame for training some type of plant is a possibility.

Copper will be almost permanent in most soils, galvanised iron wire may only
last a few years, so if you don't plan on repeating the installation the best
choice is plain copper, either insulated or not, with tinned copper a moderate
second and galvanised iron third by a fair way.

Any will be significantly better than mud and stones which are known to be
poor conductors at RF.

vy 73

Andy, M1EBV

660. Re: ANyone build a corner reflector for uhf

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 14:04:37 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <cs0mdl$9fd$1@mail.specsol.com>
Source record: 83799

stryped@hotmail.com wrote:
> I have seen designes for tv antennas but wondered if they would work
> well for uhf?

http://www.cebik.com/corn1.html

http://www.cebik.com/crn.html

--
Jim Pennino

Remove -spam-sux to reply.

661. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 14:20:15 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e3e0aa$1_2@127.0.0.1>
Source record: 83800
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Ian White, G3SEK wrote:
> Whatever wrote:
>> Why not use a roll of wire netting and bury that.
>>
> Good question. That method has a good reputation for portable 4-squares,
> as used by some MegaDXpeditions. Just roll it out, and away you go.

When I was in high school, my Dad had a very large wire chicken
pen. I mounted my 33' downspout vertical on top of it and used
the wire mesh for a slightly elevated ground plane. Worked All
States with it except Idaho (darn it).
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

662. Re: In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 14:24:23 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e3e1a2$1_2@127.0.0.1>
Source record: 83801

stryped@hotmail.com wrote:
> Ok, I think I am learning something here. If radials simulate earth,
> would using a solid steel plate instead of radials be better?

OK till it rusted away. Some very fine antennas have used
metal roofs for their ground planes.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

663. Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 14:42:37 UTC
From: tox <nospam@nospamming.co.com>
Message-ID: <xBREd.90$fj7.9@newsfe3-gui.ntli.net>
Source record: 83802
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

http://news.bbc.co.uk/1/hi/health/4163003.stm

Any views?

--
tox

664. Re: In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 14:45:40 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <cs0oqk$i87$1@mail.specsol.com>
Source record: 83803

stryped@hotmail.com wrote:
> Ok, I think I am learning something here. If radials simulate earth,
> would using a solid steel plate instead of radials be better?

Depends on how you define "better".

For an elevated antenna, once you get beyond about 3 or 4 radials, the increamental difference in performance for added radials is such that you would never notice it in a practical application.

A solid plane has the disadvantages of being heavy, has a much larger wind loading, and is difficult to "droop" to get closer to 50 Ohms.

You can download the demo version of EZNEC from http://www.eznec.com/ and model a simple vertical with varying numbers of radials and see for yourself.

--
Jim Pennino

Remove -spam-sux to reply.

665. Re: Yaesu FT-7800 E

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 14:47:08 UTC
From: JD <dixon@cae.ca>
Message-ID: <cs0otf$3tb$1@dns3.cae.ca>
Source record: 83804

Did you try the eham.com reviews???
I always check them before I make a major purchase of equipment.
JD, VE3DIX

"Simon Smith" <s.Smith@btinternet.com> wrote in message
news:crurol$32v$1@titan.btinternet.com...
> Has anyone on the group got an opinion on this 2m-70cm mobile transceiver
?
> I am almost ready to purchase one but thought I would ask for some
feedback.
> 73's
>
> John M3IIV
> Cornwall - UK
>
>

666. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 14:58:01 UTC
From: Trevor Day <Trev@secornwall.removethis.com>
Message-ID: <ZZFKQtizl+4BFw8Z@secornwall.com>
Source record: 83805
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In message <xBREd.90$fj7.9@newsfe3-gui.ntli.net>, tox
<nospam@nospamming.co.com> writes
>http://news.bbc.co.uk/1/hi/health/4163003.stm
>
>
>Any views?
>
>--
>tox

Well I would say that if mobile phones are eventually proven to be bad for your health, it is most likely to be the phone itself that is the culprit rather than the mast mounted tx at the local school etc; a point that still has not been made by the media or, it seems, anyone providing them with information.

It is probably worth noting that, in my experience, most children use their mobiles almost exclusively for 'texting' rather than 'talking'; presumably this carries significantly less risk perceived or otherwise.

Trev G3ZYY

--
Trevor Day
SIP: 84411998@voiptalk.org

667. Re: Anyone build a corner reflector for uhf

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 15:13:06 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <KbqdnRC8fKqfcH7cRVn-pQ@comcast.com>
Source record: 83806

<stryped@hotmail.com> wrote in message
news:1105450222.665696.56860@f14g2000cwb.googlegroups.com...
>I have seen designes for tv antennas but wondered if they would work
> well for uhf?
>

Yes, Arrow antennas makes corner reflectors for 2 meters, 220 MHz and 70 cm
amateur bands.

Here is a dual band unit
http://www.arrowantennas.com/cb450.html

gb

668. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 15:20:43 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <obr7u0124fgj0o87nnuq0mmsafrkmlt0su@4ax.com>
Source record: 83807
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Tue, 11 Jan 2005 14:58:01 GMT, Trevor Day
<Trev@secornwall.removethis.com> wrote:

>It is probably worth noting that, in my experience, most children use
>their mobiles almost exclusively for 'texting' rather than 'talking';
>presumably this carries significantly less risk perceived or otherwise.

I agree. Proximity is the dominant factor at work here. That's why
these scare stories about mobile phone masts and cancer are such
total nonsense.
There may well be some significant risk associated with the
conventional use of mobiles right next to the head, though. The EM
field is bound to invade brain tissue and the effects of such exposure
to even low levels of near-microwave frequencies are as yet not fully
known.
--

"What is now proved was once only imagin'd." - William Blake, 1793.

669. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 15:25:43 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105457143.617952.98140@f14g2000cwb.googlegroups.com>
Source record: 83808
Cross-posted to: uk.radio.amateur, rec.radio.amateur.antenna

Thanks for that. Pretty useful those trees then. There are a number of large trees in the village and have to be very big to survive the winds at this altitude. Not sure how a tower would fair up here - and probably not necessary according to some coverage map simulations I've been doing - http://home.btconnect.com/g1lvn/eqso/maps/

670. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 15:28:16 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105457296.486149.113150@f14g2000cwb.googlegroups.com>
Source record: 83809
Cross-posted to: uk.radio.amateur, rec.radio.amateur.antenna

It's the altitude, only the big ones can cope with the near constant winds up here - the little ones just get uprooted. There are at least 3 over 80ft.

671. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 15:36:48 UTC
From: Trunky <trunky@geemail.com>
Message-ID: <koSEd.8389$GG1.7111@text.news.blueyonder.co.uk>
Source record: 83810
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

http://www.cellular.co.za/news_2001/092601-mobile_phones_may_do_harm.htm

--
http://www.stressed-out.org
CS Public #1, 195.242.236.171:27015 ff=on, awp=off
CS Public #2, 195.242.236.171:27035 ff=on
CS Public #3, Mini_maps only 195.242.236.171:27045

"Paul Burridge" <pb@notthisbit.osiris1.co.uk> wrote in message
news:obr7u0124fgj0o87nnuq0mmsafrkmlt0su@4ax.com...
> On Tue, 11 Jan 2005 14:58:01 GMT, Trevor Day
> <Trev@secornwall.removethis.com> wrote:
>
>>It is probably worth noting that, in my experience, most children use
>>their mobiles almost exclusively for 'texting' rather than 'talking';
>>presumably this carries significantly less risk perceived or otherwise.
>
> I agree. Proximity is the dominant factor at work here. That's why
> these scare stories about mobile phone masts and cancer are such
> total nonsense.
> There may well be some significant risk associated with the
> conventional use of mobiles right next to the head, though. The EM
> field is bound to invade brain tissue and the effects of such exposure
> to even low levels of near-microwave frequencies are as yet not fully
> known.
> --
>
> "What is now proved was once only imagin'd." - William Blake, 1793.

672. What determines an antenna's impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 15:40:26 UTC
From: stryped@hotmail.com
Message-ID: <1105458026.233906.189860@f14g2000cwb.googlegroups.com>
Source record: 83811

I know in a ground plane the angle of the radials can, but what about a simple, multiple element yagi?
How does one measure what the impedance is or will be?

673. Re: Yaesu FT-7800 E

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 15:45:20 UTC
From: Simon Smith <s.Smith@btinternet.com>
Message-ID: <cs0saf$gc3$1@titan.btinternet.com>
Source record: 83812

How do I find it ? Do you have the web Address ?
Thanks
John
"JD" <dixon@cae.ca> wrote in message news:cs0otf$3tb$1@dns3.cae.ca...
> Did you try the eham.com reviews???
> I always check them before I make a major purchase of equipment.
> JD, VE3DIX
>
> "Simon Smith" <s.Smith@btinternet.com> wrote in message
> news:crurol$32v$1@titan.btinternet.com...
>> Has anyone on the group got an opinion on this 2m-70cm mobile transceiver
> ?
>> I am almost ready to purchase one but thought I would ask for some
> feedback.
>> 73's
>>
>> John M3IIV
>> Cornwall - UK
>>
>>
>
>

674. Re: Yaesu FT-7800 E

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 15:46:13 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34iarpF31vp8vU1@individual.net>
Source record: 83813

It's a CB rig for CBers.

But then again, you're not a Radio Ham, you're an M3/CBer, so
go right ahead with your off-the-shelf purchase.

Radio Hams design and manufacture their own gear.

"Simon Smith" <s.Smith@btinternet.com> wrote in message
> news:crurol$32v$1@titan.btinternet.com...
> Has anyone on the group got an opinion on this 2m-70cm mobile transceiver
> ?
> I am almost ready to purchase one but thought I would ask for some
> feedback.
> 73's
>
> John M3IIV

675. Re: DOes a ground plane need a choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 15:56:57 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34ibfsF481nq3U1@individual.net>
Source record: 83815

I say, I say, I say! Did you hear the one about the ground plane
and the policeman's dog?

Perhaps not.

<stryped@hotmail.com> wrote in message
news:1105459112.119572.307170@f14g2000cwb.googlegroups.com...
> Does a ground plane need a choke?

676. DOes a ground plane need a choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 15:58:32 UTC
From: stryped@hotmail.com
Message-ID: <1105459112.119572.307170@f14g2000cwb.googlegroups.com>
Source record: 83814

Does a ground plane need a choke? What about being grounded to the mast?

677. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 16:00:33 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cs0t71mps1@sparta.btinternet.com>
Source record: 83816
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Ian, theres's far too much unwarranted fuss about ground radials in ordinary English gardens and back yards. Just lay a few wires, 6 to 12 in number. beneath a trodden-on, compacted soil surface, with lengths of a few metres, perhaps 5 to 10 metres, and away you go.

Don't forget to attach to the incoming main water pipe and the domestic plumbing system if you have one. Also the electricity supply ground. And then stop! Or stop before then and see how well it works.

Reg.

678. Re: Copper vs Stainless? *Ping Walter Maxwell

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 16:17:54 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <h8u7u0d8n1lf6uvppn4kgsrrqtt7miv94m@4ax.com>
Source record: 83817

On Tue, 11 Jan 2005 07:55:19 -0500, "Glenn Ashmore" <gashmore@cox.net>
wrote:

>I understand that you are the resident authority on QFH antennas. Can you
>help with this problem?

Hello Glenn,

I've had some experience with the QFH, Glenn, but I don't consider
myself an authority. However, I'll try to help you with the problem,
but first I'll need to know the form you used in your model. Is it
the self phasing type, with the inductive bifilar longer than the
capacitive one? Or are both bifilars of the same length and fed with a
power splitter and a 90ï¿½ hybrid? If it is the self phasing type what
diameter is the tubing? And have you reviewed my data on the subject
that appears in Reflections?

If both the copper and stainless steel models are fabricated in
exactly the same form there shouldn't be much difference in
performance due the different materials. I don't believe the
difference in resistivities of the two materials should have a
significant effect on their performances, unless your bifilars are
made with very small diameter wire. If you used the self phasing type
the tubing diameter should be approximately 3/4", in which the
difference in resitivities would be absolutely insignificant.

So Glenn, give me the details of your QFH so that I can be of more
help.

Walt, W2DU

679. Re: What's the deal? (was: Re: AM radio reception inside passenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 16:21:34 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cs0ueeikn1@titan.btinternet.com>
Source record: 83818

More sense could be derived by considering lightning and radio-ground conductors to be transmission lines. It's also more simple than reams of words.

But perhaps its asking too much of the present-day school and engineering educational system which neglects arithmetic.

Ignorant school teachers frighten pupils by calling it Mathematics. As I've said before, the culled kids who live in the sewers of Rio de Janerio, South America, are better (self) educated.

680. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 16:35:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1ov7u0lf8gt6nbrghghibmmlv0ork9rueb@4ax.com>
Source record: 83819
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Tue, 11 Jan 2005 09:41:57 +0000, Spike <Aero.Spike@Speed.invalid>
wrote:
> many of us knew this already. Didn't you, Bean? If you already
>knew this, why have you not explained it before?

Hi OM,

Much the same faint complaint could be lain against you, which is to
say, seeing as you "knew this" why didn't you explain it as well?

This is simply stealing Walt's thunder. It takes only once, and that
moment passed.

73's
Richard Clark, KB7QHC

681. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 16:53:52 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105462432.708081.295470@z14g2000cwz.googlegroups.com>
Source record: 83820
Cross-posted to: uk.radio.amateur, rec.radio.amateur.homebrew, rec.radio.amateur.antenna

tox wrote:
> http://news.bbc.co.uk/1/hi/health/4163003.stm
>
>
> Any views?
>
> --
> tox

Sounds rather like the precautionary principle to me. Nothing
particularly new about it. Perhaps a crisis waiting to happen.

682. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 16:53:55 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105462435.317675.3290@c13g2000cwb.googlegroups.com>
Source record: 83821
Cross-posted to: uk.radio.amateur, rec.radio.amateur.homebrew, rec.radio.amateur.antenna

tox wrote:
> http://news.bbc.co.uk/1/hi/health/4163003.stm
>
>
> Any views?
>
> --
> tox

Sounds rather like the precautionary principle to me. Nothing
particularly new about it. Perhaps a crisis waiting to happen.

683. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 16:53:58 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105462438.510018.3540@c13g2000cwb.googlegroups.com>
Source record: 83722
Cross-posted to: uk.radio.amateur, rec.radio.amateur.homebrew, rec.radio.amateur.antenna

tox wrote:
> http://news.bbc.co.uk/1/hi/health/4163003.stm
>
>
> Any views?
>
> --
> tox

Sounds rather like the precautionary principle to me. Nothing
particularly new about it. Perhaps a crisis waiting to happen.

684. Re: Television Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 16:59:58 UTC
From: Mike <williams@fdt.net>
Message-ID: <41E4060E.AC99FD3D@fdt.net>
Source record: 83723

Ross:

Looks like a Winegard Chromstar from the 70's.

Possibly a predecessor to one of these
http://www.starkelectronic.com/wing4.htm

Great fringe antenna, built like a tank.

Mine had a plastic box with a passive balun
on a circuit board with an F connector on
the bottom. I seem to recall seeing an active
version as well.

Hope this gets you started.

Mike NZ4K

Ross Anderson wrote:
>
> Can anyone tell me the make and model number of this television
> antenna?
>
> http://home.comcast.net/~ross_anderson/TelevisionAntenna.htm
> I want to model it using nec.
>
> Thanks
>
> Ross W1HBQ

685. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 17:14:58 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <4t18u0l9lcn75smfmjp14kq8mp3mpubb89@4ax.com>
Source record: 83724
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Tue, 11 Jan 2005 08:35:36 -0800, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Tue, 11 Jan 2005 09:41:57 +0000, Spike <Aero.Spike@Speed.invalid>
>wrote:
>> many of us knew this already. Didn't you, Bean? If you already
>>knew this, why have you not explained it before?
>
>Hi OM,
>
>Much the same faint complaint could be lain against you, which is to
>say, seeing as you "knew this" why didn't you explain it as well?
>

Simple. The context for the information posted is that Bean held a VHF
licence for many years before getting the HF licence. In my own case,
I have never been interested in VHF, confining myself to HF and
ground-mounted verticals, where the option of sloping any radials is
not available. I also believe that Walt's information has been
published in roughly similar form many years ago, although I don't
have the reference to hand.

Further, my original post on this also said "...an interesting
contribution, for which thanks are due to the OP...", which you
snipped.
--
from
Aero Spike

686. Re: Why are they yagi antennas on some bridges?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 17:35:51 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <10u83k1ss2aibdf@corp.supernews.com>
Source record: 83725

"They" reports how high the river, stream be! Not how deep, just how
high. They look really cool perched up there too!
Butch Magee KF5DE

Ron, KC4YOY wrote:
> "Re: Why are they yagi antennas on some bridges?"
>
> Why are "they"???
>
> HUH?
>
> Ron
>
>

687. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 17:39:15 UTC
From: RT <noreply.co.uk>
Message-ID: <41e40f41.0@entanet>
Source record: 83729
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"tox" <nospam@nospamming.co.com> wrote in message
news:xBREd.90$fj7.9@newsfe3-gui.ntli.net...
> http://news.bbc.co.uk/1/hi/health/4163003.stm
>
>
> Any views?
>
> --
> tox
>
>

Yes, it's a usual load of Tosh, the opening paragraph says it all, even a so called expert admits he doesn't know.

"Parents should ensure their children use mobile phones only when absolutely necessary because of the potential health risks, an expert is warning."
Then in same sentence,

"The latest study by Sir William Stewart says there is still no proof mobile phones are unsafe,"

The vision of angry villagers with flaming torches spring to mind every time I hear about objections to mobile phones/masts.

688. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 17:43:24 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <O7-dnTk7ffuhjXncRVn-jw@comcast.com>
Source record: 83726
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34higdF4c235pU2@individual.net...
> Such an excellent and succint didactic exposition deserves
> wider recognition.....

The man (Mr. Walter Maxwell) writes excellent books too! :-)

689. Re: In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 17:48:08 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <NKCdneQBB_TGjHncRVn-1w@comcast.com>
Source record: 83727

<jimp@specsol-spam-sux.com> wrote in message
news:cs0oqk$i87$1@mail.specsol.com...
> stryped@hotmail.com wrote:
>> Ok, I think I am learning something here. If radials simulate earth,
>> would using a solid steel plate instead of radials be better?
>
> Depends on how you define "better".
>
> For an elevated antenna, once you get beyond about 3 or 4 radials, the
> increamental difference in performance for added radials is such that
> you would never notice it in a practical application.

Doesn't it somewhat depend on frequency? I.e., how electrically large those radials appear to the antenna?

I ask due to having seen how commercial AM radio station antennas are built -- usually something pushing a dozen radials, often over a wire mesh as well.

I'm thinking that in the case of a commercial station, they often multiple phased antennas to try to precisely control their radiation pattern, in which case have each antenna be 'as ideal as possible' probably helps.

---Joel

690. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 17:50:22 UTC
From: Starr <Starr@proxima.net>
Message-ID: <cs13kv$a14$0@pita.alt.net>
Source record: 83728
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"G1LVN" <google@g1lvn.org.uk> wrote in message
news:1105315670.028828.266290@c13g2000cwb.googlegroups.com...
> What if you don't have a pavement at the front of the
> Can I insist that my neighbour removes the two 80 foot oak trees he has
> grown in his garden?
>
80 foot? How old is your neighbour?

691. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 17:50:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ad38u0hehdq3oel47omse0f24vujmioe9i@4ax.com>
Source record: 83731
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Tue, 11 Jan 2005 17:14:58 +0000, Spike <Aero.Spike@Speed.invalid>
wrote:
> I also believe that Walt's information has been
>published in roughly similar form many years ago, although I don't
>have the reference to hand.

Hi OM,

There's a good chance it was from one of Walt's own many publications,
or it was, as he said, Dr. George H. Brown (the nominal, ultimate
source) with whom he worked.

73's
Richard Clark, KB7QHC

692. Re: Yaesu FT-7800 E

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 17:52:27 UTC
From: Simon Smith <s.Smith@btinternet.com>
Message-ID: <cs13oqept1@hercules.btinternet.com>
Source record: 83730

Mr Bean.
Airy......
I haven't got the know how or the time to build my own transceiver - and I admire anyone who has. Wonderful talent to have.
I have so far followed all the steps suggested by the RSGB - I obtained the foundation license book and studied it. I then attended a course at Poldu Amature Radio Club in Cornwall and at the end of this training I passed a basic Morse test along with a pass in the written test paper. This entitled me to a apply for a call sign as a beginner. I am now waiting for an intermediate course to begin and I will study again and hopefully pass first time. Next will be the advanced course and by then I hope to have obtained enough knowledge be called a Radio Armature.
In his welcome to me at Foundation Level Peter Kirby, GOTWW, General Manager of the RSGB said:
"Record numbers are coming into the Hobby at the foundation Level and well over a thousand of these are under the age of 21". "The continued success of the revival is in our own hands." "We must promote and encourage this wonderful hobby at all levels". If we all pull to-gather we have much to look foreword to.

So there you have it Mr Bean - So far I have found everyone I have come into contact with to be most helpful and enthusiastic.
I rather get the feeling you are against anyone who is a "beginner" which is a pity.
I don't know why you feel like this.. I respect your opinion but - not all beginners are "CBers" you know. And not all CBers are rude either.
Perhaps you considerable expertise might be put to better use in helping newcomers instead of condemning us !
John
M3IIV

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34iarpF31vp8vU1@individual.net...
> It's a CB rig for CBers.
>
> But then again, you're not a Radio Ham, you're an M3/CBer, so
> go right ahead with your off-the-shelf purchase.
>
> Radio Hams design and manufacture their own gear.
>
> "Simon Smith" <s.Smith@btinternet.com> wrote in message
> > news:crurol$32v$1@titan.btinternet.com...
>> Has anyone on the group got an opinion on this 2m-70cm mobile transceiver
>> ?
>> I am almost ready to purchase one but thought I would ask for some

>> feedback.
>> 73's
>>
>> John M3IIV
>
>

693. Re: DOes a ground plane need a choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 18:05:33 UTC
From: Bill-kb3gun <kb3gun-spam@swronline.com>
Message-ID: <41e41558$0$41509$ec3e2dad@news.usenetmonster.com>
Source record: 83732

If the engine is already warmed up, no choke is needed.

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34ibfsF481nq3U1@individual.net...
>I say, I say, I say! Did you hear the one about the ground plane
> and the policeman's dog?
>
> Perhaps not.
>
> <stryped@hotmail.com> wrote in message
> news:1105459112.119572.307170@f14g2000cwb.googlegroups.com...
>> Does a ground plane need a choke?
>
>

694. Re: Why are they yagi antennas on some bridges?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 18:06:18 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6o48u05gs2950qifpope1ftds9388f4buk@4ax.com>
Source record: 83734

On Tue, 11 Jan 2005 11:35:51 -0600, Butch <lynyrd@cableone.net> wrote:
>"They" reports how high the river, stream be! Not how deep, just how
>high. They look really cool perched up there too!

Hi Butch,

The complaint is noticeable from several new posters who seem to be
emulating Administration-Write. In that regard your last sentence
should read:
"i .think thay lo:ok veri kul u
p their to,"

I suppose all of this comes from the Leave No Child Behind Act and
multiple guess tests. That, or it's because the emerging generations
only type with their thumbs now. -sigh-

73's
Richard Clark, KB7QHC

695. Re: Television Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 18:09:48 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10u85i4b3eeakd9@corp.supernews.com>
Source record: 83733

Dear Ross:
A worthy endeavor. Do let us know how the modeling works out.
73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net

"Ross Anderson"

> I want to model it using nec.
>
> Thanks
>
> Ross W1HBQ
>

696. Re: Tuning a ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 18:10:27 UTC
From: Bill-kb3gun <kb3gun-spam@swronline.com>
Message-ID: <41e4167e$0$41464$ec3e2dad@news.usenetmonster.com>
Source record: 83735

A discone.

<stryped@hotmail.com> wrote in message
news:1105450155.726031.50320@f14g2000cwb.googlegroups.com...
> Just make it for 2 meters or the ham band?
> What can I use to power my scanner and my radio with one antenna?
>

697. Re: In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 18:11:18 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <cs14s6nss1@mail.specsol.com>
Source record: 83736

Joel Kolstad <JKolstad71HatesSpam@yahoo.com> wrote:
> <jimp@specsol-spam-sux.com> wrote in message
> news:cs0oqk$i87$1@mail.specsol.com...
> > stryped@hotmail.com wrote:
> >> Ok, I think I am learning something here. If radials simulate earth,
> >> would using a solid steel plate instead of radials be better?
> >
> > Depends on how you define "better".
> >
> > For an elevated antenna, once you get beyond about 3 or 4 radials, the
> > increamental difference in performance for added radials is such that
> > you would never notice it in a practical application.

> Doesn't it somewhat depend on frequency? I.e., how electrically large those
> radials appear to the antenna?

> I ask due to having seen how commercial AM radio station antennas are
> built -- usually something pushing a dozen radials, often over a wire mesh
> as well.

> I'm thinking that in the case of a commercial station, they often multiple
> phased antennas to try to precisely control their radiation pattern, in
> which case have each antenna be 'as ideal as possible' probably helps.

> ---Joel

Notice the words "For an elevated antenna" which presumes you are working
at a frequency where there is no problem with 1/4 wave radials.

For low frequencies, as in AM broadcast and the lower HAM bands, elevated
antennas become impractical and must be ground mounted, which means the
radials are usually buried as well as there may not be enough room
for 1/4 wave radials.

For radials on or in the ground, usually 4 to 8 1/4 wave radials is
good enough.

If space is limited so 1/4 wave radials aren't possible, the number
required goes up.

The ARRL Antenna Handbook has a good discussion on this.

You might also look at http://www.cebik.com/radio.html which has a couple
of articles about radials, buried and otherwise.

--
Jim Pennino

Remove -spam-sux to reply.

698. Re: Tuning a ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 18:14:45 UTC
From: richardharrison@webtv.net
Message-ID: <8282-41E41795-616@storefull-3256.bay.webtv.net>
Source record: 83741

Stryped wrote:
'"How would you go about tunibg a ground plane antenna?"

Ed Laport explains how to tune a ground plane with (4) equally-spaced too-short radials. He connected one radial with its partner sharing the same alignment to make a resonant 1/2-wavelength. He determined resonance as maximum current in the loading coils. He writes on page 140 of "Radio Antenna Engineering":
"Tuning (the radial`s loading coil) is done by maximum current in the two (radial) wires using a center-connected ammeter or wavemeter near one of the (lloading) coils away from the oscillator to avoid direct pickup from the oscillator."

Lacking loading coils, one can determine maximum current at resonance in the radial wire itself.

Best regards, Richard Harrison, KB5WZI

699. Re: In a ground plane, what dictates the number and spacing of radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 18:17:38 UTC
From: nm5k@wt.net
Message-ID: <1105467458.322954.14470@z14g2000cwz.googlegroups.com>
Source record: 83737

>stryped@hotmail.com wrote:

>Re: In a ground plane, what dictates the number and spacing of
radials?

The height of the antenna above ground in wavelengths. Yes, at a 1/2
wave
or more up, even just two radials are pretty decent. But at 1/8 wave or

lower, 2 radials are just barely above the "waste of time" level as far
as
reducing ground losses... Take two ground planes. Both are at 20 ft at
the base. Each has two radials. But one is for 145 mhz, and the other
is
for 1.85 mhz. Do they have equal ground losses? Not hardly... MK

700. Re: Yaesu FT-7800 E

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 18:17:40 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34ijo9F4b16h8U1@individual.net>
Source record: 83739

I'm not against beginners; but beginners must begin at
the beginning; and the beginning is not the issuance
of a licence in what is a technical pursuit.

As to CBers, au contraire! - all those who come onto the bands with
M3 callsigns are indistinguishable from CBers - little if
any technical knowledge and a requirement to use rigs of
a type approved by the Britland and with limited power levels. Just like
a CB licence, you get the M3/CB Fools' Licence within 2 days
of starting out from scratch. As the RAE was tackled and then
passed by otherwise-unqualified self-taught 14-year-olds I cannot
see any reason why the standards needed to be lowered to let
a licence be given on a plate to those even less qualified than
the unqualified 14-year-olds.

Such licences are not Ham Radio licences by any stretch
of the imagination, and I regret that you have been deceived
by the commercial interests of the book publisher, the RSCB,
if you have been led to believe otherwise.

I help and encourage many beginners, but never those
of the CB persuasion in the M3 guise.

I do _NOT_ condemn you; I merely refuse to associate
with you because such association will do harm for the
long term future of Ham Radio as a technical pursuit.

"Simon Smith" <s.Smith@btinternet.com> wrote in message
news:cs13oqept1@hercules.btinternet.com...
> I rather get the feeling you are against anyone who is a "beginner" which
> is a pity.
> I don't know why you feel like this.. I respect your opinion but - not
all
> beginners are "CBers" you know. And not all CBers are rude either.
> Perhaps you considerable expertise might be put to better use in helping
> newcomers instead of condemning us !
> John
> M3IIV

701. Re: DOes a ground plane need a choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 18:22:26 UTC
From: nm5k@wt.net
Message-ID: <1105467746.436154.281190@f14g2000cwb.googlegroups.com>
Source record: 83738

No and no. But in other cases, it could be yes and yes.
This should keep you good and confused for a while...:/ MK

702. Re: DOes a ground plane need a choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 18:23:47 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34ik37F4ccomlU1@individual.net>
Source record: 83740

I cleaned and ground my plane after it struck a nail and
was also choked with sawdust.

<nm5k@wt.net> wrote in message
news:1105467746.436154.281190@f14g2000cwb.googlegroups.com...
> No and no. But in other cases, it could be yes and yes.
> This should keep you good and confused for a while...:/ MK
>

703. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 18:27:28 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <B4WOHojQqB5BFAV8@ifwtech.co.uk>
Source record: 83742
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Reg Edwards wrote:
>Ian, theres's far too much unwarranted fuss about ground radials in
>ordinary English gardens and back yards. Just lay a few wires, 6 to 12
>in number. beneath a trodden-on, compacted soil surface, with lengths
>of a few metres, perhaps 5 to 10 metres, and away you go.
>

Sorry, Reg, you have no way to know how many radials someone else needs.

The 'right' radial layout for any given person will depend on their available space, their resources, their limitations, their style of operating (casual, DXing or contesting), and above all their antennas - none of which you actually know.

For example, in presuming that my next radial installation will be in an "ordinary English garden", you'd actually be wrong on all three counts!

To everyone else out there: if you want to know how many radials you need, go find out everything you can about radials, from every possible source. There's lots of it out there. With each bit of information you find, judge its probable reliability and its relevance to your particular situation. Then make your own decision.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

704. Re: DOes a ground plane need a choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 18:38:44 UTC
From: Lou W <Louisnot@home.com>
Message-ID: <T2VEd.79823$QR1.44129@fed1read04>
Source record: 83743

<nm5k@wt.net> wrote in message
news:1105467746.436154.281190@f14g2000cwb.googlegroups.com...
> No and no. But in other cases, it could be yes and yes.
> This should keep you good and confused for a while...:/ MK
>

And may I suggest that Stryped pick up a copy of

ARRL antenna handbook
ARRL novice antenna notebook
ARRL "hints and kinks for the radio amateur"
VHF UHF manual by Jessop

KE6LZS

Lou

705. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 18:42:16 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <k378u0pjjc3qi3furohuboncp7rip82j9p@4ax.com>
Source record: 83744
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Tue, 11 Jan 2005 09:50:30 -0800, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Tue, 11 Jan 2005 17:14:58 +0000, Spike <Aero.Spike@Speed.invalid>
>wrote:
>> I also believe that Walt's information has been
>>published in roughly similar form many years ago, although I don't
>>have the reference to hand.
>
>Hi OM,
>
>There's a good chance it was from one of Walt's own many publications,
>or it was, as he said, Dr. George H. Brown (the nominal, ultimate
>source) with whom he worked.
>
>73's
>Richard Clark, KB7QHC

My 1978 Antenna Handbook by Orr & Cowen, page 92, references drooping
radials at a 45 degree angle for a better impedance match, raising the
gain of the ground plane antenna by about 0.5 decibel over the normal
configuration.

'Course Walt probably preceeded those guys :-)

bob
k5qwg

706. Re: Yaesu FT-7800 E

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 18:44:13 UTC
From: Gary Cavie <m0jjh@despammed.com>
Message-ID: <MPG.1c4e2ed7d3d24dfe9896a4@news.individual.net>
Source record: 83745

In article <34iarpF31vp8vU1@individual.net>, Me@privacy.net says...
> It's a CB rig for CBers.
>
> But then again, you're not a Radio Ham, you're an M3/CBer, so
> go right ahead with your off-the-shelf purchase.
>
> Radio Hams design and manufacture their own gear.
>

And you never originate personal attacks?

So what is the story with the CB in the Land Rover? The off-the-shelf radios that you owned, but had to return for repair because you were too nervous? Your job at Westinghouse?

Are you going to tell the truth, for probably the first time, or will you now suffer from the usual ISP problems when challenged?

Do grow up.

707. Re: Copper vs Stainless? *Ping Walter Maxwell

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 18:56:47 UTC
From: Glenn Ashmore <gashmore@cox.net>
Message-ID: <LjVEd.18085$EG1.16999@lakeread04>
Source record: 83746

You are talking a little over this sailor's head but I think I got the jist of it.

The antennas are basically Bill Sykes and Bob Cobey's design. http://www.askrlc.co.uk/. I did change the ratio of height to width a little but verified the dimensions with John Copens' calculator.

The loops are different lengths so I would say it is self phasing. Both antennas are 3/8" tube but the copper is .065" wall and the stainless is .028" wall. Also at corners I used long Ell sweat fittings on the copper tube and bent the stainless on a 3/4" radius but the total centerline lengths are within half a mm on both antennas.

I have tried two different balun designs. One is Paul Hayes design http://web.ukonline.co.uk/phqfh/phbalun1.pdf built inside a film can and the other just 4 turns of RG58U around the 1 1/2" support column. The RG58U balun worked better than the film can (probably due to my poor workmanship) but the relative performance between the two antennas was the same.

I did read your QFH article in Reflections 2. Even understood about half of it. :-)

I have plenty of stainless tube and building these things and seeing how they work is fun so starting over from scratch would not be a problem. Would 3/16 solid rod work better?

--
Glenn Ashmore

I'm building a 45' cutter in strip/composite. Watch my progress (or lack there of) at: http://www.rutuonline.com
Shameless Commercial Division: http://www.spade-anchor-us.com

"Walter Maxwell" <w2du@iag.net> wrote in message news:h8u7u0d8n1lf6uvppn4kgsrrqtt7miv94m@4ax.com...
> On Tue, 11 Jan 2005 07:55:19 -0500, "Glenn Ashmore" <gashmore@cox.net>
> wrote:
>
> >I understand that you are the resident authority on QFH antennas. Can
you
> >help with this problem?
>
> Hello Glenn,
>
> I've had some experience with the QFH, Glenn, but I don't consider
> myself an authority. However, I'll try to help you with the problem,

> but first I'll need to know the form you used in your model. Is it
> the self phasing type, with the inductive bifilar longer than the
> capacitive one? Or are both bifilars of the same length and fed with a
> power splitter and a 90° hybrid? If it is the self phasing type what
> diameter is the tubing? And have you reviewed my data on the subject
> that appears in Reflections?
>
> If both the copper and stainless steel models are fabricated in
> exactly the same form there shouldn't be much difference in
> performance due the different materials. I don't believe the
> difference in resistivities of the two materials should have a
> significant effect on their performances, unless your bifilars are
> made with very small diameter wire. If you used the self phasing type
> the tubing diameter should be approximately 3/4", in which the
> difference in resitivities would be absolutely insignificant.
>
> So Glenn, give me the details of your QFH so that I can be of more
> help.
>
> Walt, W2DU
>

708. Re: Tuning a ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 19:00:39 UTC
From: stryped@hotmail.com
Message-ID: <1105470039.332451.227440@c13g2000cwb.googlegroups.com>
Source record: 83747

Bill-kb3gun wrote:
> A discone.
>
> <stryped@hotmail.com> wrote in message
> news:1105450155.726031.50320@f14g2000cwb.googlegroups.com...
> > Just make it for 2 meters or the ham band?
> > What can I use to power my scanner and my radio with one antenna?
> >

I meant if I have two antennas and want to use them both on my scanner
and 2 meter, how owuld I do that?

709. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 19:10:34 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <KwVEd.594$9j4.32@newsfe5-gui.ntli.net>
Source record: 83748
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Bob Miller" <NOSPAM@neosoft.com> wrote in message
news:k378u0pjjc3qi3furohuboncp7rip82j9p@4ax.com...
> On Tue, 11 Jan 2005 09:50:30 -0800, Richard Clark <kb7qhc@comcast.net>
> wrote:
>
> >On Tue, 11 Jan 2005 17:14:58 +0000, Spike <Aero.Spike@Speed.invalid>
> >wrote:
> >> I also believe that Walt's information has been
> >>published in roughly similar form many years ago, although I don't
> >>have the reference to hand.
> >
> >Hi OM,
> >
> >There's a good chance it was from one of Walt's own many publications,
> >or it was, as he said, Dr. George H. Brown (the nominal, ultimate
> >source) with whom he worked.
> >
> >73's
> >Richard Clark, KB7QHC
>
> My 1978 Antenna Handbook by Orr & Cowen, page 92, references drooping
> radials at a 45 degree angle for a better impedance match, raising the
> gain of the ground plane antenna by about 0.5 decibel over the normal
> configuration.
>
> 'Course Walt probably preceeded those guys :-)

I thnk it predates 1978 by some margin. I may even be in one of the old
"Admiralty Handbooks", if anyone has a copy to hand they could check.

The explanation is a fairly standard one, although Walt does express it
well. If Walt is the originator of the idea I suspect he has a many more
turns on the coil than he is admitting ;-)

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

710. Re: Yaesu FT-7800 E

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 19:12:24 UTC
From: Simon Smith <s.Smith@btinternet.com>
Message-ID: <cs18en$l3a$1@hercules.btinternet.com>
Source record: 83749

That sir is your choice.
I did not make the rules- I am only following an approved path.
I suppose when I receive the full license then it will be different will it
?
You are not giving a convincing argument are you - how can I be less
qualified than an unqualified 14year old ?
Your statements are insane. Thank goodness not all people are as foolish as
you.
John Hurkett
M3IIV

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34ijo9F4b16h8U1@individual.net...
> I'm not against beginners; but beginners must begin at
> the beginning; and the beginning is not the issuance
> of a licence in what is a technical pursuit.
>
> As to CBers, au contraire! - all those who come onto the bands with
> M3 callsigns are indistinguishable from CBers - little if
> any technical knowledge and a requirement to use rigs of
> a type approved by the Britland and with limited power levels. Just like
> a CB licence, you get the M3/CB Fools' Licence within 2 days
> of starting out from scratch. As the RAE was tackled and then
> passed by otherwise-unqualified self-taught 14-year-olds I cannot
> see any reason why the standards needed to be lowered to let
> a licence be given on a plate to those even less qualified than
> the unqualified 14-year-olds.
>
> Such licences are not Ham Radio licences by any stretch
> of the imagination, and I regret that you have been deceived
> by the commercial interests of the book publisher, the RSCB,
> if you have been led to believe otherwise.
>
> I help and encourage many beginners, but never those
> of the CB persuasion in the M3 guise.
>
> I do _NOT_ condemn you; I merely refuse to associate
> with you because such association will do harm for the
> long term future of Ham Radio as a technical pursuit.
>
> "Simon Smith" <s.Smith@btinternet.com> wrote in message
> news:cs13oqept1@hercules.btinternet.com...
>> I rather get the feeling you are against anyone who is a "beginner"
>> which

>> is a pity.
>> I don't know why you feel like this.. I respect your opinion but - not
> all
>> beginners are "CBers" you know. And not all CBers are rude either.
>> Perhaps you considerable expertise might be put to better use in helping
>> newcomers instead of condemning us !
>> John
>> M3IIV
>
>

711. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 19:33:23 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <g8a8u0h9bvconsu833cop11bj2gnvfcjig@4ax.com>
Source record: 83750
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Tue, 11 Jan 2005 09:50:30 -0800, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Tue, 11 Jan 2005 17:14:58 +0000, Spike <Aero.Spike@Speed.invalid>
>wrote:
>> I also believe that Walt's information has been
>>published in roughly similar form many years ago, although I don't
>>have the reference to hand.
>
>Hi OM,
>
>There's a good chance it was from one of Walt's own many publications,
>or it was, as he said, Dr. George H. Brown (the nominal, ultimate
>source) with whom he worked.
>
>73's
>Richard Clark, KB7QHC

The reference I had in mind was an article or item in the RSGB's
flagship journal (Radio Communication at that time?) which had a
picture of the two-radial vertical and a description of what happened
when the radials were progressively angled below the horizontal. This
must have been 15+ years ago. I can't recall now if it referenced any
of the said gentlemen's works, but the parallels are there.
--
from
Aero Spike

712. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 19:44:49 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34iol9F4c9p3rU1@individual.net>
Source record: 83751
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Spike" <Aero.Spike@Speed.invalid> wrote in message
news:g8a8u0h9bvconsu833cop11bj2gnvfcjig@4ax.com...
> On Tue, 11 Jan 2005 09:50:30 -0800, Richard Clark <kb7qhc@comcast.net>
> wrote:
>
> >On Tue, 11 Jan 2005 17:14:58 +0000, Spike <Aero.Spike@Speed.invalid>
> >wrote:
> >> I also believe that Walt's information has been
> >>published in roughly similar form many years ago, although I don't
> >>have the reference to hand.
> >
> >Hi OM,
> >
> >There's a good chance it was from one of Walt's own many publications,
> >or it was, as he said, Dr. George H. Brown (the nominal, ultimate
> >source) with whom he worked.
> >
> >73's
> >Richard Clark, KB7QHC
>
> The reference I had in mind was an article or item in the RSGB's
> flagship journal (Radio Communication at that time?) which had a
> picture of the two-radial vertical and a description of what happened
> when the radials were progressively angled below the horizontal. This
> must have been 15+ years ago. I can't recall now if it referenced any
> of the said gentlemen's works, but the parallels are there.

I'm sure it is much older than 15 years- it was around when I did my RAE
(more than 15 years !). I'm pretty sure it is the the old Admiralty
Handbook, but I can't lay my hands on mine. You see a similar effect when
making a dipole into and inverted V.

It is certainly taught on at least one Advance RCE course ;-)

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

713. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 19:46:12 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <bma8u0trmacfi4cfto785pn38h5k92ds1k@4ax.com>
Source record: 83752
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Tue, 11 Jan 2005 18:27:28 +0000, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> wrote:

>The 'right' radial layout for any given person will depend on their
>available space, their resources, their limitations, their style of
>operating (casual, DXing or contesting), and above all their antennas -
>none of which you actually know.
>
>For example, in presuming that my next radial installation will be in an
>"ordinary English garden", you'd actually be wrong on all three counts!
>

Once upon a time....I had an 18AVT trapped vertical, which due to the
lack of gardening activities in the winter, I had added a number of
insulated wire radials lying on the surface of the grass. I kept
adding to these as time went by and wire became available.

One night, after a few evenings listening to the DX on 80m, I gathered
them all into a small arc pointing at the Caribbean. There must have
been 200 or 300 radial wires spread over ~10 degrees.

A local Amateur friend using an FT200 tuned up and waited until a KV4
station called, and he was the first station pulled out of the
following European pile-up, with a cracking signal report. It's just
anecdote, but I believe the 18AVT was working well in the manner I had
anticipated. It's my belief that you can't have too much in the way of
radials.....but each to his own.
--
from
Aero Spike

714. Re: Yaesu FT-7800 E

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 19:51:29 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34ip7vF4b2phtU1@individual.net>
Source record: 83753

The M3 licensee soon proves by his rather silly and infantile
tirade that he is a CBer in disguise, and so demonstrates why
anybody who holds, or who has ever held, a licence issued
under the gangrenous degeneration that is the M3/CB Fools'
Licence scheme will never make it into the ranks of Radio
Hams with their gentlemanly traditions.

QED.

"Simon Smith" <s.Smith@btinternet.com> wrote in message
news:cs18en$l3a$1@hercules.btinternet.com...
> Your statements are insane. Thank goodness not all people are as foolish
as
> you.
> John Hurkett
> M3IIV

715. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 20:02:38 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e430e9$1_2@127.0.0.1>
Source record: 83755
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

RT wrote:
> "Parents should ensure their children use mobile phones only when absolutely
> necessary because of the potential health risks, an expert is warning."
> Then in same sentence,
>
> "The latest study by Sir William Stewart says there is still no proof mobile
> phones are unsafe,"

The IEEE Spectrum reports that cell phone use for ten years
results in a benign tumor that causes hearing loss.
--
73, Cecil http://www.qsl.net/w5dxp

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716. Re: What's the deal? (was: Re: AM radio reception inside passenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 20:05:18 UTC
From: Jim Kelley <jwkelley@nospam.edu>
Message-ID: <cs1bhu$826$1@news.service.uci.edu>
Source record: 83756

Reg Edwards wrote:

> More sense could be derived by considering lightning and radio-ground
> conductors to be transmission lines. It's also more simple than reams of
> words.
>
> But perhaps its asking too much of the present-day school and engineering
> educational system which neglects arithmetic.
>
> Ignorant school teachers frighten pupils by calling it Mathematics. As I've
> said before, the culled kids who live in the sewers of Rio de Janerio, South
> America, are better (self) educated.

Ridiculous.

717. Re: Yaesu FT-7800 E

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 20:08:14 UTC
From: Gary Cavie <m0jjh@despammed.com>
Message-ID: <MPG.1c4e4281cd07ae759896a5@news.individual.net>
Source record: 83754

In article <34ip7vF4b2phtU1@individual.net>, Me@privacy.net says...
> The M3 licensee soon proves by his rather silly and infantile
> tirade that he is a CBer in disguise, and so demonstrates why
> anybody who holds, or who has ever held, a licence issued
> under the gangrenous degeneration that is the M3/CB Fools'
> Licence scheme will never make it into the ranks of Radio
> Hams with their gentlemanly traditions.
>
> QED.

Do 'silly and infantile tirades' including encouraging the deaths of police officers, comment on the Soham girls, lying about your identity, lying about your previous radio history,lying about your previous religion-based activities, lying just about every time you open your mouth?

Or are you just a rather silly troll?

718. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 20:20:27 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e43516$1_1@127.0.0.1>
Source record: 83757
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Brian Reay wrote:
> The explanation is a fairly standard one, although Walt does express it
> well. If Walt is the originator of the idea I suspect he has a many more
> turns on the coil than he is admitting ;-)

From "Radio Handbook" by Bill Orr, 20th edition, copyright 1975,
section/page 27.9: "The feedpoint impedance of a ground plane may
be raised to about 50 ohms by drooping the radials down at a 45
degree angle." Anyone got an earlier edition?
--
73, Cecil http://www.qsl.net/w5dxp

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719. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 20:28:35 UTC
From: RT <noreply.co.uk>
Message-ID: <41e436ef.0@entanet>
Source record: 83769
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

> The IEEE Spectrum reports that cell phone use for ten years
> results in a benign tumor that causes hearing loss.

What?

;-)

I heard (no pun intended) that the YAAH committee report states that most of the talk about health being put under risk by mobile phones/mast is totally bollox.

I have to agree, before anyone spouts off about being sick due to a nearby mast perhaps the investigators ought to check the contents of moaners fridge etc first.

720. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 20:33:07 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34irfsF49m8g4U1@individual.net>
Source record: 83758
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41e430e9$1_2@127.0.0.1...
> RT wrote:
> > "Parents should ensure their children use mobile phones only when
absolutely
> > necessary because of the potential health risks, an expert is warning."
> > Then in same sentence,
> >
> > "The latest study by Sir William Stewart says there is still no proof
mobile
> > phones are unsafe,"
>
> The IEEE Spectrum reports that cell phone use for ten years
> results in a benign tumor that causes hearing loss.

Is that 10 years continous use? If so, most youngsters will be death by the
time they are 18, if the 'music' hasn't 'got them by 15 ;-)

I'm glad I'm too old to like what passes for 'music' these days ;-)

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

721. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 20:35:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10u8e5h1n6adja5@corp.supernews.com>
Source record: 83759
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Cecil Moore wrote:
>
> The IEEE Spectrum reports that cell phone use for ten years
> results in a benign tumor that causes hearing loss.

Which issue was that? I'd like to read the article.

Roy Lewallen, W7EL

722. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 20:38:00 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e43933$1_2@127.0.0.1>
Source record: 83760
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Brian Reay wrote:

> "Cecil Moore" <w5dxp@hotmail.com> wrote:
>>The IEEE Spectrum reports that cell phone use for ten years
>>results in a benign tumor that causes hearing loss.
>
> Is that 10 years continous use? If so, most youngsters will be death by the
> time they are 18, if the 'music' hasn't 'got them by 15 ;-)

I assume you mean deaf? Few people have used cell phones
for ten years already. Some of those few are starting to
get tumors inside their ears. I have switched over to a
headset for my cellphone activities after having one
for about three years.
--
73, Cecil http://www.qsl.net/w5dxp

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723. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 20:42:28 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34is1cF49ght9U1@individual.net>
Source record: 83761
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41e43516$1_1@127.0.0.1...
> Brian Reay wrote:
> > The explanation is a fairly standard one, although Walt does express it
> > well. If Walt is the originator of the idea I suspect he has a many more
> > turns on the coil than he is admitting ;-)
>
> From "Radio Handbook" by Bill Orr, 20th edition, copyright 1975,
> section/page 27.9: "The feedpoint impedance of a ground plane may
> be raised to about 50 ohms by drooping the radials down at a 45
> degree angle." Anyone got an earlier edition?

Not of that book, but similar wording in ARRL's 1972 "VHF Manual". I found
it, but not the book I was looking for.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

724. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 20:44:59 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e43ad6$1_1@127.0.0.1>
Source record: 83762
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Roy Lewallen wrote:

> Cecil Moore wrote:
>> The IEEE Spectrum reports that cell phone use for ten years
>> results in a benign tumor that causes hearing loss.
>
> Which issue was that? I'd like to read the article.

December 2004, page 20: "Cellphones Linked To Brain Tumors"
"No tumors were associated with less than 10 years of
cellphone use." There will be about 50 million people with
10 years of cellphone use in 1907. I won't be one of them.
--
73, Cecil http://www.qsl.net/w5dxp

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725. What does it take to get into weather sats?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 20:48:36 UTC
From: stryped@hotmail.com
Message-ID: <1105476516.871551.51730@c13g2000cwb.googlegroups.com>
Source record: 83763

I have been reading about it. Is it possible to get into this cheaply?
What is needed?

726. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 20:52:11 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34isjjF4aj19tU1@individual.net>
Source record: 83764
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41e43933$1_2@127.0.0.1...
> Brian Reay wrote:
>
> > "Cecil Moore" <w5dxp@hotmail.com> wrote:
> >>The IEEE Spectrum reports that cell phone use for ten years
> >>results in a benign tumor that causes hearing loss.
> >
> > Is that 10 years continous use? If so, most youngsters will be death by
the
> > time they are 18, if the 'music' hasn't 'got them by 15 ;-)
>
> I assume you mean deaf?

Indeed, thinking of something else as I typed. Its the 'music' ;-)

>Few people have used cell phones
> for ten years already.

Not sure about that. The mobile phone was an icon of the 'Yuppie' era (along
with the Filofax, BMW, Rolex, etc.) That was mid 1980s.

I'm pretty sure we one of the early 'next generation' phones (digital) in
about 1990.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

727. Re: Why the 4:1 or 9:1 baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 20:52:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10u8f5seljur9ee@corp.supernews.com>
Source record: 83765

Reg Edwards wrote:
> . . .
> Furthermore, the choke does NOT do what the old-wives say it does, ie., stop
> radiation from the line and prevent noise pick-up. It might even make
> matters worse. The choke merely shifts the volts and amps standing waves to
> other places along the line.
>
> Have I upset the apple cart again?

Once again I proudly don the mantle of a Reg's Old Wife.

A common-mode choke, aka "choke balun" or "current balun" can have the effect Reg mentions, but that's not the only possibility. Depending on the lengths of the antenna and transmission line and the placement of the choke, it can reduce the common mode current to a much lower value everywhere on the line. This is done by the same mechanism as an insulator reduces the current induced on a guy wire -- by making a formerly resonant line non-resonant. In stubborn cases, two (or perhaps very seldom, more) chokes placed about a quarter wave apart are required to get a low value of common mode current everywhere on the line.

The general principles are easily illustrated by modeling(*). In practice, the actual path along the feedline from antenna to ground isn't well known so can't be modeled well, and some experimentation might be necessary.

(*) Anyone having an EZNEC program, including the demo, can look in the manual index under "Coaxial Cable, Modeling" for information. To simulate a choke balun, insert a resistive or inductive load in the wire which represents the outside of the coax. 500 - 1000 ohms is a reasonable value to use.

Roy Lewallen, W7EL

728. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 20:54:11 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e43cfe$1_3@127.0.0.1>
Source record: 83767
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Brian Reay wrote:

> "Cecil Moore" <w5dxp@hotmail.com> wrote:
>> From "Radio Handbook" by Bill Orr, 20th edition, copyright 1975,
>>section/page 27.9: "The feedpoint impedance of a ground plane may
>>be raised to about 50 ohms by drooping the radials down at a 45
>>degree angle." Anyone got an earlier edition?
>
> Not of that book, but similar wording in ARRL's 1972 "VHF Manual". I found
> it, but not the book I was looking for.

You're right, page 179: "Another matching trick with the ground-plane
is to droop the radials downward, adjusting their angle below the
horizontal until the antenna feed impedance becomes 52 ohms. This
usually occurs at about a 45-degree angle."
--
73, Cecil http://www.qsl.net/w5dxp

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729. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 20:56:08 UTC
From: Howard Eisenhauer <howarde@REMOVECAPShfx.eastlink.ca>
Message-ID: <7af8u015k6hbfqge04t0n9917hnvu2dr53@4ax.com>
Source record: 83766
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Tue, 11 Jan 2005 14:42:37 GMT, "tox" <nospam@nospamming.co.com>
wrote:

>http://news.bbc.co.uk/1/hi/health/4163003.stm
>
>
>Any views?

No, just an unbiased review of what appears to be all studies done so
far-

http://www.mcw.edu/gcrc/cop/cell-phone-health-FAQ/toc.html

Read thoroughly & make up your own mind :).

H.

730. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 21:03:15 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34it8bF4a0va6U1@individual.net>
Source record: 83768
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34isjjF4aj19tU1@individual.net...

>
> >Few people have used cell phones
> > for ten years already.
>
> Not sure about that. The mobile phone was an icon of the 'Yuppie' era
(along
> with the Filofax, BMW, Rolex, etc.) That was mid 1980s.
>
> I'm pretty sure we one of the early 'next generation' phones (digital) in
> about 1990.
>

Just checked, it One2One launched in 1993, and there were other systems
before that.

Hard to believe, I don't recall a time when we weren't plagued by the
'mobile'.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

731. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 21:16:01 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <dmZJkodRIE5BFw3Z@newbrain.demon.co.uk>
Source record: 83770
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <41e43ad6$1_1@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
writes
>Roy Lewallen wrote:
>
>> Cecil Moore wrote:
>>> The IEEE Spectrum reports that cell phone use for ten years
>>> results in a benign tumor that causes hearing loss.
>> Which issue was that? I'd like to read the article.
>
>December 2004, page 20: "Cellphones Linked To Brain Tumors"
>"No tumors were associated with less than 10 years of
>cellphone use." There will be about 50 million people with
>10 years of cellphone use in 1907. I won't be one of them.

I smell some faulty logic, just because "No tumors were associated with
less than 10 years of cellphone use" you can not infer that tumours
should be associated with more than ten years use. Since handheld mobile
phones have been in use for over ten years there should be statistical
evidence of tumour induction, in fact give the large proportion of the
population using such devices the stats would indicate some tumours in
less than ten years. Where are they?
--
Ian G8ILZ

732. Arithmetic and Cannobis.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 21:18:39 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cs1frfifd1@sparta.btinternet.com>
Source record: 83771

Kids considered by the City Authorities to be a nuisance, living with rats in the sewers of Rio are ocasionally culled, perhaps not explicitly by the Authorities, to reduce their nunbers by police armed with guns.

Amongst other ways of making a living they survive be selling home-brewed cigarettes, loaded with cannobis and more powerful drugs on the city streets. It is not surprising why the Authorities consider them to be a nuisance - it has a bad effect on the wealthy tourist trade.

Now selling cigarettes involves monetary and arithmetical transactions. Accepting bank notes and coins and giving correct change. Mental calculations involve percent of drugs per inch of cigarette length, the number of cigarettes in the pack, wastage etc. All must be done very fast before an armed policeman appears. And must be done accurately and honestly to avoid upsetting customers with the consequent longer-term bad effect of loss in trade.

There has evolved in the sewers of Rio an arithmetical method of addition, subtraction, multiplication and division, altogether different from the Arabic procedures (Baghdad, Basrah, Mosul, before foreign weapons of mass destruction were introduced) now adopted by the rest of the educated world.

Not so very long ago a small party of professors, Phd's, students etc., from an English univerity made an expedition to Rio specifically to investigate this apparent revolution in the very foundation of Mathematics.

They returned with a new insight into how the human brain works with numbers and retired to study and then present their findings.

Since then all has been silence. I have not spent much time with Google. But there is no doubt that the self-taught sewer kids of Rio are better educated at arithmetic than the so-called engineers who argue amongst themselves in words on this newsgroup without any use of numbers and relative quantities.

Reg.

733. Re: Television Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 21:40:52 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncu8hv4.2724.bit-bucket@shell.config.com>
Source record: 83672

On Tue, 11 Jan 2005 13:09:48 -0500, J. Mc Laughlin wrote:
> "Ross Anderson"
>
>> I want to model it using nec.
>
> A worthy endeavor. Do let us know how the modeling works out.

I'd be interested as to how you model the kinked VHF element(s), and the twisted and missing UHF elements. HI!HI!

73 es HNY
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

734. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 21:46:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10u8i9qmod3umd6@corp.supernews.com>
Source record: 83673
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Cecil Moore wrote:
>>
>>> The IEEE Spectrum reports that cell phone use for ten years
>>> results in a benign tumor that causes hearing loss.
>>
>>
>> Which issue was that? I'd like to read the article.
>
>
> December 2004, page 20: "Cellphones Linked To Brain Tumors"
> "No tumors were associated with less than 10 years of
> cellphone use." There will be about 50 million people with
> 10 years of cellphone use in 1907. I won't be one of them.

Thanks. Here's what the article really said:

"Researchers at the Karolinska Institute of Environmental Medicine, in Stockholm, Sweden, have found an association between long-term cellphone use and a rare, benign tumor, causing concern among radiation specialists and epidemiologists, though they emphasize that the results haven't been replicated yet. Scientists now eagerly await results from other studies under way around the world.

Published in the November issue of the journal _Epidemiology_, the Swedish study, led by Stefan Lï¿½nn of the Karolinska Institute, looked at 148 people who had acoustic neuroma and compared them with 604 healthy people. It found that people who used cellphones for more than 10 years doubled their risk of developing the tumor, a benign condition affecting one in 100 000 people. . ."

So when you compacted this into the statement that "cell phone use for ten years results in a benign tumor that causes hearing loss", was it an emulation of today's journalistic technique, or just the effect of years spent working with binary circuits?

Looks to me like it said that a single study, yet to be replicated, of a small group of people indicated that long-term cell phone use caused a doubling of the risk of a rare benign tumor, raising the odds of getting one from about 1 in 100,000 to 1 in 50,000.

So when you compacted this into the statement that "cell phone use for ten years results in a benign tumor that causes hearing loss", was it an

emulation of today's journalistic technique, or just the effect of years spent working with binary circuits?

Roy Lewallen, W7EL

735. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 21:51:46 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <2mh8u055ddf6hntkimna5qklbquusbaeck@4ax.com>
Source record: 83674
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Tue, 11 Jan 2005 21:16:01 +0000, Prometheus <Prometheus@127.0.0.1>
wrote:

>..... in fact give the large proportion of the
>population using such devices the stats would indicate some tumours in
>less than ten years. Where are they?

Firstly, you have to ask yourself what is meant by 'ten years of use'.

Does it mean

- owning one for ten tears?
- having it switched on for ten years?
- using it for x hours a day for ten years?

The meaning of 'ten years' hasn't been made clear so far, at least on
this ng.

Then you need to take into account of the mechanics of tumour
initiation and development. There are thought to be five or six events
in the initiation and growth of a tumour to the stage where it can be
clinically diagnosed. Only one of these is associated with the
causative factor, which will have its own rate of effectiveness, and
so will each of the remaining steps.

Unless the statistics have been very carefully researched and
manipulated, and they may well have been, the numbers reported should
be treated with some caution....
--
from
Aero Spike

736. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 21:55:02 UTC
From: huLLy <hully@despammed.com>
Message-ID: <34j08cF43pc2nU1@individual.net>
Source record: 83675
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"tox" <nospam@nospamming.co.com> wrote in message
news:xBREd.90$fj7.9@newsfe3-gui.ntli.net...
> http://news.bbc.co.uk/1/hi/health/4163003.stm
>
>
> Any views?
>

I think common sense dictates caution when you slap something on the side of your head that heats your brain (Airy excluded) up... There must be health issues with this....

737. Re: What does it take to get into weather sats?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 21:55:43 UTC
From: dplatt@radagast.org
Message-ID: <10u8iqvh7e90u4e@corp.supernews.com>
Source record: 83676

In article <1105476516.871551.51730@c13g2000cwb.googlegroups.com>,
<stryped@hotmail.com> wrote:

>I have been reading about it. Is it possible to get into this cheaply?
>What is needed?

Google is a wonderful thing, my friend. Try "Weather fax" as a search
topic.

The cheapest approach seems to be a "sound card" weather-fax
demodulator program (runs on Windows or Linux or other Unix variants -
commercial variants around $100, many freeware variants available for
downloading), an inexpensive "PC sound-card interface to radio"
interface (RigBlaster, Buxcomm RASCAL, or any of a zillion homebrew
isolators costing perhaps $10 to build), a suitable antenna (a
homebrew yagi, or an "eggbeater" with omnidirectional overhead
coverage).

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

738. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 22:16:42 UTC
From: Howard Eisenhauer <howarde@REMOVECAPShfx.eastlink.ca>
Message-ID: <jrj8u05i1g3ufiarm4bbt2bbhhm18es8q0@4ax.com>
Source record: 83677
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Tue, 11 Jan 2005 13:46:17 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Cecil Moore wrote:
>> Roy Lewallen wrote:
>>
>>> Cecil Moore wrote:
>>>
>>>> The IEEE Spectrum reports that cell phone use for ten years
>>>> results in a benign tumor that causes hearing loss.
>>>
>>>
>>> Which issue was that? I'd like to read the article.
>>
>>
>> December 2004, page 20: "Cellphones Linked To Brain Tumors"
>> "No tumors were associated with less than 10 years of
>> cellphone use." There will be about 50 million people with
>> 10 years of cellphone use in 1907. I won't be one of them.
>
>Thanks. Here's what the article really said:
>
>"Researchers at the Karolinska Institute of Environmental Medicine, in
>Stockholm, Sweden, have found an association between long-term cellphone
>use and a rare, benign tumor, causing concern among radiation
>specialists and epidemiologists, though they emphasize that the results
>haven't been replicated yet. Scientists now eagerly await results from
>other studies under way around the world.
>
Snip
>Roy Lewallen, W7EL

Just curious, did the study take into account putting vinyl phone
cases against skin, being warmed up & subsequently out-gassing
carcinogens that were then absorbed through the skin & into the blood
stream???

Enquiring Minds Want to Know-

Howard.

p.s.- Just what are "double the odds" for this "rare" cancer? Any
chance they're within the statistical noise floor?? EMWtK.

H.E.

739. Re: Arithmetic and Cannobis.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 22:17:24 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <cs1j9ldmu1@news.service.uci.edu>
Source record: 83678

Reg Edwards wrote:

> Kids considered by the City Authorities to be a nuisance, living with rats
> in the sewers of Rio are ocasionally culled, perhaps not explicitly by the
> Authorities, to reduce their nunbers by police armed with guns.
>
> Amongst other ways of making a living they survive be selling home-brewed
> cigarettes, loaded with cannobis and more powerful drugs on the city
> streets. It is not surprising why the Authorities consider them to be a
> nuisance - it has a bad effect on the wealthy tourist trade.
>
> Now selling cigarettes involves monetary and arithmetical transactions.
> Accepting bank notes and coins and giving correct change. Mental
> calculations involve percent of drugs per inch of cigarette length, the
> number of cigarettes in the pack, wastage etc. All must be done very fast
> before an armed policeman appears. And must be done accurately and honestly
> to avoid upsetting customers with the consequent longer-term bad effect of
> loss in trade.
>
> There has evolved in the sewers of Rio an arithmetical method of addition,
> subtraction, multiplication and division, altogether different from the
> Arabic procedures (Baghdad, Basrah, Mosul, before foreign weapons of mass
> destruction were introduced) now adopted by the rest of the educated world.
>
> Not so very long ago a small party of professors, Phd's, students etc., from
> an English univerity made an expedition to Rio specifically to investigate
> this apparent revolution in the very foundation of Mathematics.
>
> They returned with a new insight into how the human brain works with numbers
> and retired to study and then present their findings.

Or else lose their grant funding.

> Since then all has been silence. I have not spent much time with Google. But
> there is no doubt that the self-taught sewer kids of Rio are better educated
> at arithmetic than the so-called engineers who argue amongst themselves in
> words on this newsgroup without any use of numbers and relative quantities.

Better educated? Ridiculous. More proficient, perhaps.

740. Re: What does it take to get into weather sats?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 22:24:15 UTC
From: stryped@hotmail.com
Message-ID: <1105482254.985838.57710@f14g2000cwb.googlegroups.com>
Source record: 83679

Dave Platt wrote:
> In article <1105476516.871551.51730@c13g2000cwb.googlegroups.com>,
> <stryped@hotmail.com> wrote:
>
> >I have been reading about it. Is it possible to get into this
cheaply?
> >What is needed?
>
> Google is a wonderful thing, my friend. Try "Weather fax" as a
search
> topic.
>
> The cheapest approach seems to be a "sound card" weather-fax
> demodulator program (runs on Windows or Linux or other Unix variants
-
> commercial variants around $100, many freeware variants available for
> downloading), an inexpensive "PC sound-card interface to radio"
> interface (RigBlaster, Buxcomm RASCAL, or any of a zillion homebrew
> isolators costing perhaps $10 to build), a suitable antenna (a
> homebrew yagi, or an "eggbeater" with omnidirectional overhead
> coverage).
>
>
> --
> Dave Platt <dplatt@radagast.org>
AE6EO
> Hosting the Jade Warrior home page:
http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

Would a ground plane work? Are these immages pretty clear?
Do you have to have ssb capability?

741. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 22:26:54 UTC
From: fractenna@aol.com
Message-ID: <20050111172654.16401.00000036@mb-m16.aol.com>
Source record: 83680

Radials function as a counterpoise, and, when there are enough radials, a ground plane.

If you wish to attenuate ground losses, then it is best to make the most of the surface by using as many radials as possible. The first dozen+ are the most critical in reducing ground losses. Even a dozen or so helps substantially or over 3, for example. Several dozen reduces ground losses substantially.

Elevating radials always helps.

73,
Chip N1IR

742. Re: What does it take to get into weather sats?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 22:36:56 UTC
From: dplatt@radagast.org
Message-ID: <10u8l88e09kia81@corp.supernews.com>
Source record: 83681

In article <1105482254.985838.57710@f14g2000cwb.googlegroups.com>,
<stryped@hotmail.com> wrote:

>Would a ground plane work? Are these immages pretty clear?
>Do you have to have ssb capability?

As I said in my response to your first query on the subject:

Google is a wonderful thing, my friend. Try "Weather fax" as a
search topic.

There's a massive amount of useful information out there on the Web.
You're going to learn faster, and more, and better, if you buckle down
and do the work of looking for it yourself, rather than continually
firing off dozens of pleas asking people to read you the Cliff Notes
version.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

743. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 22:45:53 UTC
From: Dave <davenpat@btopenworld.com>
Message-ID: <cs1kv1kca1@titan.btinternet.com>
Source record: 83682
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41e43933$1_2@127.0.0.1...
>
>
> I assume you mean deaf? Few people have used cell phones
> for ten years already.

You in the USA already? ;-)

Already I have used an already mobile phone for well over ten years already.
(not too sure how to punctuate that in the USA vernacular) ;-)
I see no signs of ill health in either myself, or my daughter already. We
both went with Orange about the same time. (A British mobile phone network)
Now Orange work at about 1.8 Gig? At that time, that was about the highest
frequency phone system that was going. Now we have systems that work at 3
gigabyte? already. Or do they operate at even higher frequencies already?
I'm not to sure already.

Right! I'm off to bed already. ;-)

Dave

744. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 22:59:40 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34j42lF4a363lU1@individual.net>
Source record: 83683
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Dave" <davenpat@btopenworld.com> wrote in message
news:cs1kv1kca1@titan.btinternet.com...
>
> "Cecil Moore" <w5dxp@hotmail.com> wrote in message
> news:41e43933$1_2@127.0.0.1...
> >
> >
> > I assume you mean deaf? Few people have used cell phones
> > for ten years already.
>
> You in the USA already? ;-)
>
> Already I have used an already mobile phone for well over ten years
already.
> (not too sure how to punctuate that in the USA vernacular) ;-)
> I see no signs of ill health in either myself, or my daughter already. We
> both went with Orange about the same time. (A British mobile phone
network)

Isn't Orange an offshoot of Hutchinsion Telecom which was, I think, from
Hong Kong?

> Now Orange work at about 1.8 Gig? At that time, that was about the highest
> frequency phone system that was going. Now we have systems that work at 3
> gigabyte? already. Or do they operate at even higher frequencies already?
> I'm not to sure already.
>
> Right! I'm off to bed already. ;-)

Actually Dave, Cecil's use of "already" was quite appropriate. Just
because it may not be 'our' English doesn't make it incorrect- for good or
ill US and UK English are diverging. Languages change. In fact, there is
some evidence the US English is nearer to old English than current UK usage.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

745. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 23:09:01 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34j4k7F4cc2n2U1@individual.net>
Source record: 83684
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Howard Eisenhauer" <howarde@REMOVECAPShfx.eastlink.ca> wrote in message
news:jrj8u05i1g3ufiarm4bbt2bbhhm18es8q0@4ax.com...
> Just curious, did the study take into account putting vinyl phone
> cases against skin, being warmed up & subsequently out-gassing
> carcinogens that were then absorbed through the skin & into the blood
> stream???
>
> Enquiring Minds Want to Know-
>

Not to mention using the MP3 or Radio features with the volume too high. Or
RSI in the thumbs due to over texting.

Even worse, terminal boredom watching phone geeks comparing features. What
is wrong with a basic phone?
Some things are best simple:

Mobilephones (Proud owner of a Nokia 3310.)
Watches (I don't even like quartz watches, give me a mechanical automatic
any day.)
Razors (why do people like electric razors?)
Toothbrushes (electric toothes, I ask you).

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

746. social commentary, performance art or smut?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 23:16:32 UTC
From: thruthewoods32@yahoo.com
Message-ID: <1105485392.397974.66530@z14g2000cwz.googlegroups.com>
Source record: 83685

I just came across the website for a video called "hunting for bambi".
>From the looks of it, it seems to be a low-brow stab at the OLN/Playboy
genres of cable networks, but also comes across as a misogynist
celebration of gun culture. Does anybody have any insight or opinions
as to what else it could be construed as?
The preview is on www.teambambi.com

747. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 23:20:55 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <y6WdnaXV1dTHwnncRVn-gQ@comcast.com>
Source record: 83686
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

> It found that people who used cellphones for more than 10 years doubled
> their risk of developing the tumor, a benign condition affecting one in
> 100 000 people. . ."

I bet that driving a car to work every day raises the likelihood of a multiude of serious health illnesses by an order of magnitude, and those risks are a lot greater than 1 in 100,000 to begin with!

A lot people don't seem to reailze that lifestyle choices (where you live, what you eat, etc.) have a vastly greater influence on their likelihood of coming down with some dreaded disease than most forms of new technology do...

(Although I am all for continuing research so that appropriate levels for polluting gases, EM radiation emissions, etc. can be set... but of course 'the appropriate level' is at least as much if not more a political problem than a technical problem.)

748. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 23:23:49 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <0KidnUKT75iY_XncRVn-ig@comcast.com>
Source record: 83687
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34j4k7F4cc2n2U1@individual.net...
> Some things are best simple:
>
> Mobilephones (Proud owner of a Nokia 3310.)

I'm sold on wireless Internet connectivity, sorry. WiFi/WiMax's coverage is
still a drop in the bucket compared to WCDMA/GPRS/EDGE coverage.

> Watches (I don't even like quartz watches, give me a mechanical automatic
> any day.)

I like mechnical watches, but there's something to be said for dual time
zones, chronographs, count down alarms, etc. too!

> Razors (why do people like electric razors?)

Mainly laziness; the last thing I want to do when I'm still groggy in the
morning is deal with changing a double-edged razor blade.

> Toothbrushes (electric toothes, I ask you).

I'd speculate that _most_ people do a better job of cleaning with an
electric toothbrush than with a 'manual...'

749. Re: What determines an antenna's impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 23:29:28 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <K86dnZc9pvTG_HncRVn-hQ@comcast.com>
Source record: 83690

<stryped@hotmail.com> wrote in message
news:1105458026.233906.189860@f14g2000cwb.googlegroups.com...
>I know in a ground plane the angle of the radials can, but what about a
> simple, multiple element yagi?

The spacing of the elements and thei angles they're mounted out (a yagi consists of a regular old dipole with a reflector and a bunch of directors added).

> How does one measure what the impedance is or will be?

The equations for designing a Yagi are rather involved, but you certainly could use them if you're dead set on it. Otherwise, you use an antenna modeling program such as NEC to predict the impedance, and an antenna analyzer to measure the impedance of an actual antenna. (Internally, an antenna analyzer is measuring the SWR [and relative phase] of a small RF test signal applied; it can convert this back into an impedance.)

750. Re: What does it take to get into weather sats?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 23:35:12 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <doadndrgBPUy_3ncRVn-hw@comcast.com>
Source record: 83689

<stryped@hotmail.com> wrote in message
news:1105476516.871551.51730@c13g2000cwb.googlegroups.com...
>I have been reading about it. Is it possible to get into this cheaply?
> What is needed?
>

Amateur Weather
http://www.amateurweather.com/apt.htm

Dave has already pointed you in the proper direction. You can also use the word "WEFAX" for google searches.
http://www.dxradio.co.uk/wefax/

UK site - Time-Step
http://www.time-step.com/

http://www.satsignal.net/

Remember that many of these images are NOW available to you via the Internet and various web sites !

2 major types satellite are available:
Polar APT orbiting (VHF around 137 MHz)
APT satellites give about 12 good images a day, wherever you are in the world. The resolution is 4km per pixel and there are visible and infrared sensors. This is a simple system where the satellite is in low earth orbit and very easily received at 137MHz (bandwidth of 30 - 50 kHz required by receiver). The two frequencies in main use are 136.50 for NOAA 12 and 15 and 137.62MHz for NOAA 14. A simple crossed dipole antenna can be used or a Quadrifilar helix antenna (stainless steel for marine usage).
http://www.w8bya.com/Wefax-main.htm

and Geostationary Meteosat or GOES (S-Band - 1691MHz)
These are the photos you usually see on The Weather Channel or your local news.
WEFAX satellites give anything up to 400 images a day and can provide relay images of the other side of the world. The resolution varies between 2.5 and 10km. There are 3 sensors, visible, infrared and upper atmosphere water vapor. The main frequency is 1691MHz and we provide a special receiver for this purpose. This signal from a 90cm (3 foot) dish and is amplified by a low noise preamplifier mounted directly on the dish.

Princeton 2002 Satellite class (Intro to Physics)
http://www.hep.princeton.edu/~marlow/satlab/index.html

751. Re: ANyone build a corner reflector for uhf

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 23:35:18 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <WoZEd.4743$C52.2779@newsread2.news.atl.earthlink.net>
Source record: 83688

<stryped@hotmail.com> wrote in message
news:1105450222.665696.56860@f14g2000cwb.googlegroups.com...
> I have seen designes for tv antennas but wondered if they would work
> well for uhf?

Yes, they will work. They are just usually larger for the same gain than
other antennas. One advantage is the same reflector can be used for several
bands.

752. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 23:36:32 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34j67pF476ujvU1@individual.net>
Source record: 83691
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Joel Kolstad" <JKolstad71HatesSpam@Yahoo.Com> wrote in message
news:0KidnUKT75iY_XncRVn-ig@comcast.com...
> "Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
> news:34j4k7F4cc2n2U1@individual.net...
> > Some things are best simple:
> >
> > Mobilephones (Proud owner of a Nokia 3310.)
>
> I'm sold on wireless Internet connectivity, sorry. WiFi/WiMax's coverage
is
> still a drop in the bucket compared to WCDMA/GPRS/EDGE coverage.

Must be a big phone just to get the label on it ;-)

> > Watches (I don't even like quartz watches, give me a mechanical
automatic
> > any day.)
>
> I like mechnical watches, but there's something to be said for dual time
> zones, chronographs, count down alarms, etc. too!

I can't imagine how I live without then. Nice mechanical hands that move, a
nice tick, and not having to wind it up. If cars were as reliable as a
Rolex, garages would be out of business.

>
> > Razors (why do people like electric razors?)
>
> Mainly laziness; the last thing I want to do when I'm still groggy in the
> morning is deal with changing a double-edged razor blade.

Don't you have those snazzy clip in dual (or even triple) bladed beasts. Do
them in the dark.

Plus, a proper wet shave lasts all day. An electric tickle about 4 hours.

> > Toothbrushes (electric toothes, I ask you).
>
> I'd speculate that _most_ people do a better job of cleaning with an
> electric toothbrush than with a 'manual...'

I've heard that before. However, there is also the case for 'up and down'
motion (no innuendo intended) and electric toothbrushes are rotary.
--
Brian Reay
www.g8osn.org.uk

www.amateurradiotraining.org.uk
FP#898

753. Re: What does it take to get into weather sats?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 23:47:25 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <uYmdnV-dNKoR-HncRVn-qA@comcast.com>
Source record: 83692

<stryped@hotmail.com> wrote in message
news:1105476516.871551.51730@c13g2000cwb.googlegroups.com...
>I have been reading about it. Is it possible to get into this cheaply?
> What is needed?
>

1500 members in 45 countries RIG is an internationally recognized and
represents the interests of members, to the Radio Communications Agency in
the UK, to Eumetsat in Europe and to NOAA in the USA. They are actively
lobbying all agencies in respect of access to forthcoming digital
transmissions.

Remote Imaging Group (UK) is a major hobby group for WX imaging
http://www.rig.org.uk/

Before the advent of the Internet (1980s), Dallas RIG was a very popular
narrowband imaging dial-up BBS (DOS days)
http://www.drig.com/

gb

754. Re: Why the 4:1 or 9:1 baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 23:53:47 UTC
From: Dan Richardson <dwr@mailinator.com>
Message-ID: <pmp8u0dmojr8ja3lpi3f5sguqr685mbht7@4ax.com>
Source record: 83693

On Tue, 11 Jan 2005 12:52:59 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Once again I proudly don the mantle of a Reg's Old Wife.

Oh my gawd! Do I detect Kurt Sturba here. <G><G>

Danny

755. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-11 23:54:23 UTC
From: "M5WJF@GB7MAX.#28.GBR.EU" <M5WJF@GB7MAX.#28.GBR.EU>
Message-ID: <38311$41e46725$5397d286$14921@nf4.news-service.com>
Source record: 83694
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

G1LVN wrote:
> Thanks for that. Pretty useful those trees then. There are a number of
> large trees in the village and have to be very big to survive the winds
> at this altitude. Not sure how a tower would fair up here - and
> probably not necessary according to some coverage map simulations I've
> been doing - http://home.btconnect.com/g1lvn/eqso/maps/
>

Interesting projections/simulations, how did you make these maps?

I'm interested in producing maps of such detail for various locations
across the West Midlands Region.

M5WJF

756. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 00:12:53 UTC
From: Chris Kirby <g4fzn@yahoo.com>
Message-ID: <spq8u0pfkoutod97hl9704q8761jagjvh2@4ax.com>
Source record: 83695
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Dave wrote:

>We
>both went with Orange about the same time. (A British mobile phone network)

Eh? Orange is almost wholly owned by France Telecom. Hardly British!!

--
Chris

757. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 00:16:28 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <N0atQMfcxG5BFw0c@newbrain.demon.co.uk>
Source record: 83696
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <2mh8u055ddf6hntkimna5qklbquusbaeck@4ax.com>, Spike
<Aero.Spike@Speed.invalid> writes
>On Tue, 11 Jan 2005 21:16:01 +0000, Prometheus <Prometheus@127.0.0.1>
>wrote:
>
>>..... in fact give the large proportion of the
>>population using such devices the stats would indicate some tumours in
>>less than ten years. Where are they?
>
>Firstly, you have to ask yourself what is meant by 'ten years of use'.
>
>Does it mean
>
> - owning one for ten tears?
> - having it switched on for ten years?
> - using it for x hours a day for ten years?
>
>The meaning of 'ten years' hasn't been made clear so far, at least on
>this ng.

True, owning for ten years but never switching on can be no worse then
any other lump of plastic and metal. Having it switched on but not
making any calls is also of minimal risk. Using for X hours per day
might be meaningful but if X is not defined it is of little value, we
also need to know what proportion of users suffer adverse effect. If the
proportion is little different to that in non-mobile phone users then
use of mobile phones can not be considered significant.

>Then you need to take into account of the mechanics of tumour
>initiation and development. There are thought to be five or six events
>in the initiation and growth of a tumour to the stage where it can be
>clinically diagnosed. Only one of these is associated with the
>causative factor, which will have its own rate of effectiveness, and
>so will each of the remaining steps.

Again information not published.

>Unless the statistics have been very carefully researched and
>manipulated, and they may well have been, the numbers reported should
>be treated with some caution....

Give the lack of atestable figures I prefer distrust to caution.
--
Ian G8ILZ

758. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 00:38:55 UTC
From: Matthew Haigh <$matthaigh{News07}$@haigh.org>
Message-ID: <FGFWIjNfGH5BFwGM@local.gcrsoft.com>
Source record: 83698
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <34j67pF476ujvU1@individual.net>, Brian Reay
<brian.reay@bigfoot.com> writes
>"Joel Kolstad" <JKolstad71HatesSpam@Yahoo.Com> wrote in message
>news:0KidnUKT75iY_XncRVn-ig@comcast.com...
>> "Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
>> news:34j4k7F4cc2n2U1@individual.net...

>> > Razors (why do people like electric razors?)
>>
>> Mainly laziness; the last thing I want to do when I'm still groggy in the
>> morning is deal with changing a double-edged razor blade.
>
>Don't you have those snazzy clip in dual (or even triple) bladed beasts. Do
>them in the dark.

Personally I use an electric because it doesn't take chunks out of my
face. Not that I do that often with a razor, but you can bet that the
day I have an important meeting is the one I end up looking like an
extra from a slasher horror film :-)

>
>Plus, a proper wet shave lasts all day. An electric tickle about 4 hours.
>
>> > Toothbrushes (electric toothes, I ask you).
>>
>> I'd speculate that _most_ people do a better job of cleaning with an
>> electric toothbrush than with a 'manual...'
>
>I've heard that before. However, there is also the case for 'up and down'
>motion (no innuendo intended) and electric toothbrushes are rotary.

My electric one goes up and down. It is also a completely sealed handle,
with the battery charging done inductively, and the motion transferred
to the head magnetically. I can't believe the amount of engineering gone
into something that could be done with a stick of plastic and a few
bristles :-)
(and no, I didn't buy it - it was given to me).

Matt
--
Matthew Haigh --$matthaigh{News07}$@haigh.org--
GCRSoft, providing SMS solutions since 1996...
http://www.gcrsoft.com http://www.moretext.com

759. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 00:39:03 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <MKEN$XgnGH5BFwHW@newbrain.demon.co.uk>
Source record: 83697
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <34j4k7F4cc2n2U1@individual.net>, Brian Reay
<brian.reay@bigfoot.com> writes
>Even worse, terminal boredom watching phone geeks comparing features.

An anthropomorphic study of the lesser witted geek should be
interesting, one must ask is the species viable?

> What
>is wrong with a basic phone?

Unless you need the extra features, nothing. I have a digital camera
which is much better than any in a phone, my pocket radio is better than
any phone, my handheld computer is better than any phone. My mobile
phone is smaller than any phone containing "feature" I seldom want to
carry around.

>Some things are best simple:

However not automatically so.

>Mobilephones (Proud owner of a Nokia 3310.)

Depends if you NEED more than speech.

>Watches (I don't even like quartz watches, give me a mechanical
>automatic
>any day.)

My analogue quarts is more rugged and accurate but I do have to change
the battery every three years so I do have some sympathy for a
mechanical automatic.

>Razors (why do people like electric razors?)

Perhaps they find the vibration of an electric shaver to be auto-erotic,
I prefer the closer shave obtained with a real razor.

>Toothbrushes (electric toothes, I ask you).

Depends on the type; the reciprocating rotary head are more effective
than an ordinary brush, the vibrating etc. are a waste of time.

I take an engineering approach and select equipment to be effective
rather than simply rejecting anything that is not traditional (otherwise
you would have to reject all phones and use runners).

--
Ian G8ILZ

760. Re: Get FREE Sony Cameras, Palms Treo 650 Smartphone or Sony Vaio K35!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 01:16:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10u8ukfjk9fv23c@corp.supernews.com>
Source record: 83699

That came from prodigy.net.mx. I've reported it to the ISP, for whatever good it might do.

Roy Lewallen, W7EL

761. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 01:44:07 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <ym%Ed.14480$B95.10786@lakeread02>
Source record: 83702

"Fractenna" <fractenna@aol.com> wrote

> Radials function as a counterpoise, and, when there are enough radials, a
> ground plane.
>
> If you wish to attenuate ground losses, then it is best to make the most
of the
> surface by using as many radials as possible. The first dozen+ are the
most
> critical in reducing ground losses. Even a dozen or so helps substantially
or
> over 3, for example. Several dozen reduces ground losses substantially.
>
> Elevating radials always helps.
>
> 73,
> Chip N1IR
>

Welcome back to the group, Chip! Where have you been?

Jack Painter
Virginia Beach, Virginia

762. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 01:44:40 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <xZmdnXcXvbuWHHncRVn-vA@comcast.com>
Source record: 83700
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Prometheus" <Prometheus@127.0.0.1> wrote in message
news:MKEN$XgnGH5BFwHW@newbrain.demon.co.uk...
>>Mobilephones (Proud owner of a Nokia 3310.)
> Depends if you NEED more than speech.

Hmm... I don't know that we NEED much of any modern technology... but I'm certainly willing to pay for it! (And it is interesting how the Internet has gone from being 'a cool toy' to something many would argue is NEEDed for 'modern jobs' in under a decade... I wonder how long telephones took to reach the same level of 'NEED'?)

> My analogue quarts is more rugged and accurate but I do have to change the
> battery every three years so I do have some sympathy for a mechanical
> automatic.

Casio has some nice 10 year (battery life) models, although they're plastic so generally the case will die years before the battery...

There are also solar powered and kinetically powered quartz (electric) watches out there...

> I take an engineering approach and select equipment to be effective rather
> than simply rejecting anything that is not traditional (otherwise you
> would have to reject all phones and use runners).

I thought it was smoke signals? :-)

763. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 01:46:07 UTC
From: "aunwin@insightbb.com"
Message-ID: <zj%Ed.1269$ox3.526@attbi_s04>
Source record: 83701
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:B4WOHojQqB5BFAV8@ifwtech.co.uk...
> Reg Edwards wrote:
>>Iasnip
>
> For example, in presuming that my next radial installation will be in an
> "ordinary English garden", you'd actually be wrong on all three counts!
> one.........two ....three

Are we off to Spain?

Art

>
snip
>
>
> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

764. Re: What does it take to get into weather sats?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 03:07:05 UTC
From: Glenn Ashmore <gashmore@cox.net>
Message-ID: <ov0Fd.18125$EG1.17254@lakeread04>
Source record: 83703

About $300 and some skill at plumbing. I run a Hamtronics R139 receiver into my sound card (there are better and cheaper receivers), David Jones' satsignal shareware and a homebrew QHF. I get 6 to 8 poctures a day covering Hudson Bay to Puerto Rico.

Google around. You will find everything you need.

--
Glenn Ashmore

I'm building a 45' cutter in strip/composite. Watch my progress (or lack there of) at: http://www.rutuonline.com
Shameless Commercial Division: http://www.spade-anchor-us.com

<stryped@hotmail.com> wrote in message news:1105476516.871551.51730@c13g2000cwb.googlegroups.com...
> I have been reading about it. Is it possible to get into this cheaply?
> What is needed?
>

765. CALCULATION OF EARTH RESISTANCE IN MULTI-LAYER EARTH STRUCTURE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 03:09:01 UTC
From: mmufoe2004@yahoo.com
Message-ID: <1105499341.246877.88400@c13g2000cwb.googlegroups.com>
Source record: 83704

I am PhD student and I doing some work on grounding resistance and I would like to develop a formula for CALCULATION OF EARTH RESISTANCE IN MULTI-LAYER EARTH STRUCTURE. and compare it with some field measurments...What do you think? Is it possible to develop such this formula?
Just want to remind you again that my case of study (calculation of Earth resistance for the driven rod in a horizontally stratified multi-layer earth at non-homogeneous earth).
If any body have any papers to help or any advice please do
I would like to thank you in advance
your Ram

766. Re: Yaesu FT-7800 E

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 03:28:21 UTC
From: Old Ed <eXseniorsDeleteThisAndTheX@earthlink.net>
Message-ID: <pP0Fd.4901$li4.4227@newsread3.news.pas.earthlink.net>
Source record: 83705

Hi John -

Welcome to the hobby, from across the pond!

It didn't look like anyone answered your question about eham.net
(note: NOT eham.com), so try this:

http://www.eham.net/reviews/detail/4779

If you navigate around the site just a bit, you will find many
more reviews on the FT-7800R version. I assume it's very
similar, but I haven't looked up the differences.

BTW, I think you would do well to ignore posts from trolls
and flamers. There is no upside to getting into a spraying
contest with a skunk. (I have done it a few times, so I know.)

73, Ed, W6LOL

"Simon Smith" <s.Smith@btinternet.com> wrote in message
news:cs0saf$gc3$1@titan.btinternet.com...
> How do I find it ? Do you have the web Address ?
> Thanks
> John
> "JD" <dixon@cae.ca> wrote in message news:cs0otf$3tb$1@dns3.cae.ca...
> > Did you try the eham.com reviews???
> > I always check them before I make a major purchase of equipment.
> > JD, VE3DIX
> >
> > "Simon Smith" <s.Smith@btinternet.com> wrote in message
> > news:crurol$32v$1@titan.btinternet.com...
> >> Has anyone on the group got an opinion on this 2m-70cm mobile
transceiver
> > ?
> >> I am almost ready to purchase one but thought I would ask for some
> > feedback.
> >> 73's
> >>
> >> John M3IIV
> >> Cornwall - UK
> >>
> >>
> > >
> > >
>
>

767. Re: What does it take to get into weather sats?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 03:36:33 UTC
From: Kingfish Stevens <nospam@nospam.net>
Message-ID: <on69u0tptasnq2c1ljat9p1nc4mp7q3poa@4ax.com>
Source record: 83706

first, you would need to be pretty small. You'd also need some type
of rocket ship.

768. Re: CALCULATION OF EARTH RESISTANCE IN MULTI-LAYER EARTH STRUCTURE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 03:50:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6679u0l8hb5llgro641lq3viiepmeprmm0@4ax.com>
Source record: 83707

On 11 Jan 2005 19:09:01 -0800, mmufoe2004@yahoo.com wrote:

>I am PhD student and I doing some work on grounding resistance and I
>would like to develop a formula for CALCULATION OF EARTH RESISTANCE IN
>MULTI-LAYER EARTH STRUCTURE. and compare it with some field
>measurments...What do you think? Is it possible to develop such this
>formula?
>Just want to remind you again that my case of study (calculation of
>Earth resistance for the driven rod in a horizontally stratified
>multi-layer earth at non-homogeneous earth).
>If any body have any papers to help or any advice please do
>I would like to thank you in advance
>your Ram

Hi Ram,

Well, you have certainly picked one of the most obscure thesis to embark upon. Everyone's done it, they all have an answer, but no one could repeat it anywhere by any rationale except maybe in one fine publication:
UNITED STATES DEPARTMENT OF AGRICULTURE
Rural Electrification Administration
REA BULLETIN 1751F-802
SUBJECT: Electrical Protection Grounding Fundamentals

It does not characterize soil, but it does a very compelling job of characterizing technique, which is very valuable.

I don't know what the soil is like there in Malaysia, but you can bet that it contains all the variables that will make analysis quite a challenge. I would presume that you at least have less differences in water content and temperature than here in North America (this drives a huge difference in earth resistance).

73's
Richard Clark, KB7QHC

769. Re: Arithmetic and Cannobis.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 03:53:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0o79u0lk22r5l76fen721tu3mnr2s57do2@4ax.com>
Source record: 83708

On Tue, 11 Jan 2005 21:18:39 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:
> loaded with cannobis and more powerful drugs

Hi Reggie,

If you are expected to be taken seriously, even the sewer rats of Rio
know how to spell hemp.

73's
Richard Clark, KB7QHC

770. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 04:25:47 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e4a6d5$1_3@127.0.0.1>
Source record: 83709
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Brian Reay wrote:
> "Cecil Moore" <w5dxp@hotmail.com> wrote:
>>Few people have used cell phones
>>for ten years already.
>
> Not sure about that.

Few compared to an estimated 200,000,000 by 2017.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

771. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 04:39:03 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e4a9f2_2@127.0.0.1>
Source record: 83710
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Prometheus wrote:
> I smell some faulty logic, just because "No tumors were associated with
> less than 10 years of cellphone use" you can not infer that tumours
> should be associated with more than ten years use.

People with less than 10 years of cellphone use suffered the same
rate of tumors as non-cellphone users. People with more than 10 years
of cellphone use suffered twice as many tumors as non-cellphone users
and tumors among cellphone users was four times more likely to occur
on the side of the head normally used for the cellphone. Where's the
faulty logic?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

772. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 04:49:44 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e4ac73$1_4@127.0.0.1>
Source record: 83711
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Roy Lewallen wrote:
> So when you compacted this into the statement that "cell phone use for
> ten years results in a benign tumor that causes hearing loss", was it an
> emulation of today's journalistic technique, or just the effect of years
> spent working with binary circuits?

That was the gist of what I got out of reading the article the
title and header of which is:

"CELLPHONES LINKED TO BRAIN TUMORS, THE GOOD NEWS IS THEY'RE
BENIGN; THE BAD NEWS IS THAT THEY'RE THERE."

Your gist may vary. I assume one argument from the "no energy
in RF waves" guys will be "no energy = no tumor".
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

773. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 04:55:02 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e4adb1$1_1@127.0.0.1>
Source record: 83712
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Dave wrote:
> I see no signs of ill health in either myself, or my daughter already.

That's nice and fits right in with one in 100,000 non-cellphone
users getting it Vs two in 100,000 10-year cellphone users getting
it.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

774. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 04:58:08 UTC
From: tox <nospam@nospamming.co.com>
Message-ID: <A72Fd.3$fr6.0@newsfe4-gui.ntli.net>
Source record: 83713
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41e4a6d5$1_3@127.0.0.1...
> Brian Reay wrote:
> > "Cecil Moore" <w5dxp@hotmail.com> wrote:
> >>Few people have used cell phones
> >>for ten years already.
> >
> > Not sure about that.
>
> Few compared to an estimated 200,000,000 by 2017.

In which case, it could well be the end of the world! With all that RF
flying about, chances are, by 2017 every male in the world will be sterile.

If there's a moral here, it must be, don't keep your phone in your trouser
pocket!

Regards
tox

775. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 05:11:35 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e4b194$1_1@127.0.0.1>
Source record: 83714
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

tox wrote:
> If there's a moral here, it must be, don't keep your phone in your trouser
> pocket!

More on the subject from:
http://www.timesonline.co.uk/article/0,,2-1436543,00.html

"CHILDREN under the age of eight should not use mobile phones, parents were advised last night after an authoritative report linked heavy use to ear and brain tumours and concluded that the risks had been underestimated by most scientists.

Professor Sir William Stewart, chairman of the National Radiological Protection Board (NRPB), said that evidence of potentially harmful effects had become more persuasive over the past five years.

The news prompted calls for phones to carry health warnings and panic in parts of the industry. One British manufacturer immediately suspended a model aimed at four to eight-year-olds.

The number of mobiles in Britain has doubled to 50 million since the first government-sponsored report in 2000. The number of children aged between five and nine using mobiles has increased fivefold in the same period.

In his report, Mobile Phones and Health, Sir William said that four studies have caused concern. One ten-year study in Sweden suggests that heavy mobile users are more prone to non-malignant tumours in the ear and brain while a Dutch study had suggested changes in cognitive function. A German study has hinted at an increase in cancer around base stations, while a project supported by the EU had shown evidence of cell damage from fields typical of those of mobile phones."
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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776. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 06:21:46 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <tRT1JWi6HM5BFwSZ@newbrain.demon.co.uk>
Source record: 83715
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <41e4a9f2_2@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
writes
>Prometheus wrote:
>> I smell some faulty logic, just because "No tumors were associated
>>with less than 10 years of cellphone use" you can not infer that
>>tumours should be associated with more than ten years use.
>
>People with less than 10 years of cellphone use suffered the same
>rate of tumors as non-cellphone users. People with more than 10 years
>of cellphone use suffered twice as many tumors as non-cellphone users
>and tumors among cellphone users was four times more likely to occur
>on the side of the head normally used for the cellphone. Where's the
>faulty logic?

The faulty logic was in the presumption that ten years use was different when your statement in Message-ID: <41e43ad6$1_1@127.0.0.1> of 'December 2004, page 20: "Cellphones Linked To Brain Tumors" "No tumors were associated with less than 10 years of cellphone use." There will be about 50 million people with 10 years of cellphone use in 1907. I won't be one of them' which made no mention of effects either use for more than ten years or non-use. I do not expect anything a simplistic as a step function at the ten year threshold, perhaps this like your previous post is also omitting essential information?
--
Ian G8ILZ

777. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 07:17:17 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <EtNfy6C97M5BFAkI@ifwtech.co.uk>
Source record: 83717
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

aunwin@insightbb.com wrote:
>
>Are we off to Spain?
>
Nope. You'll see, in good time...

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

778. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 07:18:40 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34k1a7F2ie14pU1@individual.net>
Source record: 83716
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41e4ac73$1_4@127.0.0.1...
> Roy Lewallen wrote:
> > So when you compacted this into the statement that "cell phone use for
> > ten years results in a benign tumor that causes hearing loss", was it an
> > emulation of today's journalistic technique, or just the effect of years
> > spent working with binary circuits?
>
> That was the gist of what I got out of reading the article the
> title and header of which is:
>
> "CELLPHONES LINKED TO BRAIN TUMORS, THE GOOD NEWS IS THEY'RE
> BENIGN; THE BAD NEWS IS THAT THEY'RE THERE."
>
> Your gist may vary. I assume one argument from the "no energy
> in RF waves" guys will be "no energy = no tumor".

Have other factors in the 'life style' of phone users been ruled out?

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

779. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 08:48:36 UTC
From: Rv! <not.a.valid@email.address.invalid>
Message-ID: <41e4e462$0$19165$cc9e4d1f@news-text.dial.pipex.com>
Source record: 83718
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

> If there's a moral here, it must be, don't keep your phone in your trouser
> pocket!

Less painful than the snip! :0

Rv!

780. h

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 09:55:38 UTC
From: Michael Hunger <michael.hunger@ntlworld.com>
Message-ID: <uu6Fd.20$QV5.1@newsfe6-win.ntli.net>
Source record: 83719

[No readable article body recovered]

781. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 10:45:43 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105526743.722764.155190@f14g2000cwb.googlegroups.com>
Source record: 83720
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Unlike heavy mobile phone use it has been proven that increasing Oxydisation of cell structures causes, cancer, aging and ultimately death. Doesn't stop anyone breathing though does it? If we al stopped breathing there would be no cancer, no aging.

Seriously though, as an illustration, say that in 20 years time we find that the heating effect of RF from mobile phones provides a catalyst for increased oxydisation in the brain when combined with the inhilation of plastics vapour from the material used in cellphone keypd membranes to cause cancer of the nose (it could happen!!). This would be a totally unforseen risk to our health. What this report says that is as a precaution to unforseen health risks it is better not to let childern use mobile phones and audults only when absolutly necessary and to limit use. This is an example of the "precautionary principle", specifically used to limit or halt future crisis.

see: http://en.wikipedia.org/wiki/Precautionary_principle
http://www.spiked-online.com/Articles/00000006DE2F.htm
http://www.emfacts.com/papers/newspeak.pdf
http://www.chstm.man.ac.uk/outreach/mobile-phones.htm
http://www.seas.upenn.edu/~kfoster/precautionary_foster.PDF

782. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 11:05:38 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105527938.680067.45010@c13g2000cwb.googlegroups.com>
Source record: 83721
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

http://home.btconnect.com/g1lvn/eqso/coverage.htm

has links to coverage map software from VE2DBE and "G8GTZ how to get started guide". The G8GTZ stuff is essentially because it's a bugger to get the altitude date for the UK loaded in.

Takes a while to get it working, but once you have mastered it the worlds your lobster. It's all freeware as well - works as well as lot of commercial stuff which costs thousands of pounds
Regards
Gareth
www.g1lvn.org.uk

783. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 11:17:28 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105524152.797511.311760@f14g2000cwb.googlegroups.com>
Source record: 83622
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

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784. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 11:31:28 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cs31qg$4k3$1@hercules.btinternet.com>
Source record: 83623
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:B4WOHojQqB5BFAV8@ifwtech.co.uk...
> Reg Edwards wrote:
> >Ian, theres's far too much unwarranted fuss about ground radials in
> >ordinary English gardens and back yards. Just lay a few wires, 6 to 12
> >in number. beneath a trodden-on, compacted soil surface, with lengths
> >of a few metres, perhaps 5 to 10 metres, and away you go.
> >
>
> Sorry, Reg, you have no way to know how many radials someone else needs.
>
> The 'right' radial layout for any given person will depend on their
> available space, their resources, their limitations, their style of
> operating (casual, DXing or contesting), and above all their antennas -
> none of which you actually know.
>
> For example, in presuming that my next radial installation will be in an
> "ordinary English garden", you'd actually be wrong on all three counts!
>
>
> To everyone else out there: if you want to know how many radials you
> need, go find out everything you can about radials, from every possible
> source. There's lots of it out there. With each bit of information you
> find, judge its probable reliability and its relevance to your
> particular situation. Then make your own decision.
>
==========

Ian, may I suggest you join forces with the Ph.D student on this newsgroup
who wants to develop an explicit formula to "Calculate the Earth resistance
in a Multi-layer Ground Structure". Your problems are not unrelated.

And come back in 20 years time to report your unsuccessful findings. ;o)

Reg

785. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 12:12:23 UTC
From: G1LVN <google@g1lvn.org.uk>
Message-ID: <1105528292.172405.142250@z14g2000cwz.googlegroups.com>
Source record: 83624
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

Have a look at what G3TVU of Derby Raynet did. I have a feeling you may
want to do something similar.
http://www.cplus.org/rmw/ian/Walk%20best%20sites.htm

786. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 12:28:58 UTC
From: "M5WJF@GB7MAX.#28.GBR.EU" <M5WJF@GB7MAX.#28.GBR.EU>
Message-ID: <d377a$41e517ff$5397d286$8968@nf4.news-service.com>
Source record: 83625
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

G1LVN wrote:
> http://home.btconnect.com/g1lvn/eqso/coverage.htm
>
> has links to coverage map software from VE2DBE and "G8GTZ how to get
> started guide". The G8GTZ stuff is essentially because it's a bugger to
> get the altitude date for the UK loaded in.
>
> Takes a while to get it working, but once you have mastered it the
> worlds your lobster. It's all freeware as well - works as well as lot
> of commercial stuff which costs thousands of pounds
> Regards
> Gareth
> www.g1lvn.org.uk
>

Thanks Gareth.

73 de Wayne M5WJF

787. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 12:55:26 UTC
From: "M5WJF@GB7MAX.#28.GBR.EU" <M5WJF@GB7MAX.#28.GBR.EU>
Message-ID: <3631c$41e51e33$5397d286$8968@nf4.news-service.com>
Source record: 83626
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

G1LVN wrote:
> Have a look at what G3TVU of Derby Raynet did. I have a feeling you may
> want to do something similar.
> http://www.cplus.org/rmw/ian/Walk%20best%20sites.htm
>

A lot of work it seems (at least in working out how to use the software initially), particularly as several applications appear to be used in a modular fashion, I'll have to take a look at it in more depth in a few days time.

I do something similar to this when producing MeteorSat-8 Imagery from HRIT Data.

M5WJF

788. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 13:22:30 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <kHH3YcSWSS5BFAiY@ifwtech.co.uk>
Source record: 83629
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Reg Edwards wrote:
>Ian, may I suggest you join forces with the Ph.D student on this
>newsgroup who wants to develop an explicit formula to "Calculate the
>Earth resistance in a Multi-layer Ground Structure". Your problems are
>not unrelated.
>
That is strictly his problem. For my purposes, there's already plenty of information out there.

>And come back in 20 years time to report your unsuccessful findings.
>;o)

I will come back much sooner, and report some successful DXing... though you're still going to say it could have been done with a dozen short radials :-)

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

789. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 13:24:57 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <828au0huh16iso8ejfft7bljhvq7iska87@4ax.com>
Source record: 83627
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On 12 Jan 2005 02:45:43 -0800, "G1LVN" <google@g1lvn.org.uk> wrote:

>Unlike heavy mobile phone use it has been proven that increasing
>Oxydisation of cell structures causes, cancer, aging and ultimately
>death. Doesn't stop anyone breathing though does it? If we al stopped
>breathing there would be no cancer, no aging.

Although meant humorously, it should be noted that oxidation is a process that doesn't necessarily involve oxygen at all!

Oxidation is the process of losing one or more electrons by an atom (which may form part of a molecule) - the species that gained the appropriate electrons is said to be 'reduced'. Redox reactions are a basic part of chemistry.

The real oxidation damage to human cells comes from the action of 'free radicals' - molecules that have gained a lone electron. These electrons are highly reactive, and the transfer of this electron to a molecule in a cell can cause (chemical) damage. If this happens to be part of the cell's DNA, then the 'message' encoded by the DNA has been altered.....which can lead to uncontrolled cell growth and reproduction, and hence The Big Casino.

Where do free radicals come from? Currently they are though to arise through pollution, fried foods, alcohol, sunlight, solvents, ionising radiation, the sources are many and varied. What can you do to prevent free-radical attack? Avoid free-radical producers, and ensure you take enough anti-oxidants through dietary supplementation....

The interested reader is encouraged to find out more through, e.g. web searches. There's a lot of info out there.

I've laboured this a bit because there are people on this ng whose level of understanding is such that they believe things like 'dehumidifiers absorb heat.....you can use this to warm up your shed'.
--
from
Aero Spike

790. Re: What does it take to get into weather sats?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 13:25:35 UTC
From: stryped@hotmail.com
Message-ID: <1105536335.217168.146280@f14g2000cwb.googlegroups.com>
Source record: 83628

I have looked but am having some toruble finding information. One of the problems I have is I only have dial up at home.

791. Re: ANyone build a corner reflector for uhf

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 13:31:06 UTC
From: stryped@hotmail.com
Message-ID: <1105536666.960384.168960@f14g2000cwb.googlegroups.com>
Source record: 83630

How is "the same reflector can be used for many bands?"

792. Re: Arithmetic and Cannobis.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 13:34:31 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cs3917$rr5$1@sparta.btinternet.com>
Source record: 83631

"Richard Clark" wrote
> > loaded with cannobis and more powerful drugs
>
> Hi Reggie,
>
> If you are expected to be taken seriously, even the sewer rats of Rio
> know how to spell hemp.
>
==========
Hi Dick,

Yes, at the time, I was aware of the mis-spelling. But I could't think of the name 'hemp' which even I CAN spell correctly. Very interesting, its the only defect you could find in my story.

Your "If you are expected to be taken seriously" is an indication that you think there is something serious in what I say.

Regardless of South American un-culled sewer rats - Engineers who regularly demonstrate they are afraid of using numbers can hardly be considered to be well educated. (Refer to Kelvin).

This criticism is not so much directed against individuals as it is against the present-day, Western World engineering educational system in which university professors just sit on their fat, lazy, well-paid, self-satisfied arses, obtaining easy money under mutually-plagiarising false pretences.

Reginald, G4FGQ

793. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 14:34:53 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e53597$1_3@127.0.0.1>
Source record: 83632
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Prometheus wrote:
> I do not expect anything a simplistic as a
> step function at the ten year threshold, perhaps this like your previous
> post is also omitting essential information?

I didn't say there was a step function at the ten year threshold
and I'm certainly not going to type in the entire article. It is
much more likely that it is a ramp function roughly emerging from
the average after around ten years of use.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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794. Re: DOes a ground plane need a choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 14:40:51 UTC
From: Zombie Wolf <zombie489@tds.net>
Message-ID: <__udncidLIkzq3jcRVn-iQ@giganews.com>
Source record: 83633

A "ground plane" antenna is designed to 'fool" the antenna into thinking the horizontal radials are actually the surface of the earth. This term actually has nothing to do with grounding the antenna. However, the antenna will work better if the mast of it is grounded, since this gives the radials an actual earth ground reference electrically, and it therefore will work more closely to it's design specs.

<stryped@hotmail.com> wrote in message
news:1105459112.119572.307170@f14g2000cwb.googlegroups.com...
> Does a ground plane need a choke? What about being grounded to the mast?
>

795. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 14:41:03 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e5370a$1_1@127.0.0.1>
Source record: 83634
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Brian Reay wrote:
> Have other factors in the 'life style' of phone users been ruled out?

For further information, please contact Stefan Lï¿½nn at the
Karolinska Institute in Sweden.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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796. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 14:41:33 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34krk5F4a266oU1@individual.net>
Source record: 83635
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Discussed in the "Antenna Manual", by Woodrow Smith,
pub "Editors and Engineers Ltd " dated 1948.

He refers to the "Brown Ground Plane Antenna" and separately
to the "Drooping Ground Plane Antenna"

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41e43516$1_1@127.0.0.1...
> From "Radio Handbook" by Bill Orr, 20th edition, copyright 1975,
> section/page 27.9: "The feedpoint impedance of a ground plane may
> be raised to about 50 ohms by drooping the radials down at a 45
> degree angle." Anyone got an earlier edition?

797. Re: What determines an antenna's impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 14:53:06 UTC
From: Zombie Wolf <zombie489@tds.net>
Message-ID: <wvqdnbMgQ58SpHjcRVn-pg@giganews.com>
Source record: 83636

Any antenna will be either "inductive" or "capacitive", depending on its length as relative to the frequency its designed for. If it is short for the frequency, it is usually capacitive, and if it is long for the frequency, it will exhibit inductive qualities. The combination of these inductive and capacitive factors, added vectorially, results in the "Z", or impedance , of the antenna. Impedance is actually sort of a lossless form of resistance. More info on these factors can be found in the arrl antenna handbook, available from the arrl headquarters in Newington, Connecticut.

"Z" was a factor in these discuassions and arguments I have been having with people about how their antenna's active element was "grounded' over the years. for DC purposes, it may be grounded, but they fail to take into account that the antenna's impedance to ground is actually higher than that when RF energy is applied to it... The antenna is usually "grounded", so to speak, through a reactive element that produces quite a high impedance between ground and the active antenna element at RF. If it didn't , the antenna would send and receive nothing, since all signals WOULD get shorted to ground ! But, it seems the gist of this argument, which any novice ham operator is more than familiar with, escapes them....

<stryped@hotmail.com> wrote in message
news:1105458026.233906.189860@f14g2000cwb.googlegroups.com...
> I know in a ground plane the angle of the radials can, but what about a
> simple, multiple element yagi?
> How does one measure what the impedance is or will be?
>

798. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 15:01:59 UTC
From: Zombie Wolf <zombie489@tds.net>
Message-ID: <R_WdnYb3R9k-pnjcRVn-jw@giganews.com>
Source record: 83637

Of course Mr. Clark, as usual, is "right on the money" in saying that 1db is nothing. To get a 1 unit s-meter difference on the average receiver, it actually takes 6 decibels more signal, or 4 times the power, from the transmitter, to produce that signal increase.

Double the transmitter power (3 db) , and you get a half an s-unit increase.

In many cases, it is more advantageous to raise the antenna 10 feet or more, than it is to increase transmitter power, and it will often result in much more signal in the receiver, since it gets the transmitter antenna "up in the clear", where losses to the ground and surrounding obstructions drop off..

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:bfb1u01nmageuqg17g5g3afbgh4d80gofo@4ax.com...
> On Tue, 11 Jan 2005 03:30:07 GMT, ml <m@di.net> wrote:
> >what would happen if i build say i'd have to stay physically small , so
> >say a 1/4wave verticle on 10m and then made that antenna
> >supercondutive?
>
> Hi OM,
>
> As far as performance? Absolutely no difference to it even if it were
> elevated 1000F above that to compare.
>
> - Well maybe someone with enough sophisticated equipment might notice
> a dB difference - then they would whack the side of the gear to clear
> that up - nope, no difference....
>
> You need to come to terms with just how imperceptible 1 dB is (zilch,
> in technical terms), and how much power it takes (about 12%, just more
> $ to burn) to make that imperceptible difference. The dollar has lost
> 30% of its value in the world market in the last few years - have you
> noticed? This may not be one way to appreciate 1dB, but it does
> reveal how relative changes go unfelt.
>
> 73's
> Richard Clark, KB7QHC

799. Re: J pole vs ground plane? Which better for base?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 15:04:04 UTC
From: Zombie Wolf <zombie489@tds.net>
Message-ID: <wY6dncCe4oG5oXjcRVn-uA@giganews.com>
Source record: 83638

The J pole will work better, if it is built properly

<stryped@hotmail.com> wrote in message
news:1105312599.482663.54080@c13g2000cwb.googlegroups.com...
> I am wanting a base antenna to put atop my tv tower. I am considering
> building a j pole or a ground plane. Which in your opeiong is better
> and why?
>
> Also, most ground planes I see are for 1/4 wave. Is a 5/8 wave better?
> What about a full wave?
>
> I plan on using 2 meters and maybe 440.
>

800. Re: DOes a ground plane need a choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 15:07:11 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e53d2a$1_4@127.0.0.1>
Source record: 83639

Zombie Wolf wrote:
> A "ground plane" antenna is designed to 'fool" the antenna into thinking the
> horizontal radials are actually the surface of the earth. This term actually
> has nothing to do with grounding the antenna. However, the antenna will work
> better if the mast of it is grounded, since this gives the radials an actual
> earth ground reference electrically, and it therefore will work more closely
> to it's design specs.

Why would RF currents flowing in the mast make the
antenna work better? Wouldn't that be about the
same as common-mode transmission line currents?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

801. Re: What determines an antenna's impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 15:32:31 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e54319$1_3@127.0.0.1>
Source record: 83640

Zombie Wolf wrote:
> Any antenna will be either "inductive" or "capacitive", depending on its
> length as relative to the frequency its designed for. If it is short for the
> frequency, it is usually capacitive, and if it is long for the frequency, it
> will exhibit inductive qualities. The combination of these inductive and
> capacitive factors, added vectorially, results in the "Z", or impedance , of
> the antenna.

Simply put, the feedpoint impedance of an antenna is the ratio of
the total voltage to the total current at the feedpoint. In a
standing-wave antenna, like a center-fed dipole, the total voltage
is the vector sum of the forward voltage and reflected voltage.
The total current is the vector sum of the forward current and
the reflected current. The reflected current undergoes a 180 deg
phase shift at the tips of the dipole but the reflected voltage
does not. For a resonant 1/2WL center-fed dipole, the feedpoint
impedance is:

Zfp = (|Vfor|-|Vref|)/(|Ifor|+|Iref|) = low

i.e. Vfor is 180 degrees out of phase with Vref and Ifor is
in phase with Iref.

For a (resonant) one-wavelength center-fed dipole, the feedpoint
impedance is:

Zfp = (|Vfor|+|Vref|)/(|Ifor|-|Iref|) = high

i.e. Vfor is in phase with Vref and Ifor is 180 degrees out
of phase with Iref.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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802. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 15:37:50 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e54458$1_2@127.0.0.1>
Source record: 83641

Zombie Wolf wrote:
> Of course Mr. Clark, as usual, is "right on the money" in saying that 1db is
> nothing.

Reminds me of an article in QST in the '50's titled
"One dB Doesn't Matter" or something like that. This
ham had one dB loss due to an old final tube, one dB
loss due to a dirty tank coil, one dB loss in the low-
pass filter, one dB loss in a bad solder joint, one dB
loss in the tuner, one dB loss in the transmission line,
and one dB loss in the antenna. He wondered why he
wasn't getting out very well. :-)
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

803. Re: CALCULATION OF EARTH RESISTANCE IN MULTI-LAYER EARTH STRUCTURE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 15:41:25 UTC
From: chuck <chuck@nospam.net>
Message-ID: <41e5455a_2@newsfeed.slurp.net>
Source record: 83642

Hello Richard,

Many thanks for that information!

If others are interested, the file is available here:

http://www.usda.gov/rus/telecom/publications/pdf_files/1751f802.pdf

Chuck

> Hi Ram,
>
> Well, you have certainly picked one of the most obscure thesis to
> embark upon. Everyone's done it, they all have an answer, but no one
> could repeat it anywhere by any rationale except maybe in one fine
> publication:
> UNITED STATES DEPARTMENT OF AGRICULTURE
> Rural Electrification Administration
> REA BULLETIN 1751F-802
> SUBJECT: Electrical Protection Grounding Fundamentals
>
> It does not characterize soil, but it does a very compelling job of
> characterizing technique, which is very valuable.
>
> I don't know what the soil is like there in Malaysia, but you can bet
> that it contains all the variables that will make analysis quite a
> challenge. I would presume that you at least have less differences in
> water content and temperature than here in North America (this drives
> a huge difference in earth resistance).
>
> 73's
> Richard Clark, KB7QHC

804. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 16:08:09 UTC
From: Starr <Starr@proxima.net>
Message-ID: <cs3i19$io5$0@pita.alt.net>
Source record: 83643
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"G1LVN" <google@g1lvn.org.uk> wrote in message
news:1105524152.797511.311760@f14g2000cwb.googlegroups.com...
> 107
>

That would explain it. :)

805. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 16:26:50 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cs3j4arha1@hercules.btinternet.com>
Source record: 83644
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

> I will come back much sooner, and report some successful DXing... though
> you're still going to say it could have been done with a dozen short
> radials :-)
> --
> 73 from Ian G3SEK
======================

Ian, I wish you a trouble-free shift of abode. There are always stresses involved which are to looked-back upon with varying degrees of satisfaction. I envy you and wish I could embark on the same sort of venture.

Don't forget to take with you program RADIALS2 even if you might not have the luxury of a back yard.

Reg.

806. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 16:33:26 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <sujau09roviq6ht0vvnkavcahndln8ofg1@4ax.com>
Source record: 83645

On Tue, 11 Jan 2005 22:49:44 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Roy Lewallen wrote:
>> So when you compacted this into the statement that "cell phone use for
>> ten years results in a benign tumor that causes hearing loss", was it an
>> emulation of today's journalistic technique, or just the effect of years
>> spent working with binary circuits?
>
>That was the gist of what I got out of reading the article the
>title and header of which is:
>
>"CELLPHONES LINKED TO BRAIN TUMORS, THE GOOD NEWS IS THEY'RE
>BENIGN; THE BAD NEWS IS THAT THEY'RE THERE."
>
>Your gist may vary. I assume one argument from the "no energy
>in RF waves" guys will be "no energy = no tumor".

Anyone done a survey on ham radio & tumors? Is a 700 milliwatt phone
signal, next to the ear, that much worse than a 100 watt signal
radiating from a screwdriver antenna about 10 feet away?

Bob
k5qwg

807. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 16:37:34 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <g5kau0lc4aggq3opvdpunfgrj81rf4lubp@4ax.com>
Source record: 83646

On 11 Jan 2005 22:26:54 GMT, fractenna@aol.com (Fractenna) wrote:

>Radials function as a counterpoise, and, when there are enough radials, a
>ground plane.
>
>If you wish to attenuate ground losses, then it is best to make the most of the
>surface by using as many radials as possible. The first dozen+ are the most
>critical in reducing ground losses. Even a dozen or so helps substantially or
>over 3, for example. Several dozen reduces ground losses substantially.
>
>Elevating radials always helps.
>
>73,
>Chip N1IR
>

Well, Chip, as the inventor (Dr. George H. Brown) said, two radials
are sufficient for a ground plane, but the RCA sales dept thought they
would sell better with four. But a ground plane antenna suffers no
ground losses, so using as many as possible only applies to radials on
or in the ground.

Walt, W2DU

808. Re: MAKE MONEY USING PAYPAL

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 17:23:09 UTC
From: Fast Larry <fastlarryno1@yahoo.com>
Message-ID: <1105550589.167583.265520@c13g2000cwb.googlegroups.com>
Source record: 83647
Cross-posted to:
rec.sport.billiard,rec.arts.sf.written.robert-jordan,rec.models.rc.air,rec.pets.dogs.behavior,rec.radio.amateur.antenna

x

809. Re: LET'S HELP EACH OTHER MAKE MONEY

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 17:23:45 UTC
From: Fast Larry <fastlarryno1@yahoo.com>
Message-ID: <1105550625.785324.69040@z14g2000cwz.googlegroups.com>
Source record: 83648
Cross-posted to:
rec.sport.billiard,rec.arts.sf.written.robert-jordan,rec.models.rc.air,rec.pets.dogs.behavior,rec.radio.amateur.antenna

x

810. Re: DOes a ground plane need a choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 17:25:52 UTC
From: fractenna@aol.com
Message-ID: <20050112122552.06924.00000065@mb-m29.aol.com>
Source record: 83649

A ground plane or a tuned counterpoise does not. A rule of thumb is that if the conventional aperture is 1/2 wave across or more, you won't need the choke. Smaller and you will.

73,
Chip N1IR

811. Re: DOes a ground plane need a choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 17:37:30 UTC
From: Dan Richardson <dwr@mailinator.com>
Message-ID: <kknau0djir9mdmig9vvmvrivrrgnm4pic0@4ax.com>
Source record: 83650

On 12 Jan 2005 17:25:52 GMT, fractenna@aol.com (Fractenna) wrote:

>A ground plane or a tuned counterpoise does not. A rule of thumb is that if the
>conventional aperture is 1/2 wave across or more, you won't need the choke.
>Smaller and you will.
>

Any antenna feed with a coax transmission line will benifit from using
a choke/balun at the antenna feed point. It is just good engineering
practice to do so. It won't hurt and only can help.

Danny, K6MHE

812. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 17:55:19 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cs3oa7$4hb$1@hercules.btinternet.com>
Source record: 83651

> Reminds me of an article in QST in the '50's titled
> "One dB Doesn't Matter" or something like that. This
> ham had one dB loss due to an old final tube, one dB
> loss due to a dirty tank coil, one dB loss in the low-
> pass filter, one dB loss in a bad solder joint, one dB
> loss in the tuner, one dB loss in the transmission line,
> and one dB loss in the antenna. He wondered why he
> wasn't getting out very well. :-)
> --
==========

No he didn't. 7dB, about one S-unit, is not enough to come to anybody's attention.

It's less than the difference between a G5RV plus coax, specially a 1/2-size G5RV, and an ordinary dipole fed with open-wire line which most people never seem to notice.

Reg, G4FGQ

813. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 18:19:43 UTC
From: Dave <davenpat@btopenworld.com>
Message-ID: <cs3pnvgog1@titan.btinternet.com>
Source record: 83652
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34j42lF4a363lU1@individual.net...
>
> Isn't Orange an offshoot of Hutchinsion Telecom which was, I think, from
> Hong Kong?

That was the company that created it, then sold it to British Aerospace, who
in turn sold it on again. It is now French (spit) owned.

> Actually Dave, Cecil's use of "already" was quite appropriate.

That was why I included the smilies. I find it kinda cute that English in
this country has modernised, but that English spoken over the pond is stuck
in the 17 century.

> Languages change. In fact, there is
> some evidence the US English is nearer to old English than current UK
usage.

Once again, I find this fact hard to understand, when the world's fastest
growing technology, with the worlds largest budget etc can't up-grade the
language it speaks, to what the rest of the English speaking world use.

Regards

Dave

814. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 18:46:52 UTC
From: "aunwin@insightbb.com"
Message-ID: <wgeFd.2419$IV5.1226@attbi_s54>
Source record: 83653

I would argue over the simplification that below 1 db is "nothing."
If one cleans up his system then it is possible that those items
that lose less than a db could add up to something "meaningfull".
But DXrs say a little db is a lot and usually they are not casual operators.
A single increase in gain of a db of an antenna can infact supply more gain
at a lower
TOA where it enables the operator to make a contact where others fail!
On my antenna I am able to drive down the TOA by more than 3 degrees
where for comparison purposes it may only have the gain oif a normal four
element
yagi that has a TOA of 14 degrees. So I consider the statement that 1db is
insignificant
a bit over the top when one is working with antennas and what one can
achieve what others can't.
Regards
Art

"Zombie Wolf" <zombie489@tds.net> wrote in message
news:R_WdnYb3R9k-pnjcRVn-jw@giganews.com...
> Of course Mr. Clark, as usual, is "right on the money" in saying that 1db
> is
> nothing. To get a 1 unit s-meter difference on the average receiver, it
> actually takes 6 decibels more signal, or 4 times the power, from the
> transmitter, to produce that signal increase.
>
> Double the transmitter power (3 db) , and you get a half an s-unit
> increase.
>
> In many cases, it is more advantageous to raise the antenna 10 feet or
> more,
> than it is to increase transmitter power, and it will often result in much
> more signal in the receiver, since it gets the transmitter antenna "up in
> the clear", where losses to the ground and surrounding obstructions drop
> off..
>
>
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:bfb1u01nmageuqg17g5g3afbgh4d80gofo@4ax.com...
>> On Tue, 11 Jan 2005 03:30:07 GMT, ml <m@di.net> wrote:
>> >what would happen if i build say i'd have to stay physically small , so
>> >say a 1/4wave verticle on 10m and then made that antenna
>> >supercondutive?
>>
>> Hi OM,

>>
>> As far as performance? Absolutely no difference to it even if it were
>> elevated 1000 F above that to compare.
>>
>> - Well maybe someone with enough sophisticated equipment might notice
>> a dB difference - then they would whack the side of the gear to clear
>> that up - nope, no difference....
>>
>> You need to come to terms with just how imperceptible 1 dB is (zilch,
>> in technical terms), and how much power it takes (about 12%, just more
>> $ to burn) to make that imperceptible difference. The dollar has lost
>> 30% of its value in the world market in the last few years - have you
>> noticed? This may not be one way to appreciate 1dB, but it does
>> reveal how relative changes go unfelt.
>>
>> 73's
>> Richard Clark, KB7QHC
>
>

815. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 18:58:11 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <afi4OZkDNX5BFAVb@ifwtech.co.uk>
Source record: 83654
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Reg Edwards wrote:
>
>Ian, I wish you a trouble-free shift of abode. There are always
>stresses involved which are to looked-back upon with varying degrees of
>satisfaction. I envy you and wish I could embark on the same sort of
>venture.
>
Thanks, Reg, that's much appreciated.

But it's only lawyers, estate agents, builders, removal men... what's to
worry about?

>Don't forget to take with you program RADIALS2 even if you might not
>have
>the luxury of a back yard.

It's already on my hard disk.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

816. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 19:45:13 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <D7$eDVnJ5X5BFwkV@newbrain.demon.co.uk>
Source record: 83656
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <41e53597$1_3@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
writes
>Prometheus wrote:
>> I do not expect anything a simplistic as a step function at the ten
>>year threshold, perhaps this like your previous post is also omitting
>>essential information?
>
>I didn't say there was a step function at the ten year threshold
>and I'm certainly not going to type in the entire article. It is
>much more likely that it is a ramp function roughly emerging from
>the average after around ten years of use.

Of course a proportional function is more likely although perhaps not
linear however your statements that "No tumors were associated with less
than 10 years of cellphone use" and "People with more than 10 years of
cellphone use suffered twice as many tumors as non-cellphone users"
describes a step function at ten years {t = 1 for y < 10 and t = 2 for y
> 10, where y is the number of years and t the base rate for brain
tumours in a non-mobile phone using control group). Given this
simplistic step function I must have doubts about the accuracy of the
study that lead to such a conclusion

I do not expect you to type in the entire article, but you only stated
"No tumors were associated with less than 10 years of cellphone use"
which provide no information about any association after ten years.
--
Ian G8ILZ

817. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 19:45:17 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <M7OdTpnN5X5BFwkx@newbrain.demon.co.uk>
Source record: 83655
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <ij2au01vm6huk0v8qjrtdjeil98bg2ae0j@4ax.com>,
lucifer@eternal-flames.gov writes
>On Wed, 12 Jan 2005 06:21:46 +0000, Prometheus <Prometheus@127.0.0.1>,
>paused briefly between playing with his doll's house, to write:
>
>
>>The faulty logic was in the presumption that ten years use was different
>>when your statement in Message-ID: <41e43ad6$1_1@127.0.0.1> of 'December
>>2004, page 20: "Cellphones Linked To Brain Tumors" "No tumors were
>>associated with less than 10 years of cellphone use." There will be
>>about 50 million people with 10 years of cellphone use in 1907. I won't
>>be one of them' which made no mention of effects either use for more
>>than ten years or non-use. I do not expect anything a simplistic as a
>>step function at the ten year threshold, perhaps this like your previous
>>post is also omitting essential information?
>
>Ah yes... 1907. A very good year for whines. :-)

I refrained from pointing out just how large "mobile phones" were in
1907, and that was after ten years of development.

--
Ian G8ILZ

818. Re: What determines an antenna's impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 19:51:27 UTC
From: richardharrison@webtv.net
Message-ID: <29442-41E57FBF-79@storefull-3256.bay.webtv.net>
Source record: 83657

Stryped wrote:
"I know in a ground plane the angle of the radials can, but what about a simple multiple element yagi?"

The feedpoint impedance of a resonant 1/2-wave dipole is about 67 ohms resistive (page 120 of Kraus` 3rd edition of "Antennas"). The impedance of a 1/4-wave antenna perpendicular to ground is about half the dipole`s impedance (page 568 Kraus` 3rd edition).

Drooping radials place a ground plane in a transition between a 1/4-wave perpendicular to ground and a 1/2-wave antenna. Impedance follows suit, ranging from 30 ohms with no droop to 60+ ohms with complete droop. In between, a match for 50-ohm coax can probably be foind.

An antenna element alone in free-space has a particular self-impedance. Aide by side elements are coupled. Current flowing in one ekement induces voltage in other elements nearby. This affects the feedpoint impedance of the driven element because it is feeding an array. Another name for coupling is mutual impedance. It is measured as the voltage produced in one element bivided by current in the driven element. It`s reciprocal. Either element can be driven and the other can be parasitic. The mutual impedance is the same either way. The feedpoint impedance is a complex sum of all the array impedances.. It is often tedious to calculate. Kraus shows the mutual impedance story on page 452 of his 3rd edition of "Antennas".

Cecil, W5DXP gave a good explanation of impedabce in a standing wave antenna. He showed how a high impedance at the open-circuit end of the antenna is converted to a low voltage and a high current 1/4-wave back at the feedpoint. Their quotient is the low self-impedance at the feedpoint.

Best regards, Richard Harrison, KB5WZI

819. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 20:22:34 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10ub1oat83tinea@corp.supernews.com>
Source record: 83658

Zombie Wolf wrote:
> . . .To get a 1 unit s-meter difference on the average receiver, it
> actually takes 6 decibels more signal, or 4 times the power, from the
> transmitter, to produce that signal increase. . .

I'd be very interested in seeing the basis for that statement. Or are you simply and mistakenly assuming that the ficticious 6 dB "S-Unit" so fondly and inexplicably used by amateurs actually represents a division on a typical receiver S meter? Have you checked your receiver's S meter?

Roy Lewallen, W7EL

820. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 20:27:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10ub22568glhc12@corp.supernews.com>
Source record: 83659

Reg Edwards wrote:
>
> No he didn't. 7dB, about one S-unit, is not enough to come to anybody's
> attention. . .

Yet look at all the people who go to all the trouble of putting up a 3 element beam, then think that the 7 dB gain over a dipole actually makes their signal louder. Or get a 500 watt amplifier for their 100 watt rig. Silly fools! Old wives!

Roy Lewallen, W7EL

821. Re: discone or scantenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 20:31:04 UTC
From: Dave VanHorn <dvanhorn@dvanhorn.org>
Message-ID: <GqOdnSmJSe2dFHjcRVn-rQ@comcast.com>
Source record: 83660

> GLC1173 wrote:
>> Nothing is as wide-band as a discone.
>
> Nothing? I'll bet my Bird Termaline is wider-banded. :-)

Possibly higher gain too! :)

822. Re: DOes a ground plane need a choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 21:30:25 UTC
From: Zombie Wolf <zombie489@tds.net>
Message-ID: <s8idnYURnLk2C3jcRVn-sg@giganews.com>
Source record: 83661

oh god. here we go again. I didn't SAY that "RF flows into the antenna mast". Read the post again.

"Cecil Moore" <w5dxp@hotmail.com> wrote in message news:41e53d2a$1_4@127.0.0.1...
> Zombie Wolf wrote:
> > A "ground plane" antenna is designed to 'fool" the antenna into thinking the
> > horizontal radials are actually the surface of the earth. This term actually
> > has nothing to do with grounding the antenna. However, the antenna will work
> > better if the mast of it is grounded, since this gives the radials an actual
> > earth ground reference electrically, and it therefore will work more closely
> > to it's design specs.
>
> Why would RF currents flowing in the mast make the
> antenna work better? Wouldn't that be about the
> same as common-mode transmission line currents?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> -----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==-----
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823. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 21:53:16 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e59c0c.7488484@news.iol.ie>
Source record: 83662
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Jock. <real_class_a2003@yahoo.fr> wrote:

: On 10 Jan 2005 03:52:38 GMT, Alun <elektros@yahoo.com> wrote:
:
: >It's not normally grease, it's vaseline, which is conductive. I don't know
: >how vaseline behaves at RF, though. Maybe not too well?
:
: What about silicon grease?
:

ah now Jock.... thats just too technical... next thing you'll be
mentioning which ''number'' of grease which will really confuse them!

824. Re: Planning permission - a lesson from satellite launching?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 21:59:03 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e59d79.7853982@news.iol.ie>
Source record: 83663
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Ed Price" <edprice@cox.net> wrote:

:
: "jonny" <nospam@spam0junk.com> wrote in message
: news:GofEd.8930$HA5.1029554@juliett.dax.net...
: > The man next door has a large erection in the back garden, which is
: > unsightly and dangerous. !!
: > Is This is the sort of complaint they send to the council, Mr Bean ??
: >
:
: Is that Mr. Hugh E. Rection?

no couldnt be...
hes a cb'er who went back to cb after getting a ham licence

825. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 22:17:35 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e5a1cc.8960899@news.iol.ie>
Source record: 83664
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote:

:
: I'm sure it is much older than 15 years- it was around when I did my RAE
: (more than 15 years !). I'm pretty sure it is the the old Admiralty
: Handbook, but I can't lay my hands on mine. You see a similar effect when
: making a dipole into and inverted V.
:
: It is certainly taught on at least one Advance RCE course ;-)

anyone else notice how Brian comes to the aid of
his faultering/slipping anonymous comrade ?

826. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 23:10:17 UTC
From: me@privacy.net
Message-ID: <mdbbu0p0ag33koc68mks6s85s2b8p4gr91@4ax.com>
Source record: 83665
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Wed, 12 Jan 2005 14:41:33 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>Discussed in the "Antenna Manual", by Woodrow Smith,
>pub "Editors and Engineers Ltd " dated 1948.
>
>He refers to the "Brown Ground Plane Antenna" and separately
>to the "Drooping Ground Plane Antenna"

But does he refer to the 'drooping' as an impedance-matching device?

If not, what reason does he give for the technique?

827. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 23:38:40 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e5b64a$1_2@127.0.0.1>
Source record: 83666
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Prometheus wrote:
> Of course a proportional function is more likely although perhaps not
> linear however your statements that "No tumors were associated with less
> than 10 years of cellphone use" and "People with more than 10 years of
> cellphone use suffered twice as many tumors as non-cellphone users"
> describes a step function at ten years {t = 1 for y < 10 and t = 2 for y
> 10, where y is the number of years and t the base rate for brain
> tumours in a non-mobile phone using control group). Given this
> simplistic step function I must have doubts about the accuracy of the
> study that lead to such a conclusion

Your basic ignorance of statistical data is showing. What if, starting
at ten years of use, 1% of cell phone users suffered 1% more tumors
than non-cellphone users and a year later, 2% of cellphone users
suffered 2% more tumors than non-cellphone users, and a year later 3%
of cellphone users suffered 3% more tumors than non-cellphone users
... That is certainly ***NOT*** a step function, to which you objected,
but a ramp function that is certainly something to be concerned about.
Hint: I'm surprised that you don't know that nothing changes
instantaneously in reality, i.e. a 'step function' is purely an
invention of the human mind.
--
73, Cecil http://www.qsl.net/w5dxp

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828. Re: discone or scantenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 23:42:16 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e5b722$1_2@127.0.0.1>
Source record: 83667

Dave VanHorn wrote:

>>GLC1173 wrote:
>>>Nothing is as wide-band as a discone.
>>
>>Nothing? I'll bet my Bird Termaline is wider-banded. :-)
>
> Possibly higher gain too! :)

Is that a cruel world joke? :-)
--
73, Cecil http://www.qsl.net/w5dxp

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829. Re: DOes a ground plane need a choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 23:46:33 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e5b823$1_2@127.0.0.1>
Source record: 83668

Zombie Wolf wrote:
> oh god. here we go again. I didn't SAY that "RF flows into the antenna
> mast". Read the post again.

Please rethink your position. If no RF current flows in the mast, a
fiberglas mast is just as good as a metal mast. If you are depending
upon the mast to furnish a ground, RF current *must* be flowing in the
mast. Otherwise, how do you know it is providing a ground? You simply
cannot have it both ways. I hope that soaks in.
--
73, Cecil http://www.qsl.net/w5dxp

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830. Re: Ground radials -- the practicalities?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 23:48:09 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e5b883$1_2@127.0.0.1>
Source record: 83669
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

ZZZPK wrote:

> Jock. <real_class_a2003@yahoo.fr> wrote:
> : What about silicon grease?
>
> ah now Jock.... thats just too technical... next thing you'll be
> mentioning which ''number'' of grease which will really confuse them!

I hear that KY has introduced a heat producing grease.
--
73, Cecil http://www.qsl.net/w5dxp

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831. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 23:50:05 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <E0GvQXpteb5BFwFd@newbrain.demon.co.uk>
Source record: 83670
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <i75bu0tdm1og3h8b36erk59lmese4f1inl@4ax.com>,
lucifer@eternal-flames.gov writes
>On Wed, 12 Jan 2005 19:45:17 +0000, Prometheus <Prometheus@127.0.0.1>,
>paused briefly between playing with his doll's house, to write:
>
>>I refrained from pointing out just how large "mobile phones" were in
>>1907, and that was after ten years of development.
>
>As I understand it, mobile phones actually had wheels back then...
>Together with a huge drum of cable.

Wheels, yes; drum of cable, no: they would have been spark transmitters,
see the experiments of Maxwell and Hertz.

--
Ian G8ILZ

832. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-12 23:55:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gacbu05fqraolifns4c2rnejj10dqqkbk2@4ax.com>
Source record: 83671

On Wed, 12 Jan 2005 18:46:52 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:
>So I consider the statement that 1db is insignificant
>a bit over the top when one is working with antennas and what one can
>achieve what others can't.

Hi all,

This "over the top" and other straining to get a "louder" signal begs
a real number - like 1dB. Such testimonials (negative or positive)
are emotional comparisons.

This "over the top" expression speaks for itself. If a 12% drop is
outrageously "over the top," then there would be runs on the bank for
the 30% fall of the dollar's value in the world market. Back when we
had double-digit inflation (hmmmm, 12% is double-digit) the party now
in charge went ballistic about the state of the economy. Now that we
have outsourced inflation - 30% is cool. Merely a matter of who's ox
is being gored.

Well, so much for fun with numbers; let's look at "louder" signals.

What does it mean to be "louder" with a modern (post Depression era)
receiver? Is 1 dB perceived as being "louder?" Well, by definition:
just barely (IFF you turn up the volume control). Why do I
parenthetically add this constraint of a necessary active
participation of turning up the volume control? Because in a modern
receiver, the circuitry deliberately compensates for that 1dB boost by
depressing the gain by the same amount. Net result? Voila! 0dB by
perception and design. Well, by aural perception that is. So much
for "louder."

You "might" see (another perception) the S-Meter shift by something
less than one needle's width if that makes you feel that something has
been accomplished - in this case they could as easily calibrate the
meter in ego-Satisfaction units. Then again, maybe you would have
missed 1dB entirely (should we insist on a negative multipliers for
that ego reading?). The correct appeal is found in S+N/N where the
improvement adds clarity - merely bombasting about "loudness" is
provincial.

73's
Richard Clark, KB7QHC

833. Re: ANyone build a corner reflector for uhf

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 00:17:14 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <e6jFd.4876$KJ2.1239@newsread3.news.atl.earthlink.net>
Source record: 83572

<stryped@hotmail.com> wrote in message
news:1105536666.960384.168960@f14g2000cwb.googlegroups.com...
> How is "the same reflector can be used for many bands?"
>

The driven element is a dipole and you use a seperate dipole for each band.
The spacing of the dipole from the reflector depends on frequency .

834. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 00:53:14 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <jDzWNWr6Zc5BFwTQ@newbrain.demon.co.uk>
Source record: 83573
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <41e5b64a$1_2@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
writes
>Prometheus wrote:
>> Of course a proportional function is more likely although perhaps not
>>linear however your statements that "No tumors were associated with
>>less than 10 years of cellphone use" and "People with more than 10
>>years of cellphone use suffered twice as many tumors as non-cellphone
>>users" describes a step function at ten years {t = 1 for y < 10 and t
>>= 2 for y 10, where y is the number of years and t the base rate for
>>brain tumours in a non-mobile phone using control group). Given this
>>simplistic step function I must have doubts about the accuracy of the
>>study that lead to such a conclusion
>
>Your basic ignorance of statistical data is showing. What if, starting
>at ten years of use, 1% of cell phone users suffered 1% more tumors
>than non-cellphone users and a year later, 2% of cellphone users
>suffered 2% more tumors than non-cellphone users, and a year later 3%
>of cellphone users suffered 3% more tumors than non-cellphone users
>... That is certainly ***NOT*** a step function, to which you objected,
>but a ramp function that is certainly something to be concerned about.
>Hint: I'm surprised that you don't know that nothing changes
>instantaneously in reality, i.e. a 'step function' is purely an
>invention of the human mind.

If, as you state, it went from nothing below ten years to two times
after then there was a step, it is that I object to; perhaps you do not
understand that it is a step {t = 1 for y < 10 and t = 2 for y 10,
where y is the number of years and t the base rate for brain tumours in
a non-mobile phone using control group)

Hint: YOU quoted a single value for less than ten years and single value
for above, maybe you do not understand that is a step, do I have to draw
a graph of your statement.

t

2 ----------------------

1 ---------------------------
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 y

Can you see what happened? Of course I object to the function you quoted
as being improbable.

Your example of a proportional relationship is not justified from your quotes, is irrelevant, and being a deception has no place in a discussion of this nature.
--
Ian G8ILZ

835. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 01:44:05 UTC
From: "aunwin@insightbb.com"
Message-ID: <FnkFd.3688$P04.968@attbi_s03>
Source record: 83574

Richard,
you have responded to my post but frankly I miss the point or points
you are trying to make. Sorry about that as I would have liked a discussion
on the subject
Regards
Art

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:gacbu05fqraolifns4c2rnejj10dqqkbk2@4ax.com...
> On Wed, 12 Jan 2005 18:46:52 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>>So I consider the statement that 1db is insignificant
>>a bit over the top when one is working with antennas and what one can
>>achieve what others can't.
>
> Hi all,
>
> This "over the top" and other straining to get a "louder" signal begs
> a real number - like 1dB. Such testimonials (negative or positive)
> are emotional comparisons.
>
> This "over the top" expression speaks for itself. If a 12% drop is
> outrageously "over the top," then there would be runs on the bank for
> the 30% fall of the dollar's value in the world market. Back when we
> had double-digit inflation (hmmmm, 12% is double-digit) the party now
> in charge went ballistic about the state of the economy. Now that we
> have outsourced inflation - 30% is cool. Merely a matter of who's ox
> is being gored.
>
> Well, so much for fun with numbers; let's look at "louder" signals.
>
> What does it mean to be "louder" with a modern (post Depression era)
> receiver? Is 1 dB perceived as being "louder?" Well, by definition:
> just barely (IFF you turn up the volume control). Why do I
> parenthetically add this constraint of a necessary active
> participation of turning up the volume control? Because in a modern
> receiver, the circuitry deliberately compensates for that 1dB boost by
> depressing the gain by the same amount. Net result? Voila! 0dB by
> perception and design. Well, by aural perception that is. So much
> for "louder."
>
> You "might" see (another perception) the S-Meter shift by something
> less than one needle's width if that makes you feel that something has
> been accomplished - in this case they could as easily calibrate the

> meter in ego-Satisfaction units. Then again, maybe you would have
> missed 1dB entirely (should we insist on a negative multipliers for
> that ego reading?). The correct appeal is found in S+N/N where the
> improvement adds clarity - merely bombasting about "loudness" is
> provincial.
>
> 73's
> Richard Clark, KB7QHC

836. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 01:47:48 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cs4k04$sm4$1@sparta.btinternet.com>
Source record: 83575

A 1 dB change in loudness is about the smallest level of change which is fairly easily perceived by the human ear. BUT ONLY WITH AN INSTANTANEOUS, X versus Y, CHANGE IN LOUDNESS.

To attempt to judge the difference, with a precision of 1 S-unit, between the loudnesses of a G5RV and a 1/2-wave dipole fed by an open-wire line, with a time lag of months, a change in the number of sunspots, on different bands, with a different receiver, is futility in the extreme.

Yet some people appear to have no difficulty in making the comparison.

837. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 01:59:20 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <4qkbu011f8gt53vrpqbqbcqpcs9j7gn454@4ax.com>
Source record: 83576

On Wed, 12 Jan 2005 15:55:12 -0800, Richard Clark <kb7qhc@comcast.net>
wrote:

|On Wed, 12 Jan 2005 18:46:52 GMT, "aunwin@insightbb.com"
|<aunwin@insightbb.com@insightbb.com> wrote:
|>So I consider the statement that 1db is insignificant
|>a bit over the top when one is working with antennas and what one can
|>achieve what others can't.
|
|Hi all,
|
|This "over the top" and other straining to get a "louder" signal begs
|a real number - like 1dB. Such testimonials (negative or positive)
|are emotional comparisons.

One of the biggest thrills I've had in my amateur radio career was
pressing the key and 2.5 seconds later hearing my signal returning
from the moon. I will confess, this was an emotional response [g].
One dB does make a difference. One dB difference in transmission line
loss or antenna gain makes a hell of a difference.

I also got emotional when VU4RBI barely came up out of the noise and I
worked her a few days before the great flood or last night when 3G0YM
gave me a 59 report on 20M and not being able to tell him he was S0, I
fibbed and gave him a 53.

838. Re: Arithmetic and Cannobis.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 02:02:45 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <2hlbu0li5cvh7mmnmimb8b5jvd3pnlg3p5@4ax.com>
Source record: 83577

On Wed, 12 Jan 2005 13:34:31 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

|
|"Richard Clark" wrote
|> > loaded with cannobis and more powerful drugs
|>
|> Hi Reggie,
|>
|> If you are expected to be taken seriously, even the sewer rats of Rio
|> know how to spell hemp.
|>
|==========================
|Hi Dick,
|
|Yes, at the time, I was aware of the mis-spelling. But I could't think of
|the name 'hemp' which even I CAN spell correctly. Very interesting, its the
|only defect you could find in my story.

If you would have just typed "cannobis" in Google, it would have
asked: "Do you mean: cannabis?"

|
|Your "If you are expected to be taken seriously" is an indication that you
|think there is something serious in what I say.

Never.
|
|Regardless of South American un-culled sewer rats - Engineers who regularly
|demonstrate they are afraid of using numbers can hardly be considered to be
|well educated. (Refer to Kelvin).

Hmmm. The USA is now being overrun with denizens of the countries to
the south, including no doubt some South American sewer rats. By your
estimation, the education level here should have improved.

I think not. For example, I left a pair of slacks at the dry cleaners
a few days ago. The fee was $1.75 (USD). I gave the girl $10.00 and
she broke out a calculator to determine that my change was $8.25.

Contrast this to a tale related to me by an old friend. Jim was in
the U.S. Marine Corps when the flight of the Enola Gay took place.
Shortly after, he and his group were sent up some river in China to
ferret out some Japs...sorry...Asians who hadn't gotten the word yet
that they had lost. The Marines set up a camp and immediately began a
trade relationship with the local Chinese "service industry."

Jim said it took all of 15-20 minutes for the natives to master the U.S. currency system. (It probably would have taken them a couple of hours to figure out the British system of the day [G])

839. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 02:11:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2hlbu0tlq7moagh2n4tjrddb0hok6h9ojb@4ax.com>
Source record: 83578

On Thu, 13 Jan 2005 01:44:05 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>I would have liked a discussion on the subject

Hi Art,

About superconducting antennas? I've researched patents for a
superconductor think tank in California. Talk about more smoke than
fire.

Unfortunately, a poor choice of phrase, because in a newsgroup, it is
more talk than smoke. errr writing than talking....

73's
Richard Clark, KB7QHC

840. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 02:17:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8bmbu0tt6t66kupj3t4us43ek6o9j5bvir@4ax.com>
Source record: 83579

On Wed, 12 Jan 2005 18:59:20 -0700, Wes Stewart <n7ws_@_yahoo.com>
wrote:

>I also got emotional when VU4RBI barely came up out of the noise and I
>worked her a few days before the great flood or last night when 3G0YM
>gave me a 59 report on 20M and not being able to tell him he was S0, I
>fibbed and gave him a 53.

Hi Wes,

I've heard emotional reports before:
"I've got you here five by nine!
Could you repeat, Could, you, re-peat?"

The emotion was humor.

73's
Richard Clark, KB7QHC

841. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 02:35:00 UTC
From: ml <m@di.net>
Message-ID: <m-B71485.21350212012005@news.verizon.net>
Source record: 83580

In article <10ub22568glhc12@corp.supernews.com>,
Roy Lewallen <w7el@eznec.com> wrote:

> Reg Edwards wrote:
> >
> > No he didn't. 7dB, about one S-unit, is not enough to come to anybody's
> > attention. . .
>
> Yet look at all the people who go to all the trouble of putting up a 3
> element beam, then think that the 7 dB gain over a dipole actually makes
> their signal louder. Or get a 500 watt amplifier for their 100 watt rig.
> Silly fools! Old wives!
>
> Roy Lewallen, W7EL

back on topic,..

i still ponder if i put power into a superconducting antenna if their
is no resistance, and a given about of power would therefore 'stay' in
the antanna longer ie no resistance and a sorta flywheel effect exists
the fields would have to exist longer for fixed-given power , ..

seems that all adds up to more than a trival gain

looks like ill have to use some cheep material like copper or something
elese i can make superconduct unless i can use a supension of
conductive materials into a coolent itself an make a tube that will
radiate while being superconductive just cause i wonder if that will
work as good as a stp based liquid antenna

who knows maybe i'll stumble over 3xtra db

will the antenna stay resonant as it nears criticaltemp? and reaches it?

842. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 03:09:37 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <RDlFd.9967$wZ2.8535@newssvr13.news.prodigy.com>
Source record: 83581

This discussion kinda reminds me of a tome I read (and once actually thought possible), from a CQ article by one "Dr. Shorza Gitchigoomie" (if i spelled that right), progonosticating on the magnicifiant effects of negative resistance! Like applying it to light bulbs (they absorb light)! Or, to electric heaters (air conditioning).
If this indeed would work, then why not - the lower the power- the higher signal strength! 'Corse this article was published , in APRIL, about 40 some years ago, and in the intervening years have discovered that there are some serious flaws in his research!
And I dont expect too much out of Super Conductor Antennas (if they could work well, would not they be in use at the international space station, as that temperature must be at least colder than liquid nitrogen)? or have the laws of Newtonian Physics been repealed?
I await the dawning of the new age! :) Jim NN7K

Richard Clark wrote:
> On Thu, 13 Jan 2005 01:44:05 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>
>>I would have liked a discussion on the subject
>
>
> Hi Art,
>
> About superconducting antennas? I've researched patents for a
> superconductor think tank in California. Talk about more smoke than
> fire.
>
> Unfortunately, a poor choice of phrase, because in a newsgroup, it is
> more talk than smoke. errr writing than talking....
>
> 73's
> Richard Clark, KB7QHC

843. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 03:15:03 UTC
From: dplatt@radagast.org
Message-ID: <10ubptncqh7rk6f@corp.supernews.com>
Source record: 83582

>back on topic,..
>
>i still ponder if i put power into a superconducting antenna if their
>is no resistance, and a given about of power would therefore 'stay' in
>the antanna longer ie no resistance and a sorta flywheel effect exists
>the fields would have to exist longer for fixed-given power , ..
>
>seems that all adds up to more than a trival gain

Not really, no, at least not in the commoner cases.

Let's assume that you could find a superconductor which would be truly superconducting even at RF frequencies (which today's superconductors are not, I gather). So, you could cut the loss resistance of the antenna to precisely zero, in this hypothetical case.

According to a note Reg posted some time ago, "At 3.75 MHz the resistance of 20 awg copper wire is 0.206 ohms per metre. Overall end-to-end dipole resistance 8.24 ohms."

Using the hypothetical perfect superconductor (which may be impossible) you might reduce this dipole resistance to zero. Great reduction in loss, right?

Less than you'd think. Remember, the loss resistance of 8.24 ohms appears in series with the antenna's radiation resistance (which is due to the RF energy being radiated) which will be around 70 ohms for an antenna in free space. With the loss resistance present, just under 90% of the energy is radiated ("dissipated" in the "radiation resistance"), and 10% turns into heat in the loss resistance.

Getting rid of the loss resistance entirely will thus increase your radiated power by only about 10% - a small fraction of one dB.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

844. Re: Silly to use a linear ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 03:26:35 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <KTlFd.321$3p.155@fed1read07>
Source record: 83583

I would like to put a different spin on the 7dB statement below.

Where the extra gain or power really comes into play is very weak signal DXing - not the pileups necessarily.

Cases in point - my Dxing log has several contacts where using a linear got my signal far enough above the noise level for the DX station to understand me. True on phone or CW. In most of these cases, the DX was calling QRZ and no one was answering -- the DX station was so weak -- seems folks just gave up or maybe everyone worked them. Turning on the linear got me the contacts. Definitely Without Question - Worked an R1MV Malyj Vysotskij, HK0 Malpelo Is, VK9/M Mellish Reef, and VP8/G So Georgia by turning on the linear feeding a vertical multibander.

I had this happen enough times to realize this to be the real benefit of adding a linear. And it sure can't hurt in a pileup either, if you know how to work a pileup.

--
Caveat Lector - Honor Roll 2002

>> Some folks Wrote
>> > No he didn't. 7dB, about one S-unit, is not enough to come to
>> > anybody's
>> > attention. . .
>>
>> Yet look at all the people who go to all the trouble of putting up a 3
>> element beam, then think that the 7 dB gain over a dipole actually makes
>> their signal louder. Or get a 500 watt amplifier for their 100 watt rig.
>> Silly fools! Old wives!
>>
>> Roy Lewallen, W7EL
>

845. Re: What's the deal? (was: Re: AM radio reception inside passenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 03:33:20 UTC
From: Tom Ring <news0001@taring.org>
Message-ID: <41e5ebfc$0$62292$39cecf19@news.twtelecom.net>
Source record: 83584

Richard Clark wrote:
> On Sat, 8 Jan 2005 05:52:39 -0800, "Ed Price" <edprice@cox.net> wrote:
>
>
>>Those "Russian scientists" often seemed to come up with controversial and
>>unrepeatable results.
>
>
> Hi Ed,
<snip>
> Another story is their development of a supersonic torpedo. That's
> right, a jet powered torpedo that can dart through the ocean at
> 600MPH. It was speculated that it was the cause of the sinking of
> their submarine, the Kursk. It was thought that the propellant lit
> off in its bay, and the rest is history.
>

Rocket powered, actually. Interesting how it works physically. I have
read some speculation on making manned submarines on the same principle.
I would think running into a whale would be a serious issue, though,
even if unlikely.

tom
K0TAR

846. Re: String up folded dipoles for FM?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 03:36:26 UTC
From: "googlegroups.ken" <GoogleGroups@JuicyBits.com>
Message-ID: <1105587386.482657.219200@z14g2000cwz.googlegroups.com>
Source record: 83585

Height in the attic? I think you missed the point! But thanks for
trying.

Any other answers? I'll check back here occasionally.

--Ken.

TyllEulenspiegel wrote:
> height is most important
> worry about other problems once yuo have something in place
>
> >I can't unfold my commercial FM antenna in my atticc. Can I just
> >string wires of the same dimensions and intervals as the
> >commercial FM antenna, using string and duct tape and expect
> >similar reception? (Actually, I only care about receiving 88.5
> >MHz, if that simplifies anything.)
> >
> >Another thought: Could I just tape up an array of cheap folded
> >dipoles in a line, 1 wavelength apart, and connect them all
> >together? (Could I put them 1/2 wavelength apart, switching
> >polarity for each in sequence?)
> >
> >Thanks for any answers.
> >
> >--Ken.
> >
> >
> >
> >--
> >
> >Got questions? Get answers over the phone at Keen.com.
> >Up to 100 minutes free!
> >http://www.keen.com
> >
> >

847. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 04:09:03 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e5f5a9$1_2@127.0.0.1>
Source record: 83586
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Prometheus wrote:
> Hint: YOU quoted a single value for less than ten years and single value
> for above, maybe you do not understand that is a step, do I have to draw
> a graph of your statement.

No, you should get in touch with reality. Discontinuities,
like step functions, exist only in limited minds, apparently
like yours, certainly not in reality.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

848. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 04:10:36 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e5f606$1_2@127.0.0.1>
Source record: 83587

aunwin@insightbb.com wrote:
> Richard,
> you have responded to my post but frankly I miss the point or points
> you are trying to make.

Join the club, Art.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

849. Re: Arithmetic and Cannobis.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 04:14:04 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e5f6d6$1_2@127.0.0.1>
Source record: 83588

Wes Stewart wrote:
> If you would have just typed "cannobis" in Google, it would have
> asked: "Do you mean: cannabis?"

Oops Wes, you have just joined the FBI's most wanted list.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

850. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 04:17:44 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e5f7b3_1@127.0.0.1>
Source record: 83589

ml wrote:
> i still ponder if i put power into a superconducting antenna if their
> is no resistance, and a given about of power would therefore 'stay' in
> the antanna longer ie no resistance and a sorta flywheel effect exists
> the fields would have to exist longer for fixed-given power , ..

Using copper, the reflected current back at the feedpoint of a 1/2WL
standing-wave antenna is in the ballpark of 90% of the forward current.
Exactly how much improvement is possible?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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851. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 04:18:57 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e5f7fc_1@127.0.0.1>
Source record: 83590

Jim - NN7K wrote:
> This discussion kinda reminds me of a tome I read (and once actually
> thought possible), from a CQ article by one "Dr. Shorza Gitchigoomie"
> (if i spelled that right), progonosticating on the magnicifiant
> effects of negative resistance!

Did your read the one about DED's? (Dark Emitting Diodes)
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

852. Re: social commentary, performance art or smut?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 05:56:21 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <94oFd.6043$994.87@newssvr31.news.prodigy.com>
Source record: 83591

1. Proof that some people shouldn't be allowed to breed.
2. If "low browed" can be compared to the eaves of a house,
the 'eaves' are slightly below the foundation.
3. Don't want them for neighbors (any of them!).
4. I have NEVER been that drunk!
5. Gotta be Democrats.

Art? I don't think so.
Smut? I've seen better.
Stupid? YES.
'Doc

Now, if they had been hunting my EX! They'd need something
bigger than that Hummer to haul her off. Naaw... Ain't nobody
that stupid.

853. Re: Silly to use a linear ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 06:14:27 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10uc4e51c60dd0a@corp.supernews.com>
Source record: 83592

Ah, c'mon. Reg says 7 dB isn't enough to worry about. "Kurt Sterba" said that even 15 dB isn't. All the people who think that linears and beams help their signals are just imagining things. The real experts say so. You're not going to listen to the old wives, are you?

Roy Lewallen, W7EL
-- One of Reg's "Old Wives"

Caveat Lector wrote:
> I would like to put a different spin on the 7dB statement below.
>
> Where the extra gain or power really comes into play is very weak signal
> DXing - not the pileups necessarily.
>
> Cases in point - my Dxing log has several contacts where using a linear got
> my signal far enough above the noise level for the DX station to understand
> me. True on phone or CW. In most of these cases, the DX was calling QRZ and
> no one was answering -- the DX station was so weak -- seems folks just gave
> up or maybe everyone worked them. Turning on the linear got me the
> contacts. Definitely Without Question - Worked an R1MV Malyj Vysotskij, HK0
> Malpelo Is, VK9/M Mellish Reef, and VP8/G So Georgia by turning on the
> linear feeding a vertical multibander.
>
> I had this happen enough times to realize this to be the real benefit of
> adding a linear. And it sure can't hurt in a pileup either, if you know how
> to work a pileup.
>
>

854. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 06:25:55 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10uc53k8pgdbne6@corp.supernews.com>
Source record: 83593

The fact that superconductors have zero resistance above DC isn't a limitation of today's technology (although technology limitations cause current high-temperature superconductors to have resistivity greater than theoretically possible), but a fundamental property of the nature of superconductors.

What I'm saying is that a "truly superconducting", "hypothetical perfect" superconductor has finite resistance at any frequeny above DC. Imagining a material that has zero resistivity at frequencies above DC requires imagining something other than a superconductor.

Roy Lewallen, w7EL

Dave Platt wrote:
> . . .
> Let's assume that you could find a superconductor which would be
> truly superconducting even at RF frequencies (which today's
> superconductors are not, I gather). So, you could cut the loss
> resistance of the antenna to precisely zero, in this hypothetical
> case.

> . . .
> Using the hypothetical perfect superconductor (which may be
> impossible) you might reduce this dipole resistance to zero. Great
> reduction in loss, right?
> . . .

855. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 07:10:07 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <jv+WWdtP7h5BFwBj@newbrain.demon.co.uk>
Source record: 83594
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <41e5f5a9$1_2@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
writes
>Prometheus wrote:
>> Hint: YOU quoted a single value for less than ten years and single
>>value for above, maybe you do not understand that is a step, do I
>>have to draw a graph of your statement.
>
>No, you should get in touch with reality. Discontinuities,
>like step functions, exist only in limited minds, apparently
>like yours, certainly not in reality.

It was you who described a step function and I am disputing it precisely
because it can not be as you describe, why don't you admit that your
description is wrong instead of pretending that you are not, or are you
to stupid to understand that you are wrong.
--
Ian G8ILZ

856. Re:not just res superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 11:26:26 UTC
From: ml <m@di.net>
Message-ID: <m-A14A1E.06263013012005@news.verizon.net>
Source record: 83595

In article <10uc53k8pgdbne6@corp.supernews.com>,
Roy Lewallen <w7el@eznec.com> wrote:

> The fact that superconductors have zero resistance above DC isn't a
> limitation of today's technology (although technology limitations cause
> current high-temperature superconductors to have resistivity greater
> than theoretically possible), but a fundamental property of the nature
> of superconductors.
>
> What I'm saying is that a "truly superconducting", "hypothetical
> perfect" superconductor has finite resistance at any frequeny above DC.
> Imagining a material that has zero resistivity at frequencies above DC
> requires imagining something other than a superconductor.
>
> Roy Lewallen, w7EL
>
> Dave Platt wrote:
> > . . .
> > Let's assume that you could find a superconductor which would be
> > truly superconducting even at RF frequencies (which today's
> > superconductors are not, I gather). So, you could cut the loss
> > resistance of the antenna to precisely zero, in this hypothetical
> > case.
>
> > . . .
> > Using the hypothetical perfect superconductor (which may be
> > impossible) you might reduce this dipole resistance to zero. Great
> > reduction in loss, right?
> > . . .

well seems everyone is 'strictly' (narrow) focused on the antenna's
resistence loss, i mentined it as the starting point as that is first
thing i think of when it goes critical... however one the resistance
drops, other effects take place no? both in the material and in respect
to other forces aside from just resistance, once it reaches near 0 and
begins being a superconductor

guess i won't know until i build it and mesure it i wanted to try 10m
really but 2m might be easier to keep chilly(0) and i am looking
foward to rig it i've got most of the stuff i think i need so far

i'd also like to build a superconductie ocilator, i'd suspect that i
could power it using a truly small ammount of power?

857. ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 13:09:02 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34nal2F4ak7h3U1@individual.net>
Source record: 83597
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I wonder if there is any mileage to be had from adapting
the numerous junk-mail CD's as the vanes of ATU
capacitors?

1. We already have a form that is circular (no waste) and
with an accurately-positioned central hole.

2. There is a metallic film sandwiched between the plastic.

3. Is this film to thin to stand up to the RF currents that
will spread out across it when charging & discharging?

4. How would we make metallic contact to the film without
destroying the film at the point of contact?

5. Does anybody know the type of metal making up the film, i.e.,
can we solder to it?

6. Is the plastic of a suitable quality? Will it arc-through?

858. Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 13:13:17 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34nal3F4ak7h3U2@individual.net>
Source record: 83596
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

Is there a "kink" for setting up a slitting saw to saw through
round bar stock along the axis, so that the slot is exactly
across a diameter? (I presume this to be a similar problem to
setting up accurately for cross-drilling)

This is actually a Ham Radio application; I wish to make
up some very large banana-type plugs from the 1/4" round
bar stock that I have in small quantities. For this, I will need
to saw two diameters in a cross shape, and then splay
out the leaves slightly to make a springy and rubbing contact.

859. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 13:27:01 UTC
From: jtaylor <jtaylor@deletethis.hfx.andara.com>
Message-ID: <MIuFd.88465$vO1.528207@nnrp1.uunet.ca>
Source record: 83598
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34nal3F4ak7h3U2@individual.net...
> Is there a "kink" for setting up a slitting saw to saw through
> round bar stock along the axis, so that the slot is exactly
> across a diameter? (I presume this to be a similar problem to
> setting up accurately for cross-drilling)
>
> This is actually a Ham Radio application; I wish to make
> up some very large banana-type plugs from the 1/4" round
> bar stock that I have in small quantities. For this, I will need
> to saw two diameters in a cross shape, and then splay
> out the leaves slightly to make a springy and rubbing contact.
>

I put the saw mandrel in a lathe chuck and made a block with a hole and setscrew to mount on the cross-slide. Did this to slit the threaded end of a bolt - it has a countersunk hole lengthways through it and when a smaller screw is thightened it locks the threads. This bolt is the mount for a ball-turning attachment; I wanted to be able to lock the mounting bolt at the right clearance without having it cock or move sideways, so a locknut and a setscrew were both out.

I had to thread the hole through my block, but you don't need that. If you wanted to get fancy you could make a shouldered sleeve with your setscrew holding the stock, drill a hole in the shoulder, and two holes in the block for a pin to set your 90 degree cuts.

860. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 13:55:38 UTC
From: Dave Fawthrop <hyphen@hyphenologist.co.uk>
Message-ID: <q5vcu0dasurqfj7prm7ian3fco7tjpiis4@4ax.com>
Source record: 83600
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Thu, 13 Jan 2005 13:09:02 -0000, "Airy R.Bean" <Me@privacy.net> wrote:

| I wonder if there is any mileage to be had from adapting
| the numerous junk-mail CD's as the vanes of ATU
| capacitors?

I make mine into Christmas decorations.
Stick in pairs using double sided foam pads, on monofilament fishing line.
Dangle a lot of these strings inside a window.

--
Dave Fawthrop <dave hyphenologist co uk>
Killfile and Anti Troll FAQs at
http://www.hyphenologist.co.uk/killfile.

861. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 13:56:33 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <a8vcu0hjdlgqkg8gkog41rcnt1f54f0cej@4ax.com>
Source record: 83599
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Thu, 13 Jan 2005 13:09:02 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>I wonder if there is any mileage to be had from adapting
>the numerous junk-mail CD's as the vanes of ATU
>capacitors?
>
>1. We already have a form that is circular (no waste) and
>with an accurately-positioned central hole.
>
>2. There is a metallic film sandwiched between the plastic.
>
>3. Is this film to thin to stand up to the RF currents that
>will spread out across it when charging & discharging?
>
>4. How would we make metallic contact to the film without
>destroying the film at the point of contact?
>
>5. Does anybody know the type of metal making up the film, i.e.,
>can we solder to it?
>
>6. Is the plastic of a suitable quality? Will it arc-through?

A little Googling would soon show you whether the critical factor,
which you doubtless have already determined from your preliminary
calculations is the loss tangent for the CD substrate, may well render
such a use as inadvisable.
--
from
Aero Spike

862. Re: What does it take to get into weather sats?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 14:01:21 UTC
From: Wefax_Dude <wefaxdude@noaspam.com>
Message-ID: <41E67F2F.7BE43549@noaspam.com>
Source record: 83601

Hi,

I'm also on dialup also.

To speed up things, just turn off load images in your browser as a
temporary
measure and that will speed up your internet browsing !
No reason to download all the images or graphis unless you want them.
Bookmark the sites you like and then turn on load images again.

Is there a library either public or university near you ?
Many have public internet computers available at no cost, just ned
a library card and perhaps a quick instrution session before they let
you online !

Regards,

wefax_dude

stryped@hotmail.com wrote:

> I have looked but am having some toruble finding information. One of
> the problems I have is I only have dial up at home.

863. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 14:03:55 UTC
From: Wefax_Dude <wefaxdude@noaspam.com>
Message-ID: <41E67FCA.780D06F7@noaspam.com>
Source record: 83602

Perhaps the cost/benefit ratio is not viable
because of the expense to keep the antenna cold ?

On spacecraft missions to the outer plantes,
the antenna were not supercooled but the
space environment was very cold !

864. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 14:12:57 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34ne4sF4atn6pU1@individual.net>
Source record: 83603
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

Thanks for your ideas - it's always the way that there's more
though and effort needed to be put in to make the jig than
to make the device in which you're interested!

"jtaylor" <jtaylor@deletethis.hfx.andara.com> wrote in message
news:MIuFd.88465$vO1.528207@nnrp1.uunet.ca...
> I had to thread the hole through my block, but you don't need that. If
you
> wanted to get fancy you could make a shouldered sleeve with your setscrew
> holding the stock, drill a hole in the shoulder, and two holes in the
block
> for a pin to set your 90 degree cuts.

865. Re: Silly to use a linear ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 14:34:55 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <iGvFd.4$ru.2@fed1read07>
Source record: 83604

Hi Roy -- reminds me of the time I worked an S79 on 15M phone. Very weak but the contact was made. I posted the S79 on the DX packet cluster. A local big gun came back at me with "Miniprop sez there is absolutely no propagation to the Seychelles".

I replied Oh Gosh, I had better send the QSL card back when it gets here. The QSL did arrive. I decided to keep it.

I have an old wife here -- don't listen to her either hi hi.

--
Caveat Lector -- I'll take an S-unit increase every time.

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10uc4e51c60dd0a@corp.supernews.com...
> Ah, c'mon. Reg says 7 dB isn't enough to worry about. "Kurt Sterba" said
> that even 15 dB isn't. All the people who think that linears and beams
> help their signals are just imagining things. The real experts say so.
> You're not going to listen to the old wives, are you?
>
> Roy Lewallen, W7EL
> -- One of Reg's "Old Wives"
>
> Caveat Lector wrote:
>> I would like to put a different spin on the 7dB statement below.
>>
>> Where the extra gain or power really comes into play is very weak signal
>> DXing - not the pileups necessarily.
>>
>> Cases in point - my Dxing log has several contacts where using a linear
>> got my signal far enough above the noise level for the DX station to
>> understand me. True on phone or CW. In most of these cases, the DX was
>> calling QRZ and no one was answering -- the DX station was so weak --
>> seems folks just gave up or maybe everyone worked them. Turning on the
>> linear got me the contacts. Definitely Without Question - Worked an R1MV
>> Malyj Vysotskij, HK0 Malpelo Is, VK9/M Mellish Reef, and VP8/G So Georgia
>> by turning on the linear feeding a vertical multibander.
>>
>> I had this happen enough times to realize this to be the real benefit of
>> adding a linear. And it sure can't hurt in a pileup either, if you know
>> how to work a pileup.
>>

866. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 14:50:26 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34ngbqF4choh9U1@individual.net>
Source record: 83606

How would you set it up to be exactly cutting a diameter?

"Jack Painter" <223bthp@cox.net> wrote in message
news:kWvFd.15549$B95.11334@lakeread02...
> "Airy R.Bean" <Me@privacy.net> wrote
> > Is there a "kink" for setting up a slitting saw to saw through
> > round bar stock along the axis, so that the slot is exactly
> > across a diameter? (I presume this to be a similar problem to
> > setting up accurately for cross-drilling)
> > This is actually a Ham Radio application; I wish to make
> > up some very large banana-type plugs from the 1/4" round
> > bar stock that I have in small quantities. For this, I will need
> > to saw two diameters in a cross shape, and then splay
> > out the leaves slightly to make a springy and rubbing contact.
> Hi Airy, couldn't you just use a grinding/cutting wheel to do this job?
> Doesn't sound like you need any fancy jig to cut a slot or two into round
> stock.

867. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 14:51:59 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <kWvFd.15549$B95.11334@lakeread02>
Source record: 83605

"Airy R.Bean" <Me@privacy.net> wrote

> Is there a "kink" for setting up a slitting saw to saw through
> round bar stock along the axis, so that the slot is exactly
> across a diameter? (I presume this to be a similar problem to
> setting up accurately for cross-drilling)
>
> This is actually a Ham Radio application; I wish to make
> up some very large banana-type plugs from the 1/4" round
> bar stock that I have in small quantities. For this, I will need
> to saw two diameters in a cross shape, and then splay
> out the leaves slightly to make a springy and rubbing contact.
>

Hi Airy, couldn't you just use a grinding/cutting wheel to do this job?
Doesn't sound like you need any fancy jig to cut a slot or two into round
stock.

Jack

868. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 14:59:32 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <s1wFd.15551$B95.14894@lakeread02>
Source record: 83607

I'd put the bar in a vise and do it by hand, so what if you waste an inch of stock at a time if you aren't happy with it? This isn't rocket-science making a plug Airy, just have at it for Pete's sake. I could hold a tiny Dremel-tool or a big 1/2" drive side-grinder steady enough to do what you're asking with one eye closed.

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34ngbqF4choh9U1@individual.net...
> How would you set it up to be exactly cutting a diameter?
>
> "Jack Painter" <223bthp@cox.net> wrote in message
> news:kWvFd.15549$B95.11334@lakeread02...
> > "Airy R.Bean" <Me@privacy.net> wrote
> > > Is there a "kink" for setting up a slitting saw to saw through
> > > round bar stock along the axis, so that the slot is exactly
> > > across a diameter? (I presume this to be a similar problem to
> > > setting up accurately for cross-drilling)
> > > This is actually a Ham Radio application; I wish to make
> > > up some very large banana-type plugs from the 1/4" round
> > > bar stock that I have in small quantities. For this, I will need
> > > to saw two diameters in a cross shape, and then splay
> > > out the leaves slightly to make a springy and rubbing contact.
> > Hi Airy, couldn't you just use a grinding/cutting wheel to do this job?
> > Doesn't sound like you need any fancy jig to cut a slot or two into
round
> > stock.
>
>

869. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 15:14:22 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34nho2F4ecikjU1@individual.net>
Source record: 83609

Sorry, but there is a parallel here with cross-drilling
of round stock. You only need to be a few thou out
for it to be very apparent that the hole is off-centre.

In trying to make a 4-leaf banana plug, with the additional
consideration that material is cut away by the saw or grinding wheel, I
expect that a few thou deviation would result in some leaves
of the plug being considerably weaker. In any case, there is
a certain degree of pride in setting out and achieving a
quality result if that result can be obtained with a few
moments of extra planning.

In any case, it is not the steadiness of hand that is the issue,
but the centring of the tool over the product.

"Jack Painter" <223bthp@cox.net> wrote in message
news:s1wFd.15551$B95.14894@lakeread02...
> I'd put the bar in a vise and do it by hand, so what if you waste an inch
of
> stock at a time if you aren't happy with it? This isn't rocket-science
> making a plug Airy, just have at it for Pete's sake. I could hold a tiny
> Dremel-tool or a big 1/2" drive side-grinder steady enough to do what
you're
> asking with one eye closed.
>
> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:34ngbqF4choh9U1@individual.net...
> > How would you set it up to be exactly cutting a diameter?
> >
> > "Jack Painter" <223bthp@cox.net> wrote in message
> > news:kWvFd.15549$B95.11334@lakeread02...
> > > "Airy R.Bean" <Me@privacy.net> wrote
> > > > Is there a "kink" for setting up a slitting saw to saw through
> > > > round bar stock along the axis, so that the slot is exactly
> > > > across a diameter? (I presume this to be a similar problem to
> > > > setting up accurately for cross-drilling)
> > > > This is actually a Ham Radio application; I wish to make
> > > > up some very large banana-type plugs from the 1/4" round
> > > > bar stock that I have in small quantities. For this, I will need
> > > > to saw two diameters in a cross shape, and then splay
> > > > out the leaves slightly to make a springy and rubbing contact.
> > > Hi Airy, couldn't you just use a grinding/cutting wheel to do this
job?
> > > Doesn't sound like you need any fancy jig to cut a slot or two into
> round

> > > stock.
> >
> >
>
>

870. Discone antenna plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 15:17:06 UTC
From: stryped@hotmail.com
Message-ID: <1105629426.464206.319250@f14g2000cwb.googlegroups.com>
Source record: 83608

Does anyone know if there are plans for a discone scanner antenna on
the web to build?

871. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 15:18:23 UTC
From: Andrew Mawson <andrew@no_spam_please_mawson.org.uk>
Message-ID: <cs63fvkkj1@titan.btinternet.com>
Source record: 83610
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34nal3F4ak7h3U2@individual.net...
> Is there a "kink" for setting up a slitting saw to saw through
> round bar stock along the axis, so that the slot is exactly
> across a diameter? (I presume this to be a similar problem to
> setting up accurately for cross-drilling)
>
> This is actually a Ham Radio application; I wish to make
> up some very large banana-type plugs from the 1/4" round
> bar stock that I have in small quantities. For this, I will need
> to saw two diameters in a cross shape, and then splay
> out the leaves slightly to make a springy and rubbing contact.
>
>

Assuming you are using a vertical mill so that the slitting saw is
horizontal, and the work is fixtured horizontal (vee block perhaps):

a/ Measure height of top of stock with vernier height guage, subtract
half the stock thickness, and add half the slitting saw thickness -
set the height guage to the resultant figure.

b/ Adjust quill of mill so top of slitting saw just touches the height
guage and lock the quill.

You now have the slitting saw bang on centre of the work.

AWEM

872. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 15:21:59 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e692a4$1_1@127.0.0.1>
Source record: 83611
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Prometheus wrote:
> In article <41e5f5a9$1_2@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com> writes
>
>> Prometheus wrote:
>> No, you should get in touch with reality. Discontinuities,
>> like step functions, exist only in limited minds, apparently
>> like yours, certainly not in reality.
>
> It was you who described a step function ...

Sorry, until you choose to tell the truth, I have
nothing further to say. What I described was a
ramp function starting at 10 years of use. It was
you, not I, who introduced the *step* function
concept.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

873. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 15:26:34 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e693b7_1@127.0.0.1>
Source record: 83612

Wefax_Dude wrote:
> Perhaps the cost/benefit ratio is not viable
> because of the expense to keep the antenna cold ?

It's certainly more economical to increase the
transmitter's power output than to supercool a
dipole.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

874. Re: Discone antenna plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 15:32:00 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <PvwFd.11$ru.6@fed1read07>
Source record: 83613

<stryped@hotmail.com> THE QUESTION BOX wrote in message
news:1105629426.464206.319250@f14g2000cwb.googlegroups.com...
> Does anyone know if there are plans for a discone scanner antenna on
> the web to build?
>

QRZ has a discone design download

http://www.qrz.com/download/antennas/discone1.zip

Also see:
http://www.northcountryradio.com/Articles/discone.htm

P.S. When are you going to learn how to use Google ?
I found these two links in 10 seconds using Google
There are more there as well

Click on this URL:
http://www.google.com/

Type in Discone antenna

Get dozens of places to look.

Also have you bought an antenna book yet -- most of your questions can be
answered by studying a good antenna book.

It is difficult to teach you antennas here. It would take several pages.

Antenna theory on the web can be found at these URL's
Antenna Basics and Theory -- WOW -- See this One -- From Navy Training
Series

Antenna Basics and Theory -- From Ian C. Purdie, VK2TIP

Antenna Basics and Theory -- Excellent Tutorial From Scott's Pages

Antenna Basics and Theory -- Excellent From Integrated Publishing

Antenna Basics and Theory -- From Sub-TV

Antenna Basic Radiation Theory-- From The ARRL

Antenna Basics and Theory -- Excellent - From VK2DQ

Antenna Construction Tips And Practices -- From KQ6RH

Antenna Construction Tips -- Metals to use. From Bob Hejl - W2IK

Antenna Dimension Calculators -- From The Antenna Elmer - Click On Antenna Type

Antenna Dimension Calculators -- Inverted Vee And Dipoles

Antenna Dimensions Calculator-- Dipoles From AMANDX

Antenna Dimensions Calculators -- Loops, Dipoles, Delta Loop, and 5/8 waves -- KK5HY

Antenna Gain -- From L. B. Cebik

Antenna Height? -- How High Should They Be? -- By Mike Banz, AA3RL

Antenna Tuner Theory -- From The ARRL

Antenna Tuners and SWR -- From The ARRL

Antenna Tuners - How to use

Baluns -- IZ7ATH

Baluns and Choke Baluns -- From Ian C. Purdie, VK2TIP

Baluns - W8JI Antenna Articles Toroid Balun Winding * Balun and Transformer Core Selection * Transmitting Baluns

Choosing Wire For An Antenna

Dipole End Insulator Installation -- Lots of photos From NorthWest Antennas

Ground & Radial Systems -- From Butternut

Height Of Dipoles - Patterns By AA3RL

Loaded Antennas - From Tom W8JI

Noise -- Technical article about noise and receiving/ receiving antennas From Tom W8JI

NVIS I- Near Vertical Incident Skywave Antennas -- By Patricia Gibbons - WA6UBE

NVIS II - Near Vertical Incident Skywave Antennas Via WB5UDE

QuarterWave Antenna installation notes -- includes ground/raised radial info -- From Butternut

Radiation And Fields -- From Tom W8JI

Radiation Resistance -- From Tom W8JI

Slingshot method for hanging SkyWires

Tower Topics, Raising, Specs -- Several Links

Traps - How do they work ? Excellent - From VK2DQ

Traps -- Excellent From Tom W8JI

TrapDip Design and performance of 2-band trapped dipole antennas including trap design. Lots more

Trees -- Getting an Antenna Up in em -- From G3CWI

Vertical Antennas - Dirty Little Secrets, Ground/Radial Systems - Click On Tech Notes

The Effects of VSWR on Transmitted Power --By James G. Lee, W6VAT

--
Caveat Lector

875. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 15:39:55 UTC
From: jtaylor <jtaylor@deletethis.hfx.andara.com>
Message-ID: <mFwFd.88477$vO1.528526@nnrp1.uunet.ca>
Source record: 83614
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34ne4sF4atn6pU1@individual.net...
> Thanks for your ideas - it's always the way that there's more
> though and effort needed to be put in to make the jig than
> to make the device in which you're interested!
>
> "jtaylor" <jtaylor@deletethis.hfx.andara.com> wrote in message
> news:MIuFd.88465$vO1.528207@nnrp1.uunet.ca...
> > I had to thread the hole through my block, but you don't need that. If
> you
> > wanted to get fancy you could make a shouldered sleeve with your
setscrew
> > holding the stock, drill a hole in the shoulder, and two holes in the
> block
> > for a pin to set your 90 degree cuts.
>

If you're making more than half a dozen it'd be worth it.

876. Re: Discone antenna plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 15:47:20 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <aKwFd.14$ru.10@fed1read07>
Source record: 83615

All of the theory URL's Listed below can be found at

http://ac6v.com/antprojects.htm#theory

--
Caveat Lector

"Caveat Lector" <CL@barahmas.com> wrote in message
news:PvwFd.11$ru.6@fed1read07...
> <stryped@hotmail.com> THE QUESTION BOX wrote in message
> news:1105629426.464206.319250@f14g2000cwb.googlegroups.com...
>> Does anyone know if there are plans for a discone scanner antenna on
>> the web to build?
>>
>
> QRZ has a discone design download
>
> http://www.qrz.com/download/antennas/discone1.zip
>
> Also see:
> http://www.northcountryradio.com/Articles/discone.htm
>
> P.S. When are you going to learn how to use Google ?
> I found these two links in 10 seconds using Google
> There are more there as well
>
> Click on this URL:
> http://www.google.com/
>
> Type in Discone antenna
>
> Get dozens of places to look.
>
> Also have you bought an antenna book yet -- most of your questions can be
> answered by studying a good antenna book.
>
> It is difficult to teach you antennas here. It would take several pages.
>
> Antenna theory on the web can be found at these URL's
> Antenna Basics and Theory -- WOW -- See this One -- From Navy Training
> Series
>
>
> Antenna Basics and Theory -- From Ian C. Purdie, VK2TIP
>

>
> Antenna Basics and Theory -- Excellent Tutorial From Scott's Pages
>
>
> Antenna Basics and Theory -- Excellent From Integrated Publishing
>
>
> Antenna Basics and Theory -- From Sub-TV
>
>
> Antenna Basic Radiation Theory-- From The ARRL
>
>
> Antenna Basics and Theory -- Excellent - From VK2DQ
>
>
> Antenna Construction Tips And Practices -- From KQ6RH
>
>
> Antenna Construction Tips -- Metals to use. From Bob Hejl - W2IK
>
>
> Antenna Dimension Calculators -- From The Antenna Elmer - Click On Antenna
> Type
>
>
> Antenna Dimension Calculators -- Inverted Vee And Dipoles
>
>
> Antenna Dimensions Calculator-- Dipoles From AMANDX
>
>
> Antenna Dimensions Calculators -- Loops, Dipoles, Delta Loop, and 5/8
> waves -- KK5HY
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> Antenna Gain -- From L. B. Cebik
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> Antenna Height? -- How High Should They Be? -- By Mike Banz, AA3RL
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> Antenna Tuner Theory -- From The ARRL
>
>
> Antenna Tuners and SWR -- From The ARRL
>
>
> Antenna Tuners - How to use
>

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> Baluns -- IZ7ATH
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> Baluns and Choke Baluns -- From Ian C. Purdie, VK2TIP
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> Baluns - W8JI Antenna Articles Toroid Balun Winding * Balun and
> Transformer Core Selection * Transmitting Baluns
>
>
> Choosing Wire For An Antenna
>
>
> Dipole End Insulator Installation -- Lots of photos From NorthWest
> Antennas
>
>
> Ground & Radial Systems -- From Butternut
>
>
> Height Of Dipoles - Patterns By AA3RL
>
>
> Loaded Antennas - From Tom W8JI
>
>
> Noise -- Technical article about noise and receiving/ receiving antennas
> From Tom W8JI
>
>
> NVIS I- Near Vertical Incident Skywave Antennas -- By Patricia Gibbons -
> WA6UBE
>
>
> NVIS II - Near Vertical Incident Skywave Antennas Via WB5UDE
>
>
> QuarterWave Antenna installation notes -- includes ground/raised radial
> info -- From Butternut
>
>
> Radiation And Fields -- From Tom W8JI
>
>
> Radiation Resistance -- From Tom W8JI
>
>
> Slingshot method for hanging SkyWires
>

>
> Tower Topics, Raising, Specs -- Several Links
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> Traps - How do they work ? Excellent - From VK2DQ
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>
> TrapDip Design and performance of 2-band trapped dipole antennas
> including trap design. Lots more
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> Trees -- Getting an Antenna Up in em -- From G3CWI
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> Vertical Antennas - Dirty Little Secrets, Ground/Radial Systems - Click On
> Tech Notes
>
>
> The Effects of VSWR on Transmitted Power --By James G. Lee, W6VAT
>
>
> --
> Caveat Lector
>
>
>
>

877. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 16:30:02 UTC
From: Wooding <binswood@bigfeet.com>
Message-ID: <34nm10F4dhmjnU1@individual.net>
Source record: 83616
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

Airy R.Bean wrote:
> Is there a "kink" for setting up a slitting saw to saw through
> round bar stock along the axis, so that the slot is exactly
> across a diameter? (I presume this to be a similar problem to
> setting up accurately for cross-drilling)

This trick assumes you have the slitting saw in a vertical mill, the bar is horizontal, and the slitting saw teeth are straight (i.e.. not staggered like a wood saw blade).
Adjust the position of the bar and saw so that, by eye, the blade is just about touching the fattest part of the bar. Interpose a vertical 6" steel rule between the bar and the saw and move the table to very gently pinch the rule. Unless you were lucky and set the saw exactly on the fattest part, the rule will no longer be vertical. Adjust the hight of the saw until the rule is truly vertical - you will be amazed at how accurately the blade is then at centre hight.

--

Regards, Gary Wooding
(To reply by email, change feet to foot in my address)

878. Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 16:48:41 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34nn8tF4c0i29U1@individual.net>
Source record: 83617

Someone suggested this over the last few days.

As I'm having trouble with soil sticking to the spade
and creating a hole when the spade is pulled up
instead of just a slit, could someone redescribe the
meat cleaver technique?

879. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 16:50:51 UTC
From: David Edmonds <dedmonds73@yahoo.co.uk>
Message-ID: <LFxFd.437$fd4.24@newsfe1-win.ntli.net>
Source record: 83618
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Airy R.Bean wrote:

> I wonder if there is any mileage to be had from adapting
> the numerous junk-mail CD's as the vanes of ATU
> capacitors?

So you've given up on using them to make 30 line television systems then?

Do a web search about this - plenty of info - though you claim you don't
web search.

David.

880. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 16:58:24 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34no3hF4c542oU1@individual.net>
Source record: 83620
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

Now, that's interesting, because it is a variation of the technique
for setting up for cross drilling (except that then the ruler is in
see-saw mode)

"Wooding" <binswood@bigfeet.com> wrote in message
news:34nm10F4dhmjnU1@individual.net...
> Airy R.Bean wrote:
> > Is there a "kink" for setting up a slitting saw to saw through
> > round bar stock along the axis, so that the slot is exactly
> > across a diameter? (I presume this to be a similar problem to
> > setting up accurately for cross-drilling)
>
> This trick assumes you have the slitting saw in a vertical mill, the bar
> is horizontal, and the slitting saw teeth are straight (i.e.. not
> staggered like a wood saw blade).
> Adjust the position of the bar and saw so that, by eye, the blade is
> just about touching the fattest part of the bar. Interpose a vertical
> 6" steel rule between the bar and the saw and move the table to very
> gently pinch the rule. Unless you were lucky and set the saw exactly on
> the fattest part, the rule will no longer be vertical. Adjust the hight
> of the saw until the rule is truly vertical - you will be amazed at how
> accurately the blade is then at centre hight.

881. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 17:00:12 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34no3iF4c542oU2@individual.net>
Source record: 83522
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

I have to make up about 14 such plugs.

(Although a nagging voice inside suggests that I should
also consider the "Binding Post" approach together with
spade terminals)

"jtaylor" <jtaylor@deletethis.hfx.andara.com> wrote in message
news:mFwFd.88477$vO1.528526@nnrp1.uunet.ca...
> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:34ne4sF4atn6pU1@individual.net...
> > Thanks for your ideas - it's always the way that there's more
> > though and effort needed to be put in to make the jig than
> > to make the device in which you're interested!
> > "jtaylor" <jtaylor@deletethis.hfx.andara.com> wrote in message
> > news:MIuFd.88465$vO1.528207@nnrp1.uunet.ca...
> > > I had to thread the hole through my block, but you don't need that.
If
> > you
> > > wanted to get fancy you could make a shouldered sleeve with your
> setscrew
> > > holding the stock, drill a hole in the shoulder, and two holes in the
> > block
> > > for a pin to set your 90 degree cuts.
>
> If you're making more than half a dozen it'd be worth it.

882. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 17:02:54 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34no3iF4c542oU3@individual.net>
Source record: 83621
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

Damn! I knew I should have purchased that digital
height gauge at the club sale, especially as it was only
£10!

The only difficulty otherwise with what you suggest is
the tendency of slitting saws to bend under the slightest
lateral force, but thanks anyway.

"Andrew Mawson" <andrew@no_spam_please_mawson.org.uk> wrote in message
news:cs63fvkkj1@titan.btinternet.com...
> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:34nal3F4ak7h3U2@individual.net...
> > Is there a "kink" for setting up a slitting saw to saw through
> > round bar stock along the axis, so that the slot is exactly
> > across a diameter? (I presume this to be a similar problem to
> > setting up accurately for cross-drilling)
> > This is actually a Ham Radio application; I wish to make
> > up some very large banana-type plugs from the 1/4" round
> > bar stock that I have in small quantities. For this, I will need
> > to saw two diameters in a cross shape, and then splay
> > out the leaves slightly to make a springy and rubbing contact.
> Assuming you are using a vertical mill so that the slitting saw is
> horizontal, and the work is fixtured horizontal (vee block perhaps):
> a/ Measure height of top of stock with vernier height guage, subtract
> half the stock thickness, and add half the slitting saw thickness -
> set the height guage to the resultant figure.
> b/ Adjust quill of mill so top of slitting saw just touches the height
> guage and lock the quill.
> You now have the slitting saw bang on centre of the work.

883. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 17:03:39 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34nnv1F4fuougU1@individual.net>
Source record: 83619
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"David Edmonds" <dedmonds73@yahoo.co.uk> wrote in message
news:LFxFd.437$fd4.24@newsfe1-win.ntli.net...
> Airy R.Bean wrote:
>
> > I wonder if there is any mileage to be had from adapting
> > the numerous junk-mail CD's as the vanes of ATU
> > capacitors?
>
> So you've given up on using them to make 30 line television systems then?
>
> Do a web search about this - plenty of info - though you claim you don't
> web search.

Superficially the idea has some merit but you would have to machine the discs anyway (they are totally symetrical and thus the area overlapping with the fixed vanes wouldn't change). By the time you've machined then to be asysmetric, might as well have made metal plates and avoid all the other problems as well.

To problems in making variable Cs, the use of a CDROMs offers little.

Etching plates on PCB and using the fibre glass for the mechanical side is maybe a better idea.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

.

884. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 17:06:39 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34nob2F4diiruU1@individual.net>
Source record: 83523
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hardly - you have the cost of purchase and the inconvenience of
etching. Junk mail cd's are free issue.

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34nnv1F4fuougU1@individual.net...
> Etching plates on PCB and using the fibre glass for the mechanical side is
> maybe a better idea.

885. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 17:16:45 UTC
From: gmz79@aol.comnospam
Message-ID: <20050113121645.24293.00000109@mb-m03.aol.com>
Source record: 83524

Real world experience: If the bands up you might not be able to tell
the difference, when its down its the difference between no copy and Q-5
****** It's a relative, not an absolute.
73
WG8Z

>Yet look at all the people who go to all the trouble of putting up a 3
>element beam, then think that the 7 dB gain over a dipole actually makes
>their signal louder. Or get a 500 watt amplifier for their 100 watt rig.
>Silly fools! Old wives!
>
>Roy Lewallen, W7EL

Greg Z
to thine own sound be true
WG8Z

886. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 17:27:14 UTC
From: Radio Man <puns@verizon.net>
Message-ID: <SbyFd.20564$lG.19133@trnddc03>
Source record: 83525
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I wonder if there is any merit in using aluminum foil
duct tape to make a capacitor?
"Airy R.Bean" <Me@privacy.net> wrote in message
news:34nal2F4ak7h3U1@individual.net...
>I wonder if there is any mileage to be had from adapting
> the numerous junk-mail CD's as the vanes of ATU
> capacitors?
>
> 1. We already have a form that is circular (no waste) and
> with an accurately-positioned central hole.
>
> 2. There is a metallic film sandwiched between the plastic.
>
> 3. Is this film to thin to stand up to the RF currents that
> will spread out across it when charging & discharging?
>
> 4. How would we make metallic contact to the film without
> destroying the film at the point of contact?
>
> 5. Does anybody know the type of metal making up the film, i.e.,
> can we solder to it?
>
> 6. Is the plastic of a suitable quality? Will it arc-through?
>
>

887. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 17:27:43 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <63bdu0lescbgh2o94r8tit9v9669v26eid@4ax.com>
Source record: 83526

On Thu, 13 Jan 2005 16:48:41 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>Someone suggested this over the last few days.
>
>As I'm having trouble with soil sticking to the spade
>and creating a hole when the spade is pulled up
>instead of just a slit, could someone redescribe the
>meat cleaver technique?
>

FYI, I found an alternative tool -- it's a 12-inch blade that is
foot-operated. See the picture at:

http://www.hound-dog.com/steppin_edger.htm

Officially, it's a lawn edger, but it will also cut a slit in the
lawn. If I bury it too deeply in wet soil, the dirt sticks to the
blade, but if I'm careful, and do it in reasonably dry soil, it works
nicely.

Bob
k5qwg

888. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 17:50:38 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34nqn4F4ed6fqU1@individual.net>
Source record: 83527
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Radio Man" <puns@verizon.net> wrote in message
news:SbyFd.20564$lG.19133@trnddc03...
> I wonder if there is any merit in using aluminum foil
> duct tape to make a capacitor?

I wonder what the background to you idea is?

New approaches to existing designs should offer one or more of:

Cost savings (cheaper materials, less man hours, ease of manufacture etc)
Better reliability and/or life (not the same thing by the way)
Extra functionality

For most things, the cost of materials is not a cost driver- the cost of the material in a variable capacitor is dwarfed by the labour and machining costs.

So, how does using duct tape help?

The CD idea falls flat as, while they may be cheap, the amount of machining 'saved' is mininmal. I suppose if you are totally strapped for cash, out of work and with time on your hands, they may offer some advantage, but you end up with a 'product' of inferior quality. Engineers who are driven by such a penny pinching approach usually end up bankrupting their company as their products are poor.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

889. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 17:58:24 UTC
From: "Lloyd E. Sponenburgh" <LLoyd$p@mindspring.com>
Message-ID: <4FyFd.5816$pZ4.230@newsread1.news.pas.earthlink.net>
Source record: 83528
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:34nal3F4ak7h3U2@individual.net...
> > Is there a "kink" for setting up a slitting saw to saw through
> > round bar stock along the axis, so that the slot is exactly
> > across a diameter? (I presume this to be a similar problem to
> > setting up accurately for cross-drilling)

The simplest way I know to locate a line on top of round stock is this:
(BTW, you don't have to switch from vertical to horizontal modes to make it
work.)

Mount the stock parallel to the mill table, and dead-level, with the
"working end" solidly in your mill vise, and enough overhang for the
slitting saw to clear the vise when you're working on the _side_ of the rod.

True up the work with your longitudinal travel, so it's _pretty_ good. A
thou. is OK, you don't need it to tenths.

With any-ol' side-cutting bit, slowly close in on the side of the work until
the bit just kisses the metal. Then make a longitudinal cut for however far
you want the slit to go.

You've now marked a line and flat that is parallel to the axis of the rod,
and perfectly centered on the horizontal diameter of the rod.

Without removing the work from the vise, you can switch to your slitting
saw, and true up the saw to the line you've just marked -- then cut.

LLoyd

890. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 18:04:05 UTC
From: Gary Cavie <m0jjh@despammed.com>
Message-ID: <MPG.1c50c86e13673d729896a6@news.individual.net>
Source record: 83529

In article <34nn8tF4c0i29U1@individual.net>, Me@privacy.net says...
> Someone suggested this over the last few days.
>
> As I'm having trouble with soil sticking to the spade
> and creating a hole when the spade is pulled up
> instead of just a slit, could someone redescribe the
> meat cleaver technique?
>
>
>

An alternative, if you know someone with a Partner cutter, or a 9" angle grinder, is to just zip along the ground with an old diamond blade, giving you nice neat slits to drop the wire into. Water it, stamp it back down, and the XYL need never know!

891. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 18:14:36 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34nss9F4borpmU1@individual.net>
Source record: 83530
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Machining"? What, cutting with a pair of scissors?

There's considerably more machining involved in your
proposal to use etched PCB.

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34nqn4F4ed6fqU1@individual.net...
>> The CD idea falls flat as, while they may be cheap, the amount of
machining
> 'saved' is mininmal. I

892. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 18:15:38 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34nsscF4borpmU2@individual.net>
Source record: 83531
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

The proposal to investigate the use of junk-mail CD's
seems to meet your very first criterion.

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34nqn4F4ed6fqU1@individual.net...
> New approaches to existing designs should offer one or more of:
>
> Cost savings (cheaper materials, less man hours, ease of manufacture etc)

893. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 18:16:50 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34nsseF4borpmU3@individual.net>
Source record: 83534
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Extra Functionality! - What "Extra Functionality" do you
envisage in a variable capacitor?!!!!!

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34nqn4F4ed6fqU1@individual.net...

> New approaches to existing designs should offer one or more of:
> Extra functionality

894. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 18:18:20 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34nssfF4borpmU4@individual.net>
Source record: 83532
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

You don't seem to have the qualities that makes
for a _REAL_ Radio Ham, OM!

There are no labour costs when you do things for yourself!

There are no machining costs in cutting up a CD with a pair of scissors.

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34nqn4F4ed6fqU1@individual.net...

> For most things, the cost of materials is not a cost driver- the cost of
the
> material in a variable capacitor is dwarfed by the labour and machining
> costs.

895. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 18:24:02 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34nssgF4borpmU5@individual.net>
Source record: 83533
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On what basis do you claim that a variable capacitor fashioned
from junk-mail CD ROMs is a "'product' of inferior quality"?

From the power handling capability?

From the flash-over voltage?

From the max and min capacitance?

Which companies do you say have been bankrupted by looking for
economical means of production? (Not all of us can boasts that we
are employed by profligate defence companies and are proud to
have been involved in the development of the weapons that
were responsible for the deaths of so many innocent children
in Iraq, OM)

Or is your posting below yet another example of bullshitting,
of side-stepping and of downright lying?

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34nqn4F4ed6fqU1@individual.net...
> The CD idea falls flat as, while they may be cheap, the amount of
machining
> 'saved' is mininmal. I suppose if you are totally strapped for cash, out
of
> work and with time on your hands, they may offer some advantage, but you
> end up with a 'product' of inferior quality. Engineers who are driven by
> such a penny pinching approach usually end up bankrupting their company as
> their products are poor.

896. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 18:32:47 UTC
From: Steve <steve.withnell@btinternet.com>
Message-ID: <34nt6eF4arjmdU1@individual.net>
Source record: 83535
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34nal3F4ak7h3U2@individual.net...
> Is there a "kink" for setting up a slitting saw to saw through
> round bar stock along the axis, so that the slot is exactly
> across a diameter? (I presume this to be a similar problem to
> setting up accurately for cross-drilling)
>
> This is actually a Ham Radio application; I wish to make
> up some very large banana-type plugs from the 1/4" round
> bar stock that I have in small quantities. For this, I will need
> to saw two diameters in a cross shape, and then splay
> out the leaves slightly to make a springy and rubbing contact.
>
>
Doesn't need to be "exactly" because it's the diameter that is more critical
than the position of the slot - I suspect even as much as just less than the
thickness of the slitting saw off centre would not be a problem.

I made a connector (female as opposed to your male) for an old radio by
slitting brass tube. Hacksaw and vice produced good enough accuracy for an
excellent operational performance.

Steve

897. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 18:44:19 UTC
From: Mr Jolly <nospamta@ntlworld.com>
Message-ID: <34nts4F4dgqdqU1@individual.net>
Source record: 83536
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"David Edmonds" <dedmonds73@yahoo.co.uk> wrote in message
news:LFxFd.437$fd4.24@newsfe1-win.ntli.net...
> Airy R.Bean wrote:
>
> > I wonder if there is any mileage to be had from adapting
> > the numerous junk-mail CD's as the vanes of ATU
> > capacitors?
>
> So you've given up on using them to make 30 line television systems then?
>
> Do a web search about this - plenty of info - though you claim you don't
> web search.

And if your realy bored http://www.scitoys.com/

898. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 18:50:26 UTC
From: Nimrod <nospamfor@me.com>
Message-ID: <34nu73F4f392nU1@individual.net>
Source record: 83538
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"David Edmonds" <dedmonds73@yahoo.co.uk> wrote in message
news:LFxFd.437$fd4.24@newsfe1-win.ntli.net...
> Airy R.Bean wrote:
>
> > I wonder if there is any mileage to be had from adapting
> > the numerous junk-mail CD's as the vanes of ATU
> > capacitors?
>
> So you've given up on using them to make 30 line television systems then?
>

Just like the TMC days. One daft idea after another.

899. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 18:50:30 UTC
From: Nimrod <nospamfor@me.com>
Message-ID: <34nu79F4cnderU1@individual.net>
Source record: 83537
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34nal2F4ak7h3U1@individual.net...
> I wonder if there is any mileage to be had from adapting
> the numerous junk-mail CD's as the vanes of ATU
> capacitors?

These would be the CDs returned with your defective, over priced, operating system on them?

900. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 18:50:33 UTC
From: Nimrod <nospamfor@me.com>
Message-ID: <34nu7aF4cnderU2@individual.net>
Source record: 83539
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

You can always tell when Gareth has lost the game and is wound up - lots of posts sent in anger.

I love it.

Just like the TMC days.

901. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 19:10:05 UTC
From: cas@w-sherwood.ih.lucent.com
Message-ID: <cs6h2d$jea@netnews.proxy.lucent.com>
Source record: 83540
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

>I made a connector (female as opposed to your male) for an old radio by
>slitting brass tube. Hacksaw and vice produced good enough accuracy for an
>excellent operational performance.

How about making a square fixture to hold the round part with two slits
to guide the saw blade?

I have found that a good fret/jewelers saw very handy for cutting small
items. I find it very difficult to cut 1/8 drill rod with a hacksaw
but easy with a fret saw. They cut faster than you expect.

902. Re: What does it take to get into weather sats?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 19:26:00 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <cXzFd.7081$C.5589@trnddc05>
Source record: 83541

Dude

I've been trying to build a collapsible antenna for WXSAT use. I
recognize that there is little interest in this antenna amongst the WXSAT
image group. I'm no longer active in HAM radio and have no connections
with any 'tinker/builders' around the Los Angeles area. I'm curious to know
if you have interest in communicating with me concerning your experiences
with 137 MHz satellite imaging.

Jerry

"Wefax_Dude" <wefaxdude@noaspam.com> wrote in message
news:41E67F2F.7BE43549@noaspam.com...
> Hi,
>
> I'm also on dialup also.
>
> To speed up things, just turn off load images in your browser as a
> temporary
> measure and that will speed up your internet browsing !
> No reason to download all the images or graphis unless you want them.
> Bookmark the sites you like and then turn on load images again.
>
> Is there a library either public or university near you ?
> Many have public internet computers available at no cost, just ned
> a library card and perhaps a quick instrution session before they let
> you online !
>
> Regards,
>
> wefax_dude
>
>
> stryped@hotmail.com wrote:
>
>> I have looked but am having some toruble finding information. One of
>> the problems I have is I only have dial up at home.
>

903. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 19:26:38 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <w1GyQLxuts5BFwTa@newbrain.demon.co.uk>
Source record: 83542
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <41e692a4$1_1@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
writes
>Prometheus wrote:
>> In article <41e5f5a9$1_2@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com> writes
>>
>>> Prometheus wrote:
>>> No, you should get in touch with reality. Discontinuities,
>>> like step functions, exist only in limited minds, apparently
>>> like yours, certainly not in reality.
>> It was you who described a step function ...
>
>Sorry, until you choose to tell the truth, I have
>nothing further to say. What I described was a
>ramp function starting at 10 years of use. It was
>*you*, not I, who introduced the *step* function
>concept.

It was you in Message-ID: <41e4a9f2_2@127.0.0.1> who quoted from the
article that "People with more than 10 years of cellphone use suffered
twice as many tumors as non-cellphone users", that you subsequently
present a hypothetical ramp function of your own creation and not
attributed to the original article does not change the quote from the
article in to a ramp function.

There is no point attempting deception by omitting my quotes from your
replies since everyone can read them and see that you are a liar.

Can you even recognise the truth, presumably not since you are not
telling it.

--
Ian G8ILZ

904. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 19:38:33 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <Z6AFd.1767$2e7.1025@newssvr12.news.prodigy.com>
Source record: 83543
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

Lay the round bar stock in a Vee and put it under the saw so the saw just
touches the highest part of the rod. As long as the stock is round you'll
have a tangent to the diameter and all you need to do is start slotting,
half in two.
There used to be lots of banana plugs for sale on eBay and hamfest, quicker,
easier, and cheaper than DIY.

--

73
Hank WD5JFR
"Airy R.Bean" <Me@privacy.net> wrote in message
news:34nal3F4ak7h3U2@individual.net...
> Is there a "kink" for setting up a slitting saw to saw through
> round bar stock along the axis, so that the slot is exactly
> across a diameter? (I presume this to be a similar problem to
> setting up accurately for cross-drilling)
>
> This is actually a Ham Radio application; I wish to make
> up some very large banana-type plugs from the 1/4" round
> bar stock that I have in small quantities. For this, I will need
> to saw two diameters in a cross shape, and then splay
> out the leaves slightly to make a springy and rubbing contact.
>
>

905. Are these antennas any good for both transmit and receive?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 19:41:45 UTC
From: stryped@hotmail.com
Message-ID: <1105645305.842819.282460@z14g2000cwz.googlegroups.com>
Source record: 83544

http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&product%5Fid=20-043

906. Sucess !!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 20:02:46 UTC
From: Simon Smith <s.Smith@btinternet.com>
Message-ID: <cs6k55hqu1@sparta.btinternet.com>
Source record: 83545

At last... and it was worth all the waiting for... I had my QSO this evening
after figuring out how to set the repeater code into this Yaesu of mine !!!
The antenna in the loft is working well. At the moment the co-axial is
draped through the loft hatch - across the landing ,and through the doorway
of the "Radio Room" so as you can imagine - I am not exactly "in Favour"
with the rest of the family..... tomorrw I shall get the drill out and
make a nice neat hole in the ceiling and tidy things up a
bit.....Wonderful day.... how do you clean the solder off the Carpet
?.....
John
M3IIV

907. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 20:05:24 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e6d464.621855@news.iol.ie>
Source record: 83546
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

me@privacy.net wrote:

: On Wed, 12 Jan 2005 14:41:33 -0000, "Airy R.Bean" <Me@privacy.net>
: wrote:
:
: >Discussed in the "Antenna Manual", by Woodrow Smith,
: >pub "Editors and Engineers Ltd " dated 1948.
: >
: >He refers to the "Brown Ground Plane Antenna" and separately
: >to the "Drooping Ground Plane Antenna"
:
: But does he refer to the 'drooping' as an impedance-matching device?
:
: If not, what reason does he give for the technique?

capacitance is prop to gap between plates.

908. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 20:17:12 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e6d6bd.1222937@news.iol.ie>
Source record: 83547
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote:

: Etching plates on PCB and using the fibre glass for the mechanical side is
: maybe a better idea.

hey everybody...brian has made capacitors (or is that capacitErs ?)

909. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 20:18:22 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e6d76e.1399658@news.iol.ie>
Source record: 83548
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote:

: "Radio Man" <puns@verizon.net> wrote in message
: news:SbyFd.20564$lG.19133@trnddc03...
: > I wonder if there is any merit in using aluminum foil
: > duct tape to make a capacitor?

well done!

you got a BIG BITE with that one.

910. Re: Are these antennas any good for both transmit and receive?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 20:20:57 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <HKAFd.58$ru.27@fed1read07>
Source record: 83549

stryped The question box wrote : Are these antennas any good for both transmit and receive?

Come on now help yourself a little bit -- the URL you gave has the answer when you click on "Features"

It sez

Your radio shack discone antenna receives VHF and UHF frequencies between 25 MHz and 1300 MHz
(1.3 GHz), and transmits effectively at 50, 144, 220, 440, 900, and 1296 MHz. It handles a maximum transmitting output power of 200 watts and provides a standing wave ratio (SWR) efficiency of 1.5:1 or better over the receiving/transmitting spectrum.

Now why can I find that and not you ???

Are you putting us on here ????

--
Caveat Lector

<stryped@hotmail.com> wrote in message
news:1105645305.842819.282460@z14g2000cwz.googlegroups.com...
> http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&product%5Fid=20-043
>

911. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 20:24:23 UTC
From: David Edmonds <dedmonds73@yahoo.co.uk>
Message-ID: <XNAFd.621$fv6.194@newsfe6-gui.ntli.net>
Source record: 83550
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Nimrod wrote:
> You can always tell when Gareth has lost the game and is wound up - lots of
> posts sent in anger.

Yes - I thought that too - from a very 'constructive' response to one
that has a pop-shot at Brian's former employment for no reason at all
then, despite Airy's "I don't attack" claims, gets straight in there
with the 'bullshitting' line. Oh well. Obviously the Special Brew has
worn off.

He'll be along claiming malicious deleting next....;-)

David.

912. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 20:46:20 UTC
From: Custos Custodum <me@privacy.net>
Message-ID: <f8ndu0tga0t344cuc637r0luhlcv920bt6@4ax.com>
Source record: 83551
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Thu, 13 Jan 2005 18:50:33 -0000, "Nimrod" <nospamfor@me.com> wrote:

>
>You can always tell when Gareth has lost the game and is wound up - lots of
>posts sent in anger.
>
>I love it.
>
>Just like the TMC days.
>
The reason for the multiple posts is that it's the only way he can
top-post responses to individual points made in the previous post. I
think his record is about 10 replies to one post. And still he thinks
top-posting is the way to go.

913. Re: Are these antennas any good for both transmit and receive?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 20:49:24 UTC
From: dplatt@radagast.org
Message-ID: <10udnmk7655qj7a@corp.supernews.com>
Source record: 83552

In article <HKAFd.58$ru.27@fed1read07>, Caveat Lector <CL@barahmas.com> wrote:
>stryped The question box wrote : Are these antennas any good for both
>transmit and receive?
>
>Come on now help yourself a little bit -- the URL you gave has the answer
>when you click on "Features"

#snip#

>Now why can I find that and not you ???
>
>Are you putting us on here ????

The information as posted on the Web site is only part of the answer.
Heck, a good high-wattage dummy load would have a better bandwidth and
SWR than the discone, and yet it'd make a (somewhat) worse antenna.

As to the original question, is a discone "any good for both transmit
and receive?". I'd say the answer is "Yes, they're 'any good' but
they are not 'very good'."

They're compromise antennas - fairly wide bandwidth, acceptable SWR,
but a radiation pattern aimed at the sky or the ground (depending on
how you mount them) rather than out at the horizon. They're a decent
choice if you can only mount a single antenna, need to operate over a
wide range of frequencies, and don't need to be concerned about
weak-signal operations. My city ARES/RACES group uses them for
pre-sited emergency antennas at the city fire stations, community
centers, schools, and other such locations... plug an HT onto the end
of the drop cable and you're on the air. The results are quite
acceptable for working nearby repeaters, simplex to the city EOC,
and so forth.

They're a mediocre choice for serious single- or multi-band operation,
though.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

914. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 20:55:52 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e6e0e5$1_2@127.0.0.1>
Source record: 83553
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Prometheus wrote:
> It was you in Message-ID: <41e4a9f2_2@127.0.0.1> who quoted from the
> article that "People with more than 10 years of cellphone use suffered
> twice as many tumors as non-cellphone users", ...

Again, It's more than obvious that I said absolutely nothing
about any "step" function. That you believe a tumor can appear
instantaneously as a step function is a mental problem for
which you probably should seek professional help.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

915. Re: Are these antennas any good for both transmit and receive?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 21:08:04 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <SqBFd.65$ru.53@fed1read07>
Source record: 83554

The answer you gave was given to the question box several times in past
postings

He just keeps repeating the questions over and over

I for one give up trying to help him

--
Caveat Lector

"Dave Platt" <dplatt@radagast.org> wrote in message
news:10udnmk7655qj7a@corp.supernews.com...
> In article <HKAFd.58$ru.27@fed1read07>, Caveat Lector <CL@barahmas.com>
> wrote:
>>stryped The question box wrote : Are these antennas any good for both
>>transmit and receive?
>>
>>Come on now help yourself a little bit -- the URL you gave has the answer
>>when you click on "Features"
>
> #snip#
>
>>Now why can I find that and not you ???
>>
>>Are you putting us on here ????
>
> The information as posted on the Web site is only part of the answer.
> Heck, a good high-wattage dummy load would have a better bandwidth and
> SWR than the discone, and yet it'd make a (somewhat) worse antenna.
>
> As to the original question, is a discone "any good for both transmit
> and receive?". I'd say the answer is "Yes, they're 'any good' but
> they are not 'very good'."
>
> They're compromise antennas - fairly wide bandwidth, acceptable SWR,
> but a radiation pattern aimed at the sky or the ground (depending on
> how you mount them) rather than out at the horizon. They're a decent
> choice if you can only mount a single antenna, need to operate over a
> wide range of frequencies, and don't need to be concerned about
> weak-signal operations. My city ARES/RACES group uses them for
> pre-sited emergency antennas at the city fire stations, community
> centers, schools, and other such locations... plug an HT onto the end
> of the drop cable and you're on the air. The results are quite
> acceptable for working nearby repeaters, simplex to the city EOC,
> and so forth.

>
> They're a mediocre choice for serious single- or multi-band operation,
> though.
>
> --
> Dave Platt <dplatt@radagast.org> AE6EO
> Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

916. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 21:11:37 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <34o6feF4e3f1eU1@individual.net>
Source record: 83555
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Nimrod wrote:
> "David Edmonds" <dedmonds73@yahoo.co.uk> wrote in message
> news:LFxFd.437$fd4.24@newsfe1-win.ntli.net...
>
>>Airy R.Bean wrote:
>>
>>
>>>I wonder if there is any mileage to be had from adapting
>>>the numerous junk-mail CD's as the vanes of ATU
>>>capacitors?
>>
>>So you've given up on using them to make 30 line television systems then?
>>
>
>
> Just like the TMC days. One daft idea after another.
>
>
>
I remember turning vinyl discs into flower pots, but some of us have
moved on since then.
--
;>)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

917. Winegard CA-8098

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 21:43:50 UTC
From: Ross Anderson <ross_anderson@comcast.net>
Message-ID: <1105652630.174917.321110@f14g2000cwb.googlegroups.com>
Source record: 83556

In an earlier post
http://groups-beta.google.com/group/rec.radio.amateur.antenna/browse_frm/thread/540469fb25ccbc17
I asked if anyone could identify this antenna
http://home.comcast.net/~ross_anderson/TelevisionAntenna.htm .
Mike, NZ4K, suggested I look at this site
http://www.starkelectronic.com/wing4.htm .
A close match is the Winegard CA-8098.
This is a fascinating antenna (the VHF part), consisting of two booms coming together in a V, with the elements attached to the boom off center, and the elements on the upper boom placed asymmetrically with respect to the elements on the lower boom.
Now my question is: Has anyone seen this type of antenna written up in any journal, conference proceedings, book, patent, web page, or message board; or is anyone willing to share their thoughts or unpublished work on this type of antenna?
Thanks, Ross W1HBQ

918. Re: Are these antennas any good for both transmit and receive?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 21:54:34 UTC
From: stryped@hotmail.com
Message-ID: <1105653274.259137.216650@c13g2000cwb.googlegroups.com>
Source record: 83557

That does not tell me if it is a "good" transmitt antenna compared to
other types. (Ground plane, j pole, etc.)

919. Re: Discone antenna plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 21:55:28 UTC
From: stryped@hotmail.com
Message-ID: <1105653328.638622.221040@c13g2000cwb.googlegroups.com>
Source record: 83558

Those plans are for uhf only.

920. Re: Discone antenna plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 21:57:39 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e6ef60$1_2@127.0.0.1>
Source record: 83559

stryped@hotmail.com wrote:
> Those plans are for uhf only.

Antennas are scalable.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

921. best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 21:58:54 UTC
From: alanh_27@yahoo.com
Message-ID: <1105653534.266393.235490@c13g2000cwb.googlegroups.com>
Source record: 83560
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

the requirement: perform solder joints outdoors, in the winter,
without electricity, up a radar mast.

and the nominations are?

P.S. could a resistance-soldering rig do it, on battery power,in a
form factor that's small/light enough to haul up a radar mast in a
basket?

922. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 22:03:12 UTC
From: Kevin R <dontemailme@ntlworld.com>
Message-ID: <AeCFd.1135$fv6.898@newsfe6-gui.ntli.net>
Source record: 83561
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

Gas powered Uk or Butane powered
<alanh_27@yahoo.com> wrote in message
news:1105653534.266393.235490@c13g2000cwb.googlegroups.com...
> the requirement: perform solder joints outdoors, in the winter,
> without electricity, up a radar mast.
>
> and the nominations are?
>
> P.S. could a resistance-soldering rig do it, on battery power,in a
> form factor that's small/light enough to haul up a radar mast in a
> basket?
>

923. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 22:13:37 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34oa47F4culmgU1@individual.net>
Source record: 83562
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Custos Custodum" <me@privacy.net> wrote in message
news:f8ndu0tga0t344cuc637r0luhlcv920bt6@4ax.com...
> On Thu, 13 Jan 2005 18:50:33 -0000, "Nimrod" <nospamfor@me.com> wrote:
>
> >
> >You can always tell when Gareth has lost the game and is wound up - lots
of
> >posts sent in anger.
> >
> >I love it.
> >
> >Just like the TMC days.
> >
> The reason for the multiple posts is that it's the only way he can
> top-post responses to individual points made in the previous post. I
> think his record is about 10 replies to one post. And still he thinks
> top-posting is the way to go.

Part of the problem is that people will respond to his rudeness, if you
can't ignore it kill file him. He does it to disrupt the group and he can
only do so IF WE LET HIM. If we don't let him he can't disrupt the group.
Standard behaviour management.

If we just ignore his rude posts (or the bits of his few other posts that
are rude), the problem would go away. Sometimes some of the stuff I seen
responded to recently hasn't been that bad- maybe his engineering skills are
wanting but this is a forum to ask questions. If he could just stop being so
rude and negative I'd happily try and help him learn.

Thing is, he seems to see every mention of failure as a reference to him. I
can only assume he has very low self esteem. This does make helping him a
challenge. Pity we don't have an SEN teacher in the group- they would be
ideal to advise us on the best plan. He could draw up an IEP for him.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

924. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 22:28:31 UTC
From: NSM <nowrite@to.me>
Message-ID: <jCCFd.99964$KO5.74309@clgrps13>
Source record: 83563
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

<alanh_27@yahoo.com> wrote in message
news:1105653534.266393.235490@c13g2000cwb.googlegroups.com...
| the requirement: perform solder joints outdoors, in the winter,
| without electricity, up a radar mast.
|
| and the nominations are?

Gas (butane) or similar. Don't bother with anything that runs on AAs.

| P.S. could a resistance-soldering rig do it, on battery power,in a
| form factor that's small/light enough to haul up a radar mast in a
| basket?

Why bother? Gas is light, cheap (dollar store) and you could even refill it
up there.

N

925. Re: Are these antennas any good for both transmit and receive?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 22:35:09 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <xICFd.15610$ig7.2158@trnddc04>
Source record: 83564

Cav-- L

Stryped is kinda hard for me to figure out. He does seem to ask alot of questions that could be easily answered by researching some basics. One thing interesting is that he has gone to other news groups asking antenna questions to metal workers. Yet he has no time/ability to search for answerd with Google. I too have decided to "give up trying". I could surely change my decision if he showed some effort to learn the normal way, read/research, or just *do* something.

Jerry

"Caveat Lector" <CL@barahmas.com> wrote in message
news:SqBFd.65$ru.53@fed1read07...
> The answer you gave was given to the question box several times in past
> postings
>
> He just keeps repeating the questions over and over
>
> I for one give up trying to help him
>
> --
> Caveat Lector
>
>
>
> "Dave Platt" <dplatt@radagast.org> wrote in message
> news:10udnmk7655qj7a@corp.supernews.com...
>> In article <HKAFd.58$ru.27@fed1read07>, Caveat Lector <CL@barahmas.com>
>> wrote:
>>>stryped The question box wrote : Are these antennas any good for both
>>>transmit and receive?
>>>
>>>Come on now help yourself a little bit -- the URL you gave has the answer
>>>when you click on "Features"
>>
>> #snip#
>>
>>>Now why can I find that and not you ???
>>>
>>>Are you putting us on here ????
>>
>> The information as posted on the Web site is only part of the answer.
>> Heck, a good high-wattage dummy load would have a better bandwidth and
>> SWR than the discone, and yet it'd make a (somewhat) worse antenna.

>>
>> As to the original question, is a discone "any good for both transmit
>> and receive?". I'd say the answer is "Yes, they're 'any good' but
>> they are not 'very good'."
>>
>> They're compromise antennas - fairly wide bandwidth, acceptable SWR,
>> but a radiation pattern aimed at the sky or the ground (depending on
>> how you mount them) rather than out at the horizon. They're a decent
>> choice if you can only mount a single antenna, need to operate over a
>> wide range of frequencies, and don't need to be concerned about
>> weak-signal operations. My city ARES/RACES group uses them for
>> pre-sited emergency antennas at the city fire stations, community
>> centers, schools, and other such locations... plug an HT onto the end
>> of the drop cable and you're on the air. The results are quite
>> acceptable for working nearby repeaters, simplex to the city EOC,
>> and so forth.
>>
>> They're a mediocre choice for serious single- or multi-band operation,
>> though.
>>
>> --
>> Dave Platt <dplatt@radagast.org> AE6EO
>> Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
>> I do _not_ wish to receive unsolicited commercial email, and I will
>> boycott any company which has the gall to send me such ads!
>
>

926. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 22:43:47 UTC
From: tox <nospam@nospamming.co.com>
Message-ID: <DQCFd.369$9P5.13@newsfe3-gui.ntli.net>
Source record: 83565
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34oa47F4culmgU1@individual.net...
> "Custos Custodum" <me@privacy.net> wrote in message
> news:f8ndu0tga0t344cuc637r0luhlcv920bt6@4ax.com...
> > On Thu, 13 Jan 2005 18:50:33 -0000, "Nimrod" <nospamfor@me.com> wrote:
> >
> > >
> > > Pity we don't have an SEN teacher in the group- they would be
> > > ideal to advise us on the best plan. He could draw up an IEP for him.
> >

ROTFLMAO

Priceless Brian, Priceless...

Regards
tox

927. Re: Are these antennas any good for both transmit and receive?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 22:53:31 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <10DFd.73$ru.13@fed1read07>
Source record: 83567

Agree Jerry reminds of an old adage

Give a man (person) a fish and he will be back the next day for another
(maybe 3 times a day - huh)

Teach a man to fish and he gains his respect and yours

We tried

Case closed

--
Caveat Lector

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:xICFd.15610$ig7.2158@trnddc04...
> Cav-- L
>
> Stryped is kinda hard for me to figure out. He does seem to ask alot of
> questions that could be easily answered by researching some basics. One
> thing interesting is that he has gone to other news groups asking antenna
> questions to metal workers. Yet he has no time/ability to search for
> answerd with Google. I too have decided to "give up trying". I could
> surely change my decision if he showed some effort to learn the normal
> way, read/research, or just *do* something.
>
> Jerry
>
>
> "Caveat Lector" <CL@barahmas.com> wrote in message
> news:SqBFd.65$ru.53@fed1read07...
>> The answer you gave was given to the question box several times in past
>> postings
>>
>> He just keeps repeating the questions over and over
>>
>> I for one give up trying to help him
>>
>> --
>> Caveat Lector
>>
>>
>>
>> "Dave Platt" <dplatt@radagast.org> wrote in message
>> news:10udnmk7655qj7a@corp.supernews.com...
>>> In article <HKAFd.58$ru.27@fed1read07>, Caveat Lector <CL@barahmas.com>

>>> wrote:
>>>>stryped The question box wrote : Are these antennas any good for both
>>>>transmit and receive?
>>>>
>>>>Come on now help yourself a little bit -- the URL you gave has the
>>>>answer
>>>>when you click on "Features"
>>>
>>> #snip#
>>>
>>>>Now why can I find that and not you ???
>>>>
>>>>Are you putting us on here ????
>>>
>>> The information as posted on the Web site is only part of the answer.
>>> Heck, a good high-wattage dummy load would have a better bandwidth and
>>> SWR than the discone, and yet it'd make a (somewhat) worse antenna.
>>>
>>> As to the original question, is a discone "any good for both transmit
>>> and receive?". I'd say the answer is "Yes, they're 'any good' but
>>> they are not 'very good'."
>>>
>>> They're compromise antennas - fairly wide bandwidth, acceptable SWR,
>>> but a radiation pattern aimed at the sky or the ground (depending on
>>> how you mount them) rather than out at the horizon. They're a decent
>>> choice if you can only mount a single antenna, need to operate over a
>>> wide range of frequencies, and don't need to be concerned about
>>> weak-signal operations. My city ARES/RACES group uses them for
>>> pre-sited emergency antennas at the city fire stations, community
>>> centers, schools, and other such locations... plug an HT onto the end
>>> of the drop cable and you're on the air. The results are quite
>>> acceptable for working nearby repeaters, simplex to the city EOC,
>>> and so forth.
>>>
>>> They're a mediocre choice for serious single- or multi-band operation,
>>> though.
>>>
>>> --
>>> Dave Platt <dplatt@radagast.org> AE6EO
>>> Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
>>> I do _not_ wish to receive unsolicited commercial email, and I will
>>> boycott any company which has the gall to send me such ads!
>>
>>
>
>

928. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 22:53:58 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <a_CFd.17389$iC4.12791@newssvr30.news.prodigy.com>
Source record: 83566

If you're doing it in a lawn just "sew them in" a good straight line so the radial is at ground level and then make some U shape pins out of whatever you have and pin them down. Stretch the radial as tight as possible before pinning. You'll be surprised how easy it is and how well it works and after about 2 or 3 mowings you won't be able find them, that is if have a lawn.

--

73
Hank WD5JFR
"Airy R.Bean" <Me@privacy.net> wrote in message
news:34nn8tF4c0i29U1@individual.net...
> Someone suggested this over the last few days.
>
> As I'm having trouble with soil sticking to the spade
> and creating a hole when the spade is pulled up
> instead of just a slit, could someone redescribe the
> meat cleaver technique?
>
>

929. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 23:01:53 UTC
From: -XC- <nobody@home.net>
Message-ID: <jZadnWUjF-h8YHvcRVn-rw@comcast.com>
Source record: 83568

Might be nasty if some metal U-pins loosened up and then the lawnmower finds them.......

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:a_CFd.17389$iC4.12791@newssvr30.news.prodigy.com...
> If you're doing it in a lawn just "sew them in" a good straight line so
the
> radial is at ground level and then make some U shape pins out of whatever
> you have and pin them down. Stretch the radial as tight as possible
before
> pinning. You'll be surprised how easy it is and how well it works and
after
> about 2 or 3 mowings you won't be able find them, that is if have a lawn.
>
> --
>
> 73
> Hank WD5JFR
> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:34nn8tF4c0i29U1@individual.net...
> > Someone suggested this over the last few days.
> >
> > As I'm having trouble with soil sticking to the spade
> > and creating a hole when the spade is pulled up
> > instead of just a slit, could someone redescribe the
> > meat cleaver technique?
> >
> >
>
>

930. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 23:19:23 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <85DxDSz7Hw5BFwS1@newbrain.demon.co.uk>
Source record: 83571
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <41e6e0e5$1_2@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
writes
>Prometheus wrote:
>> It was you in Message-ID: <41e4a9f2_2@127.0.0.1> who quoted from the
>>article that "People with more than 10 years of cellphone use suffered
>>twice as many tumors as non-cellphone users", ...
>
>Again, It's more than obvious that I said absolutely nothing
>about any "step" function. That you believe a tumor can appear
>instantaneously as a step function is a mental problem for
>which you probably should seek professional help.

If you believe stating "No tumors were associated with less than 10
years of cellphone use" and "People with more than 10 years of cellphone
use suffered twice as many tumors as non-cellphone users" as you have
does not describe a step at ten years then you are stupid. I do not
believe it can be a step function as you proposed.
--
Ian G8ILZ

931. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 23:24:58 UTC
From: Clarence_A <no@No.com>
Message-ID: <erDFd.11029$5R.423@newssvr21.news.prodigy.com>
Source record: 83569

"-XC-" <nobody@home.net> wrote in message
news:jZadnWUjF-h8YHvcRVn-rw@comcast.com...
> Might be nasty if some metal U-pins loosened up and then the
lawnmower finds
> them.......
>

Never use a magnetic lawn mower!

932. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 23:26:12 UTC
From: Dan Richardson <dwr@mailinator.com>
Message-ID: <mo0eu01gmspg2kuohbb4tbjahsenb8iu3j@4ax.com>
Source record: 83570
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

On 13 Jan 2005 13:58:54 -0800, alanh_27@yahoo.com wrote:

>and the nominations are?

I use the Ultratorch model UT-1000si.

Info on it here: http://www.masterappliance.com/selfign.html

Be sure to check out the accessory tips!

Danny, K6MHE

933. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 23:54:23 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <41E70A2F.76333F15@rica.net>
Source record: 83472
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

alanh_27@yahoo.com wrote:
>
> the requirement: perform solder joints outdoors, in the winter,
> without electricity, up a radar mast.
>
> and the nominations are?
>
> P.S. could a resistance-soldering rig do it, on battery power,in a
> form factor that's small/light enough to haul up a radar mast in a
> basket?

I think I would look for something like this:
http://www.dansdata.com/portasol.htm

More punch per ounce of weight than battery powered units.

--
John Popelish

934. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-13 23:59:17 UTC
From: mikea@mikea.ath.cx
Message-ID: <cs720k$9nt$2@puck.litech.org>
Source record: 83473
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

In <DQCFd.369$9P5.13@newsfe3-gui.ntli.net> (rec.radio.amateur.homebrew), tox wrote:

> "Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
> news:34oa47F4culmgU1@individual.net...
> > "Custos Custodum" <me@privacy.net> wrote in message
> > news:f8ndu0tga0t344cuc637r0luhlcv920bt6@4ax.com...
> > > On Thu, 13 Jan 2005 18:50:33 -0000, "Nimrod" <nospamfor@me.com> wrote:
> > >
> > > >
> > > > Pity we don't have an SEN teacher in the group- they would be
> > > ideal to advise us on the best plan. He could draw up an IEP for him.
> > >

> ROTFLMAO

> Priceless Brian, Priceless...

I think it's well past time for everyone to go to Due Process on him
-- as in "killfile" and Please Do Not Feed The Troll.

--
Slow? Geological. Tectonic plates muttering about the slowpoke, that
sort of thing.
-- Michel Buijsman, in the Monastery

935. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 00:09:41 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41e70cc3.15436776@news.crosslink.net>
Source record: 83474
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Thu, 13 Jan 2005 20:05:24 GMT,
zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net (ZZZPK)
wrote:

>me@privacy.net wrote:
>
>: On Wed, 12 Jan 2005 14:41:33 -0000, "Airy R.Bean" <Me@privacy.net>
>: wrote:
>:
>: >Discussed in the "Antenna Manual", by Woodrow Smith,
>: >pub "Editors and Engineers Ltd " dated 1948.
>: >
>: >He refers to the "Brown Ground Plane Antenna" and separately
>: >to the "Drooping Ground Plane Antenna"
>:
>: But does he refer to the 'drooping' as an impedance-matching device?
>:
>: If not, what reason does he give for the technique?
>
>capacitance is prop to gap between plates.
>

I think you meant that it's inversely proportional to the gap between
the plates.

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

936. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 00:27:31 UTC
From: James Horn <jimhorn@svn.net>
Message-ID: <10ue4fjoah89dc@corp.supernews.com>
Source record: 83475
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

In rec.radio.amateur.antenna John Popelish <jpopelish@rica.net> wrote:

> I think I would look for something like this:
> http://www.dansdata.com/portasol.htm

I second that. I bought one of the early ones (their Technic model)
twenty years ago. It worked fine until a seal failed last weekend.

Gotta get another!

Jim Horn, WB9SYN/6

937. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 00:38:19 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e715c8$2_2@127.0.0.1>
Source record: 83477
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Prometheus wrote:
> If you believe stating "No tumors were associated with less than 10
> years of cellphone use" and "People with more than 10 years of cellphone
> use suffered twice as many tumors as non-cellphone users" as you have
> does not describe a step at ten years then you are stupid.

"No tumors were associated with less than 10 years of cellphone use."
Translation for feeble-minded people: The graph of brain tumors was
the same for users and non-users for the first ten years of use.

"People with more than 10 years of cellphone use suffered twice as
many tumors as non-cellphone users." Translation for feeble-minded
people: The graph of brain tumors for users and non-users started
to diverge after ten years with twice as many tumors in the user
group as there were in the non-user group.

Statement of fact for feeble-minded people: The above two graphs
were single-valued functions, i.e. no vertical steps existed.

Must be really hard for you to type with that straightjacket on.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

938. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 00:38:58 UTC
From: TimPerry <timperry@noaspamadelphia.net>
Message-ID: <L4-dnX93zvk7iXrcRVn-3w@adelphia.com>
Source record: 83476
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

<alanh_27@yahoo.com> wrote in message
news:1105653534.266393.235490@c13g2000cwb.googlegroups.com...
> the requirement: perform solder joints outdoors, in the winter,
> without electricity, up a radar mast.
>
> and the nominations are?
>
> P.S. could a resistance-soldering rig do it, on battery power,in a
> form factor that's small/light enough to haul up a radar mast in a
> basket?

how big are the joints?

soldering in the cold can be exasperating.

i use a small oxy-MAP gas torch. it can be a pain dealing with 2 cylinders
but it certainly gets hot enough.

939. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 00:56:36 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e71a12_1@127.0.0.1>
Source record: 83478
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

W9DMK (Robert Lay) wrote:

> zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net (ZZZPK)
> wrote:
>>capacitance is prop to gap between plates.
>
> I think you meant that it's inversely proportional to the gap between
> the plates.

I've made the same mistake - said "capacitance" when I really
meant "capacitive reactance".
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

940. Re: Winegard CA-8098

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 01:26:35 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <8s6dnaO96f5MgnrcRVn-1w@comcast.com>
Source record: 83479

"Ross Anderson" <ross_anderson@comcast.net> wrote in message
news:1105652630.174917.321110@f14g2000cwb.googlegroups.com...
> In an earlier post
> http://groups-beta.google.com/group/rec.radio.amateur.antenna/browse_frm/thread/540469fb
25ccbc17
> I asked if anyone could identify this antenna
> http://home.comcast.net/~ross_anderson/TelevisionAntenna.htm .
> Mike, NZ4K, suggested I look at this site
> http://www.starkelectronic.com/wing4.htm .
> A close match is the Winegard CA-8098.
> This is a fascinating antenna (the VHF part), consisting of two booms
> coming together in a V, with the elements attached to the boom off
> center, and the elements on the upper boom placed asymmetrically with
> respect to the elements on the lower boom.
> Now my question is: Has anyone seen this type of antenna written up in
> any journal, conference proceedings, book, patent, web page, or message
> board; or is anyone willing to share their thoughts or unpublished work
> on this type of antenna?

Yes.

Popular Electronics in the 1960s and 1970s (Ziff Davis ownership) featured a
number of articles on constructing deep fringe VHF and UHF antennas. These
designs featured a similar pyramidal profile and element configuration.

You are very lucky that I still have one of these PE issues (for another
reference article).
Look for the Popular Electronic December 1971 issue -- George J. Monser
wrote the article of interest (page 40):
"Build a Mini-Pyramidal UHF TV Antenna". He reports pulling in UHF stations
(in San Diego), that were 185 miles away.

Mr. Monser lived in the Santa Barbara, CA area at the time of the PE
article.
His article references an earlier: "Build the Pyramidal TV/FM Antenna" that
was featured in the July 1969 issue of PE.
Supposed this UHF antenna design is a trimmed down version of that earlier
VHF design.

w9gb

941. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 01:42:00 UTC
From: CW <cmagers@earthlink.net>
Message-ID: <GMydndul2fp9v3rcRVn-pQ@comcast.com>
Source record: 83480
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

Set it on center, set your depth of cut, set your speed and feed, cut. What more do you want?

"Airy R.Bean" <Me@privacy.net> wrote in message news:34nal3F4ak7h3U2@individual.net...
> Is there a "kink" for setting up a slitting saw to saw through
> round bar stock along the axis, so that the slot is exactly
> across a diameter? (I presume this to be a similar problem to
> setting up accurately for cross-drilling)
>
> This is actually a Ham Radio application; I wish to make
> up some very large banana-type plugs from the 1/4" round
> bar stock that I have in small quantities. For this, I will need
> to saw two diameters in a cross shape, and then splay
> out the leaves slightly to make a springy and rubbing contact.
>
>

942. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 01:46:43 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <7wFFd.13631$wi2.12684@newssvr11.news.prodigy.com>
Source record: 83481
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

That's the question, how do you set it on center?

--

73
Hank WD5JFR
"CW" <cmagers@earthlink.net> wrote in message
news:GMydnduI2fp9v3rcRVn-pQ@comcast.com...
> Set it on center, set your depth of cut, set your speed and feed, cut.
> What
> more do you want?
>
> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:34nal3F4ak7h3U2@individual.net...
>> Is there a "kink" for setting up a slitting saw to saw through
>> round bar stock along the axis, so that the slot is exactly
>> across a diameter? (I presume this to be a similar problem to
>> setting up accurately for cross-drilling)
>>
>> This is actually a Ham Radio application; I wish to make
>> up some very large banana-type plugs from the 1/4" round
>> bar stock that I have in small quantities. For this, I will need
>> to saw two diameters in a cross shape, and then splay
>> out the leaves slightly to make a springy and rubbing contact.
>>
>>
>
>

943. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 01:53:31 UTC
From: ml <m@di.net>
Message-ID: <m-01B98F.20533713012005@news.verizon.net>
Source record: 83482

In article <41e693b7_1@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
wrote:

?
>
> It's certainly more economical to increase the
> transmitter's power output than to supercool a
> dipole.

it think this statement is not totally correct, as if someone manages to
build an antenna that serves some pourpose that achieves it's built p
goal, then it's worth the expense for certain additionally...

who knows maybe sombody might invent somthing that is more efficient or
discover something like a benificial offshoot..

who knws what the cost will be one day to supercool a antenna, of which
dipole is one of many kinds

944. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 01:53:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <039eu0p8kverg2ksu6cgkrmmjoess2vb8q@4ax.com>
Source record: 83483
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

On Fri, 14 Jan 2005 01:46:43 GMT, "Henry Kolesnik"
<kolesnik@sbcglobal.net> wrote:

>That's the question, how do you set it on center?

Hi Hank,

It seems it's not how, but how well. The how is trivial. The how
well is more a matter of a stock of ï¿½ inch which is sacrificed to
lumbering gross tools. Modern machines just make errors faster when
it is obviously within the scope of simpler hand tools and jigs. More
time has been expended in the sterile scribblings of what could be, in
place of actually getting it done.

73's
Richard Clark, KB7QHC

945. Re: Winegard CA-8098

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 01:59:34 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <aIFFd.16145$ig7.6407@trnddc04>
Source record: 83484

"Ross Anderson" <ross_anderson@comcast.net> wrote in message
news:1105652630.174917.321110@f14g2000cwb.googlegroups.com...
> In an earlier post
> http://groups-beta.google.com/group/rec.radio.amateur.antenna/browse_frm/thread/540469fb
25ccbc17
> I asked if anyone could identify this antenna
> http://home.comcast.net/~ross_anderson/TelevisionAntenna.htm .
> Mike, NZ4K, suggested I look at this site
> http://www.starkelectronic.com/wing4.htm .
> A close match is the Winegard CA-8098.
> This is a fascinating antenna (the VHF part), consisting of two booms
> coming together in a V, with the elements attached to the boom off
> center, and the elements on the upper boom placed asymmetrically with
> respect to the elements on the lower boom.
> Now my question is: Has anyone seen this type of antenna written up in
> any journal, conference proceedings, book, patent, web page, or message
> board; or is anyone willing to share their thoughts or unpublished work
> on this type of antenna?
> Thanks, Ross W1HBQ
>

Ross

I've tried to build antennas with this "technology" back in the 1960s. I
couldnt give you any specific referance to where design data is available.
But, it might be interesting to you to note that the stations being received
are in the direction that the Big V is pointed.
The fundamental concept is to feed the "Big V" at its "pointed end".
Then, the radiating elements get increasingly longer as the feed line
spreads. When the elements are about right for radiation at the frequency
of interest, the majorty of the signal is either radiated or received. In
addition, each succeeding element is reversed in phase. Since the VP of the
transmission line is about the same as velocity of the radiated wave from
the previous element, a Null is created in that direction (away from the
pointed end).

When I learned about the LPV antenna, I considered it to be more practical
for the TV frequencies. They work with elements 1/2 wave long and when the
elements are 3/2 wave long. That works quite well with TV frequencies.

I'd bet you can get the attention of some "real" antenna designers in this
news group to explain the Log Periodic Antenna design. I was never a
really good antenna designer and havent worked in antennas since 1969.

Jerry

946. isolate a master tv antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 02:00:21 UTC
From: ml <m@di.net>
Message-ID: <m-C4F3A7.21003313012005@news.verizon.net>
Source record: 83485

hi

Realize this is perhaps a long shot but cavities and filters arent my bag...

I live in a 12 story apt building that has a master tv antenna

the standard tv type but rather a bit larger than usual

it's fed via coax and not sure whats on the roof but asume some sorta dist amp

on each floor is a bunch of spliters to break the coax into 'ports' for each apt bout 6 per floor

just wondering a really crazy wackey thought

would their be anyway i could use this as a hf antenna while somehow isolating it from doing damage to the tv's , amps ???

it would be basically to be a low impact stealth install obv if i install anything the buidlng mgt would be involved but people passing on the street wouldn't know

947. Re: isolate a master tv antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 02:21:07 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qfaeu01k8kmgfemvucu87ums6sr1dn3n0u@4ax.com>
Source record: 83486

On Fri, 14 Jan 2005 02:00:21 GMT, ml <m@di.net> wrote:

>just wondering a really crazy wackey thought
>
>would their be anyway i could use this as a hf antenna while somehow
>isolating it from doing damage to the tv's , amps ???

Hi OM,

Doing the same thing to the plumbing may be more successful, less successful, or probably undifferentiated (such are the variety of answers for the original query's outcome). But one thing about this alternative, you would be at less risk to ruining someone's evening in front of the tube.

73's
Richard Clark, KB7QHC

948. Re: Are these antennas any good for both transmit and receive?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 03:08:06 UTC
From: Howard <mensch90249@yahoo.com>
Message-ID: <1jdeu0941081k8kb0kgeblrajuof7etumn@4ax.com>
Source record: 83487

On Thu, 13 Jan 2005 14:53:31 -0800, "Caveat Lector" <CL@barahmas.com>
wrote:

>Agree Jerry reminds of an old adage
>
>Give a man (person) a fish and he will be back the next day for another
>(maybe 3 times a day - huh)
>
>Teach a man to fish and he gains his respect and yours
>
>We tried
>
>Case closed

CL - If I may so address you? I 've also heard it as:
"Give a man a fish...."
"Teach a man to fish and he ends up spending his afternoons in a boat
drinking beer." I'm okay with either version as they are for
different social settings.

As to Stryped, I am in tune with you and Jerry in regard to further
assistance. To those of you answering with informative posts and
good social graces - my hat's off to you.
Howard

949. Re: superconducting antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 03:18:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <srdeu0hdb766aosjfdtervm9l32ode5sv5@4ax.com>
Source record: 83488

On Fri, 14 Jan 2005 01:53:31 GMT, ml <m@di.net> wrote:
>who knows maybe sombody might invent somthing that is more efficient or
>discover something like a benificial offshoot..

Who knows indeed? It may be the next penicillin for diesel knock.

>who knws what the cost will be one day to supercool a antenna, of which
>dipole is one of many kinds

Who knws undeed! It could pcost as much as the national debt of
Liechtenstein which isn't big enough to field a full sized 16 KHz
superhip antenna for communications to their solar powered submarine
fleet. But if the fate of whirled peas hinges upon their sacrifice,
cost be DAMNED!

73's
Richard Clark, KB7QHC

950. Re: isolate a master tv antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 05:05:09 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <41e7561f_4@news1.prserv.net>
Source record: 83489

Richard gave you an honest answer, but didn't elaborate. If you try to push RF back up the center conductor of the
coax, it will fry the first device it gets to, and not do much else. If you try to feed the shield against some other
"ground", then most of the "antenna" thus formed will be inside the building, and therefore not much of an antenna, and
will be horrible on receive as it will be close coupled to every noise source imaginable (can you say switching power
supplies in every electronics box known to man plus motor controls etc., etc.). So, try it, but be sure you have good
legal representation lined up first.

--
Crazy George
Remove N O and S P A M imbedded in return address
"ml" <m@di.net> wrote in message news:m-C4F3A7.21003313012005@news.verizon.net...
> hi
>
> Realize this is perhaps a long shot but cavities and filters arent my
> bag...
>
> I live in a 12 story apt building that has a master tv antenna
>
> the standard tv type but rather a bit larger than usual
>
> it's fed via coax and not sure whats on the roof but asume some sorta
> dist amp
>
> on each floor is a bunch of spliters to break the coax into 'ports' for
> each apt bout 6 per floor
>
>
> just wondering a really crazy wackey thought
>
> would their be anyway i could use this as a hf antenna while somehow
> isolating it from doing damage to the tv's , amps ???
>
>
> it would be basically to be a low impact stealth install obv if i
> install anything the buidlng mgt would be involved but people passing on
> the street wouldn't know

951. Re: Are these antennas any good for both transmit and receive?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 06:30:49 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <uGJFd.16259$B95.2354@lakeread02>
Source record: 83490

"Caveat Lector" <CL@barahmas.com> wrote

> stryped The question box wrote : Are these antennas any good for both
> transmit and receive?
>
> Are you putting us on here ????
>

I can't believe anyone is still taking the guy seriously since the first few rounds. I wrote him off a long time ago when it was apparent he has heard of everything, understands nothing, and refuses to look up anything, no matter how simple.

Jack

952. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 09:29:46 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34phv4F4dm189U2@individual.net>
Source record: 83491
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Once again. Mr.Reay succeeds in scoring an own-goal.....

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34oa47F4culmgU1@individual.net...
> Part of the problem is that people will respond to his rudeness, if you
> can't ignore it kill file him. He does it to disrupt the group and he can
> only do so IF WE LET HIM. If we don't let him he can't disrupt the group.
> Standard behaviour management.
>
> If we just ignore his rude posts (or the bits of his few other posts that
> are rude), the problem would go away. If he could just stop being so
> rude and negative I'd happily try and help him learn.

953. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 10:20:23 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34pl4lF4cilq4U1@individual.net>
Source record: 83494
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

That's a good idea - I must otherwise admit to being lazy when
it comes to the possibility of NOT doing things with a hand saw!

"Charles A. Sherwood" <cas@w-sherwood.ih.lucent.com> wrote in message
news:cs6h2d$jea@netnews.proxy.lucent.com...
> >I made a connector (female as opposed to your male) for an old radio by
> >slitting brass tube. Hacksaw and vice produced good enough accuracy for
an
> >excellent operational performance.
>
> How about making a square fixture to hold the round part with two slits
> to guide the saw blade?
>
> I have found that a good fret/jewelers saw very handy for cutting small
> items. I find it very difficult to cut 1/8 drill rod with a hacksaw
> but easy with a fret saw. They cut faster than you expect.

954. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 10:21:48 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34pl4lF4cilq4U2@individual.net>
Source record: 83492
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

The biggest off-the-shelf bananas that I have seen are
4mm. In any case, doing things for yourself is what
differentiates the Radio Ham from the CBer!

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:Z6AFd.1767$2e7.1025@newssvr12.news.prodigy.com...
> There used to be lots of banana plugs for sale on eBay and hamfest,
quicker,
> easier, and cheaper than DIY.
>

955. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 10:23:38 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34pl4mF4cilq4U3@individual.net>
Source record: 83493
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

How do you propose to set it on "center"? (English speakers
spell that as, "centre"!). That is the nub of my enquiry.

"CW" <cmagers@earthlink.net> wrote in message
news:GMydnduI2fp9v3rcRVn-pQ@comcast.com...
> Set it on center, set your depth of cut, set your speed and feed, cut.
What
> more do you want?
> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:34nal3F4ak7h3U2@individual.net...
> > Is there a "kink" for setting up a slitting saw to saw through
> > round bar stock along the axis, so that the slot is exactly
> > across a diameter? (I presume this to be a similar problem to
> > setting up accurately for cross-drilling)
> > This is actually a Ham Radio application; I wish to make
> > up some very large banana-type plugs from the 1/4" round
> > bar stock that I have in small quantities. For this, I will need
> > to saw two diameters in a cross shape, and then splay
> > out the leaves slightly to make a springy and rubbing contact.

956. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 10:53:52 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34pmsdF4dc5eoU1@individual.net>
Source record: 83495

Unfortunately SWMBO is the gardener!

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:a_CFd.17389$iC4.12791@newssvr30.news.prodigy.com...
> If you're doing it in a lawn just "sew them in" a good straight line so
the
> radial is at ground level and then make some U shape pins out of whatever
> you have and pin them down. Stretch the radial as tight as possible
before
> pinning. You'll be surprised how easy it is and how well it works and
after
> about 2 or 3 mowings you won't be able find them, that is if have a lawn.
> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:34nn8tF4c0i29U1@individual.net...
> > Someone suggested this over the last few days.
> > As I'm having trouble with soil sticking to the spade
> > and creating a hole when the spade is pulled up
> > instead of just a slit, could someone redescribe the
> > meat cleaver technique?

957. Re: Arithmetic and Cannobis.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 11:34:55 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <ybOFd.363$0B.26@fed1read02>
Source record: 83497

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cs1frfifd1@sparta.btinternet.com...
>
> Kids considered by the City Authorities to be a nuisance, living with rats
> in the sewers of Rio are ocasionally culled, perhaps not explicitly by the
> Authorities, to reduce their nunbers by police armed with guns.

> Now selling cigarettes involves monetary and arithmetical transactions.
> Accepting bank notes and coins and giving correct change. Mental
> calculations involve percent of drugs per inch of cigarette length, the
> number of cigarettes in the pack, wastage etc. All must be done very fast
> before an armed policeman appears. And must be done accurately and
> honestly
> to avoid upsetting customers with the consequent longer-term bad effect of
> loss in trade.

Or much more likely, a "culling" by customers / compettiors.

So why would you expect this particular geographic environment to provide
unique educational stimulus, above and beyond the crystal meth dealers of LA
or the rock cocaine vendors of Chicago?

>
> There has evolved in the sewers of Rio an arithmetical method of addition,
> subtraction, multiplication and division, altogether different from the
> Arabic procedures now adopted by the rest of the educated world.
>
> Not so very long ago a small party of professors, Phd's, students etc.,
> from
> an English univerity made an expedition to Rio specifically to investigate
> this apparent revolution in the very foundation of Mathematics.
>
> They returned with a new insight into how the human brain works with
> numbers
> and retired to study and then present their findings.
>
> Since then all has been silence.

After they sobered up, they realized that the Brazilian Renaissance only
changed the course of world thinking for 12 minutes.

Ed
wb6wsn

958. Re: Arithmetic and Cannobis.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 11:39:21 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <ybOFd.364$0B.310@fed1read02>
Source record: 83496

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cs3917$rr5$1@sparta.btinternet.com...
>
> "Richard Clark" wrote
>> > loaded with cannobis and more powerful drugs
>>
>> Hi Reggie,
>>
>> If you are expected to be taken seriously, even the sewer rats of Rio
>> know how to spell hemp.
>>
> ==========
> Hi Dick,
>
> Yes, at the time, I was aware of the mis-spelling. But I could't think of
> the name 'hemp' which even I CAN spell correctly. Very interesting, its
> the
> only defect you could find in my story.
>
> Your "If you are expected to be taken seriously" is an indication that you
> think there is something serious in what I say.
>
> Regardless of South American un-culled sewer rats - Engineers who
> regularly
> demonstrate they are afraid of using numbers can hardly be considered to
> be
> well educated. (Refer to Kelvin).
>
> This criticism is not so much directed against individuals as it is
> against
> the present-day, Western World engineering educational system in which
> university professors just sit on their fat, lazy, well-paid,
> self-satisfied
> arses, obtaining easy money under mutually-plagiarising false pretences.
> ----
> Reginald, G4FGQ

But you just cited an example of profs and students organizing a research
expedition to Rio to count the sewer rats, or was it to study how the sewer
rats count?

Ed
wb6wsn

959. Re: Arithmetic and Cannobis.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 11:44:49 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <RjOFd.433$0B.306@fed1read02>
Source record: 83499

"Wes Stewart" <n7ws_@_yahoo.com> wrote in message
news:2hlbu0li5cvh7mmnmimb8b5jvd3pnlg3p5@4ax.com...
> On Wed, 12 Jan 2005 13:34:31 +0000 (UTC), "Reg Edwards"
> <g4fgq.regp@ZZZbtinternet.com> wrote:
>
> |
> |"Richard Clark" wrote
> |> > loaded with cannobis and more powerful drugs
> |>
> |> Hi Reggie,
> |>
> |> If you are expected to be taken seriously, even the sewer rats of Rio
> |> know how to spell hemp.
> |>
> |==========
> |Hi Dick,
> |
> |Yes, at the time, I was aware of the mis-spelling. But I could't think
> of
> |the name 'hemp' which even I CAN spell correctly. Very interesting, its
> the
> |only defect you could find in my story.
>
> If you would have just typed "cannobis" in Google, it would have
> asked: "Do you mean: cannabis?"
>
> |
> |Your "If you are expected to be taken seriously" is an indication that
> you
> |think there is something serious in what I say.
>
> Never.
> |
> |Regardless of South American un-culled sewer rats - Engineers who
> regularly
> |demonstrate they are afraid of using numbers can hardly be considered to
> be
> |well educated. (Refer to Kelvin).
>
> Hmmm. The USA is now being overrun with denizens of the countries to
> the south, including no doubt some South American sewer rats. By your
> estimation, the education level here should have improved.
>
> I think not. For example, I left a pair of slacks at the dry cleaners

> a few days ago. The fee was $1.75 (USD). I gave the girl $10.00 and
> she broke out a calculator to determine that my change was $8.25.
>
> Contrast this to a tale related to me by an old friend. Jim was in
> the U.S. Marine Corps when the flight of the Enola Gay took place.
> Shortly after, he and his group were sent up some river in China to
> ferret out some Japs...sorry...Asians who hadn't gotten the word yet
> that they had lost. The Marines set up a camp and immediately began a
> trade relationship with the local Chinese "service industry."
>
> Jim said it took all of 15-20 minutes for the natives to master the
> U.S. currency system. (It probably would have taken them a couple of
> hours to figure out the British system of the day [G])

Thirty minutes after you acclimated them to US funding, the limeys would have been priced out of the market! No wonder Reg is perennially pissed at the world; lackanookie!

Ed
wb6wsn

960. Re: What's the deal? (was: Re: AM radio reception inside passenger...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 11:48:13 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <SjOFd.434$0B.266@fed1read02>
Source record: 83498

"Tom Ring" <news0001@taring.org> wrote in message
news:41e5ebfc$0$62292$39cecf19@news.twtelecom.net...
> Richard Clark wrote:
>> On Sat, 8 Jan 2005 05:52:39 -0800, "Ed Price" <edprice@cox.net> wrote:
>>
>>
>>>Those "Russian scientists" often seemed to come up with controversial and
>>>unrepeatable results.
>>
>>
>> Hi Ed,
> <snip>
>> Another story is their development of a supersonic torpedo. That's
>> right, a jet powered torpedo that can dart through the ocean at
>> 600MPH. It was speculated that it was the cause of the sinking of
>> their submarine, the Kursk. It was thought that the propellant lit
>> off in its bay, and the rest is history.
>>
>
> Rocket powered, actually. Interesting how it works physically. I have
> read some speculation on making manned submarines on the same principle. I
> would think running into a whale would be a serious issue, though, even if
> unlikely.
>
> tom
> K0TAR

Now that would be darn considerate of them, as we could track them all
without leaving Narragansett Bay.

Ed
wb6wsn

961. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 12:34:29 UTC
From: jtaylor <jtaylor@deletethis.hfx.andara.com>
Message-ID: <v1PFd.88579$vO1.529608@nnrp1.uunet.ca>
Source record: 83500
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34pl4mF4cilq4U3@individual.net...
> How do you propose to set it on "center"? (English speakers
> spell that as, "centre"!). That is the nub of my enquiry.
>

Well, if you have "stock", and it's a small thing of which you're making many, you get a method that allows both measured increments and a locking system. You do a test, and adjust, so that once it's good enough, you just shove the stock in and slice it.

If it's a one-off that has much time/money/work already into it, you use the same arrangement but plan and measure as best you can first.

962. Re: Sucess !!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 12:41:40 UTC
From: Mark <bigfathhairybiker@MAILhot.com>
Message-ID: <41e7be0b$0$16573$ed9e5944@reading.news.pipex.net>
Source record: 83501

"Simon Smith" <s.Smith@btinternet.com> wrote in message
news:cs6k55hqu1@sparta.btinternet.com...
> .... how do you clean the solder off the Carpet

Err... I use a sharp blade and cut it off. Takes bit of carpet with it!

Or soldering iron and solder sucker! :-)

963. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 12:42:12 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34pt71F4e1kdpU1@individual.net>
Source record: 83503
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

Stupid boy.

"jtaylor" <jtaylor@deletethis.hfx.andara.com> wrote in message
news:v1PFd.88579$vO1.529608@nnrp1.uunet.ca...
>
> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:34pl4mF4cilq4U3@individual.net...
> > How do you propose to set it on "center"? (English speakers
> > spell that as, "centre"!). That is the nub of my enquiry.
> >
>
> Well, if you have "stock", and it's a small thing of which you're making
> many, you get a method that allows both measured increments and a locking
> system. You do a test, and adjust, so that once it's good enough, you
just
> shove the stock in and slice it.
>
> If it's a one-off that has much time/money/work already into it, you use
the
> same arrangement but plan and measure as best you can first.
>
>

964. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 12:44:07 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41e7be6e.2049847@news.crosslink.net>
Source record: 83502
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Thu, 13 Jan 2005 18:56:36 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

>W9DMK (Robert Lay) wrote:
>
>> zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net (ZZZPK)
>> wrote:
>>>capacitance is prop to gap between plates.
>>
>> I think you meant that it's inversely proportional to the gap between
>> the plates.
>
>I've made the same mistake - said "capacitance" when I really
>meant "capacitive reactance".

No way, Cecil - you haven't made any mistakes this whole year!

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

965. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 12:55:20 UTC
From: default <none@defaulter.net>
Message-ID: <muffu0dlj3t2pt8oamo0unjp7svv12o7kb@4ax.com>
Source record: 83504
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On 12 Jan 2005 02:45:43 -0800, "G1LVN" <google@g1lvn.org.uk> wrote:

>Unlike heavy mobile phone use it has been proven that increasing
>Oxydisation of cell structures causes, cancer, aging and ultimately
>death. Doesn't stop anyone breathing though does it? If we al stopped
>breathing there would be no cancer, no aging.
>
>Seriously though, as an illustration, say that in 20 years time we find
>that the heating effect of RF from mobile phones provides a catalyst
>for increased oxydisation in the brain when combined with the
>inhilation of plastics vapour from the material used in cellphone keypd
>membranes to cause cancer of the nose (it could happen!!). This would
>be a totally unforseen risk to our health. What this report says that
>is as a precaution to unforseen health risks it is better not to let
>childern use mobile phones and audults only when absolutly necessary
>and to limit use. This is an example of the "precautionary principle",
>specifically used to limit or halt future crisis.
>
>see: http://en.wikipedia.org/wiki/Precautionary_principle
>http://www.spiked-online.com/Articles/00000006DE2F.htm
>http://www.emfacts.com/papers/newspeak.pdf
>http://www.chstm.man.ac.uk/outreach/mobile-phones.htm
>http://www.seas.upenn.edu/~kfoster/precautionary_foster.PDF

The "standards" for RF safety assume that heating is the only thing
that affects health.

The standard as tested and applied will prevent problems due to
heating - and make the world a safer place for Jello.

I seem to remember at least one case of a researcher in the US turning
up some evidence that low frequency magnetic fields inhibit a bodies
ability to either use or produce "T" cells.

Personally, I don't think there is enough research into it. (and
there isn't likely to be enough)

966. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 13:44:54 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <qtdfu01h11b5mqqrptf793ostopi6kb40p@4ax.com>
Source record: 83505
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Thu, 13 Jan 2005 22:13:37 -0000, "Brian Reay"
<brian.reay@(spamstopper)bigfoot.com> wrote:

>Part of the problem is that people will respond to his rudeness, if you
>can't ignore it kill file him. He does it to disrupt the group and he can
>only do so IF WE LET HIM. If we don't let him he can't disrupt the group.
>Standard behaviour management.

Very good points.

Having posted what appears to be on the surface a technical item
regarding the construction of capacitors for an ATU, it seems that
Bean has done no calculations whatsoever regarding the design.

Even simple back-of-the-envelope calculations would have pointed up
the the critical areas of component performance, which, together with
an appraisal of the limitations of his chosen resources, may have led
to a more realistic redesign. OTOH it may have indicated or confirmed
the correctness of his original approach. But we'll never know.

But did he respond accordingly? Instead of being an interesting
technical discussion, it has become yet another stick with which to
beat selected responders - the 'gentlemanly traditions' disappearing,
if they ever surfaced at all, very rapidly. One is left with the
strong impression that the original posting wasn't meant to be a
technical discussion at all, and another poster's comment elsewhere
about 'the cycle repeats' appears very apposite.

I note that you have already mentioned what could well be the achilles
heel of Bean's choice of components, and one which I was trying to
gently steer him to in my initial contribution. But it seems that it
is more fun to wield the stick rather than undertake any real design
studies. Ah well.
--
from
Aero Spike

967. Re: Arithmetic and Cannobis.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 13:55:53 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cs8j19$5a4$1@titan.btinternet.com>
Source record: 83506

> > Not so very long ago a small party of professors, Phd's, students etc.,
> > from
> > an English univerity made an expedition to Rio specifically to
investigate
> > this apparent revolution in the very foundation of Mathematics.
> >
> > They returned with a new insight into how the human brain works with
> > numbers
> > and retired to study and then present their findings.
> >
> > Since then all has been silence.
>
> After they sobered up, they realized that the Brazilian Renaissance only
> changed the course of world thinking for 12 minutes.
>
> Ed
> wb6wsn
>
==========

More likely, out of necessity, the investigators had to buy so many
cannabis-loaded cigarettes from sewer kids they returned from the expedition
as confirmed addicts.

Reg

968. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 14:16:19 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e7d581$1_2@127.0.0.1>
Source record: 83507
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

Airy R.Bean wrote:
> The biggest off-the-shelf bananas that I have seen are 4mm.

I've got some that are about 0.3 inches in diameter.
--
73, Cecil http://www.qsl.net/w5dxp

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969. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 14:34:06 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e7d9ac$1_1@127.0.0.1>
Source record: 83508
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

W9DMK (Robert Lay) wrote:
> No way, Cecil - you haven't made any mistakes this whole year!

Actually, it was probably a mistake to quote the "IEEE
Spectrum" magazine article regarding cellphones and
brain tumors. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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970. Re: Sucess !!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 14:54:22 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <y2RFd.14753$_X7.6878@newssvr33.news.prodigy.com>
Source record: 83509

John,
You can accomplish two objectives at once! But it's going
to really hurt. Solder doesn't really come out of carpet, and
believe me, you will always be reminded of just exactly where
it was (by 'guess who'). So, tell her that she should start
looking for new carpet. Family now happy, solder gone!
'Doc

(I said it would hurt, right?)

971. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 15:02:36 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <gaRFd.14756$_X7.9192@newssvr33.news.prodigy.com>
Source record: 83510

Airy,
Know anyone with drums? Take cymbols, put in place of wheelbarrow wheel, find amount of dirt to use for weight for proper depth, wheel you a 'slit' across the lawn. Insert wire, stomp 'slit' closed. Repeat till finsihed. Buy new cymbols for drum set.
'Doc

PS - Does it work? Yes. Is it worth the price of new cymbols? Beats me, too lazy to find out...

972. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 15:07:11 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34q5mkF4cvssdU1@individual.net>
Source record: 83511

I was considering carving up a sheet of steel to
resemble a large pizza-cutter, as it happens, but
baulked at it because of the problem of heavy clay
adhering to the disk.

"Beats me"????? Surely it is the cymbals that should
be beaten in what you propose below?1

"'Doc" <w5lz@cwis.net> wrote in message
news:gaRFd.14756$_X7.9192@newssvr33.news.prodigy.com...
> Know anyone with drums? Take cymbols, put in place of wheelbarrow
> wheel, find amount of dirt to use for weight for proper depth, wheel
> you a 'slit' across the lawn. Insert wire, stomp 'slit' closed. Repeat
> till finsihed. Buy new cymbols for drum set.
> PS - Does it work? Yes. Is it worth the price of new cymbols?
> Beats me, too lazy to find out...

973. Re: Arithmetic and Cannobis.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 15:14:20 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e7e2e4_1@127.0.0.1>
Source record: 83512

Reg Edwards wrote:
> More likely, out of necessity, the investigators had to buy so many
> cannabis-loaded cigarettes from sewer kids they returned from the expedition
> as confirmed addicts.

Last I heard, there's no proof that cannabis is
physically addicting.
--
73, Cecil http://www.qsl.net/w5dxp

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974. Re: Winegard CA-8098

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 15:21:13 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncufor9.k0t.bit-bucket@shell.config.com>
Source record: 83513

On Thu, 13 Jan 2005 19:26:35 -0600, gb wrote:

> Look for the Popular Electronic December 1971 issue -- George J. Monser
> wrote the article of interest (page 40):
> "Build a Mini-Pyramidal UHF TV Antenna".

> He reports pulling in UHF stations
> (in San Diego), that were 185 miles away.
> Mr. Monser lived in the Santa Barbara, CA area at the time of the PE
> article.

A point to be made: The entire propagation path betwix San Diego
and Santa Barbara is over salt water (AKA the Pacific Ocean.)
There's been many reports of Shack-On-The-Hip operators bringing
up repeaters in San Diego from Santa Barbara (and versy-vicey.)

Good tropo here is probably a bigger factor than good antenna(s).

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

975. How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 15:46:27 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <nPRFd.18091$ph.11198@okepread01>
Source record: 83514

Several months ago I had a temporary U/VHF base antenna.
It was a MFJ-1729 dual band mag mount stuck to a radial
plate on a 30' mast. I was feeding it with about 36' of RG58
that was made up of 3 sections, joined with SO-239 barrels.

I thought it was working great because I could hear a friend
on the input to a repeater some 50 miles away (he lives very
close to the repeater).

I improved the antenna with a mono band vertical, better
coax & more mast. My math says I gained 10' in altitude
and 2.7 db overall (factoring in new coax & better antenna).

All of a sudden my new, better & higher antenna could NOT
hear my friend! WTF? I figured it was a band opening and
forgot about it.....

Last week the ice storms caused a branch to fall, ruining my
antenna. Due to $$$ shortage (replacing my HF rig), I opted
to go back to the temporary setup. The tip of the antenna is
10' lower and overall gain is 2.7db less.

I can hear my friend again!

I don't get it - the premium antenna worked better except for
hearing my friend, where it worked worse. Anyone care to offer
an explanation?

Ken KG0WX

976. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 16:52:41 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e7f9c5_2@127.0.0.1>
Source record: 83515

Ken Bessler wrote:
> I don't get it - the premium antenna worked better except for
> hearing my friend, where it worked worse. Anyone care to offer
> an explanation?

Perhaps there was constructive multi-path interference
on your friend's signal at the location of the lower
antenna but not at the location of the higher antenna -
or vice versa. Or your friend was not located in the
plane of maximum gain of the higher gain antenna. That
2.7 dB of extra gain at one take-off-angle comes at the
expense of reduced gain at a other vertical angles.
--
73, Cecil http://www.qsl.net/w5dxp

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977. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 16:57:57 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <pSSFd.6323$KJ2.2033@newsread3.news.atl.earthlink.net>
Source record: 83516

"Ken Bessler" <kg0wx@NOSPAMyahoo.com> wrote in message
news:nPRFd.18091$ph.11198@okepread01...
> Several months ago I had a temporary U/VHF base antenna.
> It was a MFJ-1729 dual band mag mount stuck to a radial
> plate on a 30' mast. I was feeding it with about 36' of RG58
> that was made up of 3 sections, joined with SO-239 barrels.
>
> I thought it was working great because I could hear a friend
> on the input to a repeater some 50 miles away (he lives very
> close to the repeater).
>
> I improved the antenna with a mono band vertical, better
> coax & more mast. My math says I gained 10' in altitude
> and 2.7 db overall (factoring in new coax & better antenna).
>
> All of a sudden my new, better & higher antenna could NOT
> hear my friend! WTF? I figured it was a band opening and
> forgot about it.....
>
> Last week the ice storms caused a branch to fall, ruining my
> antenna. Due to $$$ shortage (replacing my HF rig), I opted
> to go back to the temporary setup. The tip of the antenna is
> 10' lower and overall gain is 2.7db less.
>
> I can hear my friend again!
>
> I don't get it - the premium antenna worked better except for
> hearing my friend, where it worked worse. Anyone care to offer
> an explanation?
>
> Ken KG0WX

Several possiable casuses. Your friend started using lower power for a
while. The patern of the new antenna had a null in your friend's direction.

978. Re: Discone antenna plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 17:03:25 UTC
From: stryped@hotmail.com
Message-ID: <1105722205.529235.102430@f14g2000cwb.googlegroups.com>
Source record: 83517

Cecil Moore wrote:
> stryped@hotmail.com wrote:
> > Those plans are for uhf only.
>
> Antennas are scalable.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> -----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World!
>100,000 Newsgroups
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How would I "scale it".

979. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 17:07:51 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41e7fb9a.86349562@news.galilei.com>
Source record: 83518

Hi Ken

Location, Location, Location and of course Take-Off Angle!

I had to lower a 55 foot antenna down to around 45 feet to hit our local repeater only 3 miles away. At 55 feet it was blocked by a microwave antenna, at 40 feet it is blocked by several steel framed buildings. At 45 feet, there was a hole I could squeek through so to speak.

Now, if I switched from a 5/8 wave to a 1/2 wave vertical, I had to go all the way down to around 30+ feet to find this hole again.

TTUL
Gary

980. Re: Discone antenna plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 17:18:18 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e8000b_1@127.0.0.1>
Source record: 83519

stryped@hotmail.com wrote:
> Cecil Moore wrote:
>>Antennas are scalable.

> How would I "scale it".

For instance, if an antenna is resonant on 460 MHz,
multiply all the dimensions by pi to make it resonant
on approximately 146.4 MHz.
--
73, Cecil http://www.qsl.net/w5dxp

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981. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 17:31:10 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34qdujF4dc60sU1@individual.net>
Source record: 83520
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Spike" <Aero.Spike@Speed.invalid> wrote in message
news:qtdfu01h11b5mqqrptf793ostopi6kb40p@4ax.com...
> On Thu, 13 Jan 2005 22:13:37 -0000, "Brian Reay"
> <brian.reay@(spamstopper)bigfoot.com> wrote:
>
> >Part of the problem is that people will respond to his rudeness, if you
> >can't ignore it kill file him. He does it to disrupt the group and he
can
> >only do so IF WE LET HIM. If we don't let him he can't disrupt the group.
> >Standard behaviour management.
>
> Very good points.
>
> Having posted what appears to be on the surface a technical item
> regarding the construction of capacitors for an ATU, it seems that
> Bean has done no calculations whatsoever regarding the design.
>
> Even simple back-of-the-envelope calculations would have pointed up
> the the critical areas of component performance, which, together with
> an appraisal of the limitations of his chosen resources, may have led
> to a more realistic redesign. OTOH it may have indicated or confirmed
> the correctness of his original approach. But we'll never know.
>
> But did he respond accordingly? Instead of being an interesting
> technical discussion, it has become yet another stick with which to
> beat selected responders - the 'gentlemanly traditions' disappearing,
> if they ever surfaced at all, very rapidly. One is left with the
> strong impression that the original posting wasn't meant to be a
> technical discussion at all, and another poster's comment elsewhere
> about 'the cycle repeats' appears very apposite.
>
> I note that you have already mentioned what could well be the achilles
> heel of Bean's choice of components, and one which I was trying to
> gently steer him to in my initial contribution. But it seems that it
> is more fun to wield the stick rather than undertake any real design
> studies. Ah well.

All signs of insecurity. If Gareth was sure of himself he could debate /
discuss at a technical level. I can't ever actually recall him doing this.

I'm sure there will be a name for his condition, probably even treatment.

--
Brian Reay

www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

982. Re: Discone antenna plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 17:36:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9m0gu014g8hociuinp3dqfshm089gfetsb@4ax.com>
Source record: 83521

On Fri, 14 Jan 2005 11:18:18 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:
>For instance, if an antenna is resonant on 460 MHz,
>multiply all the dimensions by pi to make it resonant
>on approximately 146.4 MHz.
What flavr pi and how long wuld i hav to bak it? (Kentucky humor)

983. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 17:47:17 UTC
From: Micky Taker <micky.t@ker>
Message-ID: <FATFd.94324$C8.74689@fe3.news.blueyonder.co.uk>
Source record: 83372
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Brian Reay wrote:

>
>
> All signs of insecurity. If Gareth was sure of himself he could debate /
> discuss at a technical level. I can't ever actually recall him doing this.
>
> I'm sure there will be a name for his condition, probably even treatment.
>
Yes, it's called Antisocial Personality Disorder (APD).

Google will give you all the info.

Micky

--
E&OE (C) 2005 Micky Taker
Micky Taker accepts no responsibility for any personal injury or
emotional distress that may occur as a result of reading the contents of
this message.

984. Re: Discone antenna plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 17:49:33 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e806b4$1_1@127.0.0.1>
Source record: 83373

Richard Clark wrote:
> Cecil Moore <w5dxp@hotmail.com> wrote:
>
>>For instance, if an antenna is resonant on 460 MHz,
>>multiply all the dimensions by pi to make it resonant
>>on approximately 146.4 MHz.
>
> What flavr pi and how long wuld i hav to bak it? (Kentucky humor)

When I divided 460 by 146, it was so close to pi that I
couldn't resist. We have a cartoon on the wall here at
the GED center that was lifted from a MENSA publication.

The setting is a restaurant where a man has just asked the
waitress, "How much is pie?" She responds, "How much is pi?
Last I heard it was
3.14159265358979323846264338327950288419716939937510582097 49..."
There are a couple of hundred additional digits on the cartoon.
--
73, Cecil http://www.qsl.net/w5dxp

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985. Re: Sucess !!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 18:28:46 UTC
From: Simon Smith <s.Smith@btinternet.com>
Message-ID: <cs930u$r7p$1@hercules.btinternet.com>
Source record: 83374

Haaaa .... Good sound advice Doc !!!! Sort of a peace offering ?
John
M3IIV
"'Doc" <w5lz@cwis.net> wrote in message
news:y2RFd.14753$_X7.6878@newssvr33.news.prodigy.com...
> John,
> You can accomplish two objectives at once! But it's going
> to really hurt. Solder doesn't really come out of carpet, and
> believe me, you will always be reminded of just exactly where
> it was (by 'guess who'). So, tell her that she should start
> looking for new carpet. Family now happy, solder gone!
> 'Doc
>
> (I said it would hurt, right?)

986. European Craft Makes Safe, Soft Landing on Saturn Moon

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 18:43:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5h4gu09ffch58t2al2604167hd58glu8gb@4ax.com>
Source record: 83376

re:
http://www.nytimes.com/2005/01/14/science/14cnd-titan.html?hp&ex=1105765200&en=d21b36328660142a&ei=5094&partner=homepage

"It is the first landing of a spacecraft on the moon of another
planet. And Titan is no ordinary moon, but a body larger than the
planets Mercury and Pluto, and almost the size of Mars."

...

"The possibility remains that a design flaw in Cassini's radio
receiver system will hopelessly scramble the data. Engineers
anticipated that signals from the wind-tossed Huygens would vary
widely in frequency and strength, and thus compensated for it in the
receiver's design. But they had failed to take into account frequency
shifts that would also throw off the timing of the encoded data,
leaving it a garbled mess.

"In early 2000, an ESA engineer recognized the problem. Finally, ESA
and NASA engineers found a way to reduce the frequency shifts to
acceptable levels by altering the trajectory and orientation of
Cassini during the critical maneuvers."

73's
Richard Clark, KB7QHC

987. Re: Discone antenna plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 18:59:47 UTC
From: stryped@hotmail.com
Message-ID: <1105729187.792064.261550@f14g2000cwb.googlegroups.com>
Source record: 83377

Cecil Moore wrote:
> stryped@hotmail.com wrote:
> > Cecil Moore wrote:
> >>Antennas are scalable.
>
> > How would I "scale it".
>
> For instance, if an antenna is resonant on 460 MHz,
> multiply all the dimensions by pi to make it resonant
> on approximately 146.4 MHz.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
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News==----
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This is a joke, right?

I am serious with the question. Will "scaling it" for a bottom band of
say 108 mhz make it "less efficent" at higher band?

988. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 19:09:33 UTC
From: nm5k@wt.net
Message-ID: <1105729773.861924.303340@f14g2000cwb.googlegroups.com>
Source record: 83378

Walter Maxwell wrote:
But a ground plane antenna suffers no
> ground losses, so using as many as possible only applies to radials
on
> or in the ground.
>
> Walt, W2DU

Or low to the ground in terms of wavelength. But you wouldn't have to
use
"as many as possible". With most VHF/UHF ground planes, they are
usually
several waves up off the ground, and ground loss is very low. But if
you
take a low band ground plane, say 1/8 wave off the ground, you will
need
quite a few more radials than 4, to equal the benchmark of 120 radials
on
the ground. According to charts I've seen, and also backed up with real

world results, a ground plane 1/8 wave off the ground will need appx
50-60 radials to equal the 120 on the ground. At 1/4 wave up, about
8-10
or so. At 1/2 wave up, 4, 3, or just 2 radials will all work fairly
well.
Of course, I would always prefer four, over two. Even if ground loss
was
not a factor due to being high up, the decoupling of the feedline is
better with four, than two. In real world tests on VHF, I've noticed a
noticable difference going from 4 radials, to say 8 , or even 10. And
that was several waves up...So adding more radials does continue to
improve the antenna. Probably more due to the improved decoupling of
the feedline, rather than lower ground loss I would suspect...I've
heard
many a tale of disappointed hams having poor results with "low" ground
planes, and not enough radials. But thats usually on 160,80, or 40
meters.
Actually, I don't know of any ground plane users on 160, but I have
heard of quite a few on 80m..Four radials at 10 ft up on 80m, is better

than four radials on the ground, I think, but not by a large amount...
Ground loss will be fairly substantial if the ground quality is
mediocre.
In my HF experience with them, the lowest I would use four radials, and

expect *good* performance, would be at 1/4 wave up. When I would lower the mast to 1/8 wave up, you could see quite a difference. That was on 40m, where I ran a full size GP at 36 ft at the base, on a pushup mast.

BTW, that was a great DX and late night antenna on 40m...I also had a 24 volt relay to switch a base loading coil in for 17m use as a 5/8 GP. I changed bands here in the shack, by unplugging the transformer, for 40m use..That bypassed the 17m coil.
MK

989. Re: Discone antenna plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 19:33:09 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e81fc4$1_1@127.0.0.1>
Source record: 83379

stryped@hotmail.com wrote:
> Cecil Moore wrote:
>>For instance, if an antenna is resonant on 460 MHz,
>>multiply all the dimensions by pi to make it resonant
>>on approximately 146.4 MHz.

> This is a joke, right?

Not exactly - just a dash of Aquarian humor.

> I am serious with the question. Will "scaling it" for a bottom band of
> say 108 mhz make it "less efficent" at higher band?

If a uhf discone is designed to cover 400-500 MHz, for instance,
when you scale it to a vhf center frequency of 108 MHz, it will
cover approximately 96-120 MHz.
--
73, Cecil http://www.qsl.net/w5dxp

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990. Re: Discone antenna plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 19:47:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ge6gu09kbib02u60ogndm4g62270ercbjm@4ax.com>
Source record: 83380

On 14 Jan 2005 10:59:47 -0800, stryped@hotmail.com wrote:
>I am serious with the question. Will "scaling it" for a bottom band of
>say 108 mhz make it "less efficent" at higher band?
Only if you burn yur pi krust on the higher setting - SERIOUS! :-)

By the way, what flavor pi did you pick? In the News Democrat and
LEader they offer recipes for cranberries today (mmmm cranberry pi for
UHF). The Kentucky NeW Era reports apples are a good bet out at
Schlei's Orchards this weekend (mmmm apple pi for VHF).

991. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 19:50:17 UTC
From: sofie <sofie@olypen.com>
Message-ID: <10ug8lhqkjdav7f@corp.supernews.com>
Source record: 83381
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

Jamie:
The (gas) butane soldering irons are the best for what you want..... the
problem with battery operated soldering irons is that they do not produce a
lot of heat for any length of time.... and usually when you only have a few
more joints to solder, the battery DIES. With a butane soldering iron,
when it runs out of gas you just refill it and you are ready to solder again
in a few minutes.and if more heat is needed just turn up the gas and install
a bigger tip.
--
Best Regards,
Daniel Sofie
Electronics Supply & Repair
- -

"Jamie" <jamie_5_not_valid_after_5_Please@charter.net> wrote in message
news:vjUFd.2799$uT.742@fe06.lga...
> alanh_27@yahoo.com wrote:
>
> > the requirement: perform solder joints outdoors, in the winter,
> > without electricity, up a radar mast.
> >
> > and the nominations are?
> >
> > P.S. could a resistance-soldering rig do it, on battery power,in a
> > form factor that's small/light enough to haul up a radar mast in a
> > basket?
> >
> look for "Cold heat soldering iron"
> battery operated and it very fast.
> its not good for very fine detailed work but
> may work well for your use.
>
> https://www.asseenontvnetwork.com/vcc/coldheat/coldheat/115785/
>

992. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 20:35:51 UTC
From: NSM <nowrite@to.me>
Message-ID: <H2WFd.94083$dv1.54666@edtnps89>
Source record: 83382
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

"Jamie" <jamie_5_not_valid_after_5_Please@charter.net> wrote in message
news:vjUFd.2799$uT.742@fe06.lga...

| look for "Cold heat soldering iron"
| battery operated and it very fast.
| its not good for very fine detailed work but
| may work well for your use.
|
| https://www.asseenontvnetwork.com/vcc/coldheat/coldheat/115785/

Buy one on eBay if you want to try it but it's a joke outside in a slight
breeze. Even a 25 W AC iron won't work there and these toys are no good at
all.

http://search.ebay.com/cold-heat_W0QQfromZR40QQsojsZ1

N

993. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 20:39:25 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34qp62F4fsr20U4@individual.net>
Source record: 83383
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Once again Mr.Reay has published something that has come home
to roost at his home. Remember the following bullshit from
yesterday?.....

"Part of the problem is that people will respond to his rudeness, if you
can't ignore it kill file him. He does it to disrupt the group and he can
only do so IF WE LET HIM. If we don't let him he can't disrupt the group.
Standard behaviour management."

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34qdujF4dc60sU1@individual.net...

> All signs of insecurity. If Gareth was sure of himself he could debate /
> discuss at a technical level. I can't ever actually recall him doing this.
> I'm sure there will be a name for his condition, probably even treatment.

994. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 20:45:13 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34qpgcF4eqmqtU1@individual.net>
Source record: 83384
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Once again, Mr.Reay is brandishing his card with
the "insecurity" sneer upon it.

That Mr.Reay feels the need to repeatedly initiate
personal remarks of an aggressive character, personal
remarks that cannot be taken as "debate / discussion at
a technical level", would seem to suggest that it is Mr.Reay
who is insecure, do you not think?

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34qdujF4dc60sU1@individual.net...

> All signs of insecurity. If Gareth was sure of himself he could debate /
> discuss at a technical level. I can't ever actually recall him doing this.
> I'm sure there will be a name for his condition, probably even treatment.

995. Re: Discone antenna plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 21:46:55 UTC
From: Radio Man <puns@verizon.net>
Message-ID: <j5XFd.1105$c%6.175@trnddc03>
Source record: 83385

i don't have apples....only windows xp

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:ge6gu09kbib02u60ogndm4g62270ercbjm@4ax.com...
> On 14 Jan 2005 10:59:47 -0800, stryped@hotmail.com wrote:
>>I am serious with the question. Will "scaling it" for a bottom band of
>>say 108 mhz make it "less efficent" at higher band?
> Only if you burn yur pi krust on the higher setting - SERIOUS! :-)
>
> By the way, what flavor pi did you pick? In the News Democrat and
> LEader they offer recipes for cranberries today (mmmm cranberry pi for
> UHF). The Kentucky NeW Era reports apples are a good bet out at
> Schlei's Orchards this weekend (mmmm apple pi for VHF).

996. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 22:07:18 UTC
From: Jamie <jamie_5_not_valid_after_5_Please@charter.net>
Message-ID: <vjUFd.2799$uT.742@fe06.lga>
Source record: 83375
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

alanh_27@yahoo.com wrote:

> the requirement: perform solder joints outdoors, in the winter,
> without electricity, up a radar mast.
>
> and the nominations are?
>
> P.S. could a resistance-soldering rig do it, on battery power,in a
> form factor that's small/light enough to haul up a radar mast in a
> basket?
>
look for "Cold heat soldering iron"
battery operated and it very fast.
its not good for very fine detailed work but
may work well for your use.

https://www.asseenontvnetwork.com/vcc/coldheat/coldheat/115785/

997. Re: LET'S HELP EACH OTHER MAKE MONEY

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 23:04:39 UTC
From: bobthecorncob@gmail.com
Message-ID: <1105743879.248955.127540@c13g2000cwb.googlegroups.com>
Source record: 83386
Cross-posted to:
rec.sport.billiard,rec.arts.sf.written.robert-jordan,rec.models.rc.air,rec.pets.dogs.behavior,rec.radio.amateur.antenna

jjrvn@hotmail.com wrote:
> I'm sure you've read these letters asking you to send $1 to six
> different addresses. Putting your home address or mailing address on
> the internet can be risky, but through PayPal all you have to provide
> is your email address. It's safe and easy. Just go to www.paypal.com
> and set up your FREE account! No credit card is needed. I am not a
> gullible person and have never trusted things like this, but I gave
it
> a try. Hey it's only $6. I figured at least 6 people would respond
> out of the millions of people that use the internet. You should give
it
> a try too! You have nothing to lose, and thousands to gain! Read on
for
> the letter that I found (of course, I added my PayPal e-mail on
#6)...
>
>
> HOW TO TURN $6 INTO $6,000+!!! THIS REALLY CAN MAKE YOU EASY MONEY!!!
> IT WORKS!!! BUT YOU HAVE TO FOLLOW IT TO THE LETTER FOR IT TO
WORK!!!!
> A little while back, I was browsing through newsgroups, just like you
> are now and came across an article similar to this that said you
could
> make thousands of dollars within weeks with only an initial
investment
> of $6.00! So I thought, "Yeah, right, this must be some kind of scam"
> but like most of us, I was curious, so I kept reading. Anyway, it
said
> that you send $1.00 though PayPal to each of the emails stated in the
> article. You then place your own email address in the bottom of the
> list at #6, and post the article in at least 200 news groups. (There
> are thousands) No catch. That was it. So after thinking it over, and
> talking to few people first, I thought about trying it. I figured
what
> have I got to lose except $6.00, right? Like most of us I was a
little
> skeptical and a little worried about the legal aspects of it. It
> follows the same regulations as the "mailed chain letters, which
> according to the U.S. Post Office (1-800-725-2161) is indeed legal!
> Then I invested the measly $6.00. Well GUESS WHAT!!? Within 7 days, I
> started getting money in my PayPal account! I was shocked! I figured
it

> would end soon, but the money just kept coming in. In my first week,
I
> made about $20.00. By the end second week I had made a total over
> $1,200.00!!! In the third week I had over $10,000.00 and it's still
> growing. This is now my fourth week and I have made a total of just
> over $36,000.00 and it's still coming in rapidly. It's Certainly
worth
> $6.00. I have spent more than that on the lottery!! Let me tell you
how
> this works and most importantly, why it works? Also, make sure you
> print a copy of this article now, so that you can get the information
> off of it as you need it.
>
>
> $$
>
>
> REQUIREMENTS: You must have a confirmed PayPal account. If you do not
> have a PayPal account you can go to www.paypal.com and follow the
> instructions to set up a free account. In order to place the initial
$6
> into your account, you will have to confirm your bank account with
> PayPal (which may take a few days). PayPal is 100% secure and is used
> my millions of people world wide. Confirming a www.paypal.com account
> simply means (1) PayPal will first ask you to confirm the email you
> used to sign up your PayPal account by sending you an email with a
link
> for you to click to that email. As soon as you click that link your
> email is confirmed. (2) PayPal will then make two small deposits into
> your bank account if you set up your PayPal account with a checking
or
> savings bank account. Or PayPal will make two small deposits to your
> credit card if you set up your PayPal account with your credit card.
> Then after a few days (it takes up to a few days for these deposits
to
> appear in your bank account or on your credit card statement) then
> after a few days you go back to the www.paypal.com website and sign
in.
> Then you click where it says this account is not yet confirmed. A
> screen will pop up that gives you 2 boxes to fill in. You then enter
> the numbers of the 2 small deposit amounts (two separate 2 digit
> numbers) that were deposited to your bank account or credit card. Now
> you have a working and confirmed PayPal account and can receive
> payments.
>
>
> $$
>
>
> [STEP 1]

> Send, though PayPal, $1.00 to each email on the below list. Make the
> subject of the payment "Email List" and in the comments, write
"PLEASE
> PUT ME ON YOUR EMAIL LIST." What you are doing is creating a service
by
> this - and best of all you are not giving your address to anyone you
do
> not know. THIS IS ABSOLUTELY LEGAL!! YOU ARE CREATING A SERVICE. Here
> are the latest PayPal e-mails on the e-mail lists:
>
>
> #1)brittany...@excite.com
>
>
> #2) mth...@renc.igs.net
>
>
> #3) Mishav...@aol.com
>
>
> #4) nike31...@aol.com
>
>
> #5) careent...@hotmail.com
>
>
> #6) jjrvn...@hotmail.com
>
>
> www.paypal.com
>
>
> Subject of Payment: ***Email List***
>
>
> Comments: ***PLEASE PUT ME ON YOUR EMAIL LIST***
>
>
> [STEP 2]
> Now take the #1) email off the list that you see above, move the
other
> addresses up one (6 becomes 5 & 5 becomes 4, etc) the put YOUR
> email address (the one used in your PayPal account) as #6) on the
list.
> **MAKE SURE THE EMAIL YOU SUPPLY IS EXACTLY AS IT APPEARS IN YOUR
> PAYPAL ACCOUNT**
>
>
> [STEP 3]
> Change anything you need to, but try to keep this article as close to

> original as possible. Now, post your amended article to at least 200
> newsgroups, message boards, etc. (I think there are close to 32,000
> groups) All you need is 200, but remember, the more you post, the
more
> money you make - as well as everyone else on the list! In this
> situation your job is to let as many people see this letter as
> possible. So they will make you and me reach!!!! You can even start
> posting the moment your email is confirmed. Payments will still
appear
> in your PayPal account even while your bank account is being
confirmed.
>
>
> $$
>
>
> DIRECTIONS ON HOW TO POST TO NEWSGROUPS/MESSAGE BOARDS.
>
> [Step 1]
> You do not need to re-type this entire letter to do your own posting.
> Simply put your CURSOR at the beginning of this letter and drag your
> CURSOR to the bottom of this document, and select 'copy' from the
edit
> menu. This will copy the entire letter into your computer's temporary
> memory.
>
> [Step 2]
> Open a blank Notepad file and place your cursor at the top of the
blank
> page. From the 'Edit' menu select 'Paste'. This will paste a copy of
> the letter into notepad so that you can add your email to the list.
>
> [Step 3]
> Save your new Notepad file as a .txt file. If you want to do your
> postings in different sittings, you'll always have this file to go
back
> to.
>
> [Step 4]
> Use Netscape or Internet Explorer and try searching for various
> newsgroups, on-line forums, message boards, bulletin boards, chat
> sites, discussions, discussion groups, online communities, etc.
> EXAMPLE: go to any search engine like yahoo.com, google.com,
> altavista.com, excite.com, then search with subjects like
> "millionaire message board" or "money making message board" or
> "opportunity message board" or "money making discussions" or
> "business bulletin board" or "money making forum" etc. You will
> find thousands and thousands of message boards. Click them one by one
> then you will find the option to post a new message.
>

> [Step 5]
> Visit these message boards and post this article as a new message by
> highlighting the text of this letter and selecting 'Paste' from the
> 'Edit' menu. Fill in the Subject, this will be the header that
everyone
> sees as they scroll thru the list of postings in a particular group,
> click the post message button. You're done with your first one!
> Congratulations! THAT'S IT!! All you have to do is jump to different
> newsgroups and post away. After you get the hang of it, it will take
> about 30 seconds for each newsgroup! **REMEMBER, THE MORE NEWSGROUPS
> AND/OR MESSAGE BOARDS YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT
> YOU HAVE TO POST A MINIMUM OF 200** That's it! You will begin
receiving
> money within days! **JUST MAKE SURE THE EMAIL YOU SUPPLY IS EXACTLY
AS
> IT APPEARS ON PAYPAL.**
>
> Have fun!

998. Re: Discone antenna plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-14 23:51:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3bmgu0dqvu6v7f7pf7g5ig5m5407g8dh84@4ax.com>
Source record: 83387

On Fri, 14 Jan 2005 21:46:55 GMT, "Radio Man" <puns@verizon.net>
wrote:
>i don't have apples....only windows xp

*** the category is pi for 2ï¿½ ***
*** Sorry, but in these rounds of Jeopardy, ***
*** you must put your response in the form of a question ***

tum-de-dum-dum dum-dum-dum ....

999. Re: Winegard CA-8098

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 00:33:54 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <_LadncMz7dhu-XXcRVn-vQ@comcast.com>
Source record: 83388

"Allodoxaphobia" <bit-bucket@config.com> wrote in message
news:slrncufor9.k0t.bit-bucket@shell.config.com...
> On Thu, 13 Jan 2005 19:26:35 -0600, gb wrote:
>
>> Look for the Popular Electronic December 1971 issue -- George J. Monser
>> wrote the article of interest (page 40):
>> "Build a Mini-Pyramidal UHF TV Antenna".
>
>> He reports pulling in UHF stations
>> (in San Diego), that were 185 miles away.
>> Mr. Monser lived in the Santa Barbara, CA area at the time of the PE
>> article.
>
> A point to be made: The entire propagation path betwix San Diego
> and Santa Barbara is over salt water (AKA the Pacific Ocean.)
> There's been many reports of Shack-On-The-Hip operators bringing
> up repeaters in San Diego from Santa Barbara (and versy-vicey.)
>
> Good tropo here is probably a bigger factor than good antenna(s).
>

Jonesy -

Yes

Once I found out where he lived .. that became apparent. Of course, he made
no mention of this
signal path in the PE article (impressing the teenager at that time of the
deep fringe coverage of the design).

:-)

Greg

1000. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 00:34:53 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <NyZFd.1867$8Z1.1454@newssvr14.news.prodigy.com>
Source record: 83389

Nah-- Think is is referred to as " Fresnel Zones", and other
nomenclature- It has to do with multi-path - phase relationships
of the recieved signal- similar to the drive down a country road
at midnight, listening to an A.M. broadcast station (DX) fadeing
in-out - if you measure the distance between the 2 fades, it
equals 1/2 wavelength ! this effect works also in the verticle plane!
and, at vhf- the effect is quite noticeable in the fades (every 40
inchs at 2 meters, and about 18 inchs on 450) has to do with the
multi path signals arriveing in phase, or out of phase (cancelling
each other)! as info-- Jim - NN7K

Cecil Moore wrote:
> Ken Bessler wrote:
>
>> I don't get it - the premium antenna worked better except for
>> hearing my friend, where it worked worse. Anyone care to offer
>> an explanation?
>
>
> Perhaps there was constructive multi-path interference
> on your friend's signal at the location of the lower
> antenna but not at the location of the higher antenna -
> or vice versa. Or your friend was not located in the
> plane of maximum gain of the higher gain antenna. That
> 2.7 dB of extra gain at one take-off-angle comes at the
> expense of reduced gain at a other vertical angles.

1001. Re: isolate a master tv antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 00:38:37 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <UIWdnXnajNKS-3XcRVn-jA@comcast.com>
Source record: 83390

"ml" <m@di.net> wrote in message
news:m-C4F3A7.21003313012005@news.verizon.net...
> hi
>
> Realize this is perhaps a long shot but cavities and filters arent my
> bag...
>
> I live in a 12 story apt building that has a master tv antenna
>
> the standard tv type but rather a bit larger than usual
>
> it's fed via coax and not sure whats on the roof but asume some sorta
> dist amp
>
> on each floor is a bunch of spliters to break the coax into 'ports' for
> each apt bout 6 per floor
>
> just wondering a really crazy wackey thought
>
> would their be anyway i could use this as a hf antenna while somehow
> isolating it from doing damage to the tv's , amps ???
>
>
> it would be basically to be a low impact stealth install obv if i
> install anything the buidlng mgt would be involved but people passing on
> the street wouldn't know.

Have a discussion with building management. You management has to
accommodate the satellite dishes, per earlier FCC ruling.
You may get an understanding management team. They could actually make $$
if they updated the system for DishTV (or DirecTV). I have a friend who has
his own business (design, install, maintenance) full-time in Chicago area
for a number of management companies (apartment complexes; planned
communities). It is a good alternative to cable TV proposals or old MATV
systems.
Management companies like it .. since there is only one dish and head-end
for building (does away with porcupine dishes on side of building and
patios).

gb

1002. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 00:59:54 UTC
From: Bill <spam@coqui.net>
Message-ID: <eWZFd.5634$J36.4078@fe39.usenetserver.com>
Source record: 83391
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

Jamie wrote:

> alanh_27@yahoo.com wrote:
>
>> the requirement: perform solder joints outdoors, in the winter,
>> without electricity, up a radar mast.
>>

> look for "Cold heat soldering iron"
> battery operated and it very fast.
> its not good for very fine detailed work but
> may work well for your use.

I don't think that will do. They barely work indoors.
Small little torch is the only way to go.

-Bill

1003. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 01:01:18 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e86d57_1@127.0.0.1>
Source record: 83392
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

NSM wrote:
> "Jamie" <jamie_5_not_valid_after_5_Please@charter.net> wrote in message
> news:vjUFd.2799$uT.742@fe06.lga...
>
> | look for "Cold heat soldering iron"
> | battery operated and it very fast.
> | its not good for very fine detailed work but
> | may work well for your use.
> |
> | https://www.asseenontvnetwork.com/vcc/coldheat/coldheat/115785/
>
> Buy one on eBay if you want to try it but it's a joke outside in a slight
> breeze. Even a 25 W AC iron won't work there and these toys are no good at
> all.

And ... they are not non-electric.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1004. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 02:15:37 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <d1%Fd.10618$wZ2.1680@newssvr13.news.prodigy.com>
Source record: 83393
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

Also, consider : low temperature solder-- can be melted with a match-
tho NOT advocating THAT technique, would recommend that with a butane
iron, or torch in inclemate weather! And, have used the butane irons
in blizzard conditions, in the Sierras (repairing equipment for the
railroad), useing these. highly recommend them for use in adverse wx!
Jim NN7K

Cecil Moore wrote:
> NSM wrote:
>
>> "Jamie" <jamie_5_not_valid_after_5_Please@charter.net> wrote in message
>> news:vjUFd.2799$uT.742@fe06.lga...
>>
>> | look for "Cold heat soldering iron"
>> | battery operated and it very fast.
>> | its not good for very fine detailed work but
>> | may work well for your use.
>> |
>> | https://www.asseenontvnetwork.com/vcc/coldheat/coldheat/115785/
>>
>> Buy one on eBay if you want to try it but it's a joke outside in a slight
>> breeze. Even a 25 W AC iron won't work there and these toys are no
>> good at
>> all.
>
>
> And ... they are not non-electric.

1005. Re: Sucess !!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 02:37:40 UTC
From: garigue <garigue@comcast.net>
Message-ID: <yd-dncYSuaU-HHXcRVn-sQ@comcast.com>
Source record: 83394

> > .... how do you clean the solder off the Carpet
>
> Err... I use a sharp blade and cut it off. Takes bit of carpet with it!
>
> Or soldering iron and solder sucker! :-)

I prefer moving a big piece of furniture over the area ......

73 Tom Popovic KI3R

1006. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 03:02:20 UTC
From: NSM <nowrite@to.me>
Message-ID: <0J%Fd.96549$dv1.26101@edtnps89>
Source record: 83395
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

"Jim - NN7K" <nn7kexk7zfg@NOSPAMsbcglobal.net> wrote in message
news:d1%Fd.10618$wZ2.1680@newssvr13.news.prodigy.com...
| Also, consider : low temperature solder-- can be melted with a match-
| tho NOT advocating THAT technique, would recommend that with a butane
| iron, or torch in inclemate weather! And, have used the butane irons
| in blizzard conditions, in the Sierras (repairing equipment for the
| railroad), useing these. highly recommend them for use in adverse wx!
| Jim NN7K

If you can use them in those conditions then no question they're the best.
Everything I have heard about the 4 AA irons is not confidence making!

N

1007. GB//Re: isolate a master tv antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 03:34:52 UTC
From: ml <m@di.net>
Message-ID: <m-C74750.22350314012005@news.verizon.net>
Source record: 83396

In article <UIWdnXnajNKS-3XcRVn-jA@comcast.com>,
"gb" <onw9mapsgb@no.arrl.spam.net> wrote:

> "ml" <m@di.net> wrote in message
> news:m-C4F3A7.21003313012005@news.verizon.net...
> > hi
> >
> > Realize this is perhaps a long shot but cavities and filters arent my
> > bag...
> >
> > I live in a 12 story apt building that has a master tv antenna
> >
> > the standard tv type but rather a bit larger than usual
> >
> > it's fed via coax and not sure whats on the roof but asume some sorta
> > dist amp
> >
> > on each floor is a bunch of spliters to break the coax into 'ports' for
> > each apt bout 6 per floor
> >
> > just wondering a really crazy wackey thought
> >
> > would their be anyway i could use this as a hf antenna while somehow
> > isolating it from doing damage to the tv's , amps ???
> >
> >
> > it would be basically to be a low impact stealth install obv if i
> > install anything the buidlng mgt would be involved but people passing on
> > the street wouldn't know.
>
> Have a discussion with building management. You management has to
> accommodate the satellite dishes, per earlier FCC ruling.
> You may get an understanding management team. They could actually make $$
> if they updated the system for DishTV (or DirecTV). I have a friend who has
> his own business (design, install, maintenance) full-time in Chicago area
> for a number of management companies (apartment complexes; planned
> communities). It is a good alternative to cable TV proposals or old MATV
> systems.
> Management companies like it .. since there is only one dish and head-end
> for building (does away with porcupine dishes on side of building and
> patios).
>
> gb
GB

don't mean this to sound rude but perhaps ....i overlooked a thing or 2

i must be misssing something, so lets say my building puts up a sat dish, which btw is already up there

how does this relate to my post? do you know of some way to make a direct tv dish work for hf? ohh while simul connected for tennants tv use?

1008. Re: Copper vs Stainless? *Ping Walter Maxwell

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 03:49:33 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <qj2hu0tkg447v8sf6va43qli1nusqgdupr@4ax.com>
Source record: 83397

On Tue, 11 Jan 2005 13:56:47 -0500, "Glenn Ashmore" <gashmore@cox.net>
wrote:

>You are talking a little over this sailor's head but I think I got the jist
>of it.
>
>The antennas are basically Bill Sykes and Bob Cobey's design.
>http://www.askrlc.co.uk/. I did change the ratio of height to width a
>little but verified the dimensions with John Copens' calculator.
>
>The loops are different lengths so I would say it is self phasing. Both
>antennas are 3/8" tube but the copper is .065" wall and the stainless is
>.028" wall. Also at corners I used long Ell sweat fittings on the copper
>tube and bent the stainless on a 3/4" radius but the total centerline
>lengths are within half a mm on both antennas.
>
>I have tried two different balun designs. One is Paul Hayes design
>http://web.ukonline.co.uk/phqfh/phbalun1.pdf built inside a film can and
>the other just 4 turns of RG58U around the 1 1/2" support column. The RG58U
>balun worked better than the film can (probably due to my poor workmanship)
>but the relative performance between the two antennas was the same.
>
>I did read your QFH article in Reflections 2. Even understood about half of
>it. :-)
>
>I have plenty of stainless tube and building these things and seeing how
>they work is fun so starting over from scratch would not be a problem.
>Would 3/16 solid rod work better?

Hello Glenn,

I've finally found time to review your QFH design, and find it quite
close to that which I designed for the wx sats, now the polar-orbiting
NOAAs (TIROS-N).

The design for the NOAA wx sats follows the data at the bottom of Page
22-14 in Reflections 2, in which diameters D1 and D2 at 137.56 MHz are
34.0 and 37.7 cm, respectively. Yours are 35.6 and 36.4 cm,
respectively. The perimeter dimensions P1 and P2 for the wx sats are
221 and 244 cm, respectively, while yours are 222.8 and 236.2 cm,
respectively. The height of the longer of the two bifilars in the QFH
of the wx sats is 0.260 lambda, or 56.7 cm. I was unable to determine
the height of your model.

The element tubing diameter in the wx sats is 1.918 cm, or 0.755",
while yours is 3/8" (0.375"). We actually used 3/4" tubing on the NOAA

wx sats.

Have you measured the terminal impedance of the quadrifilar? If it is to radiate optimum CP at the operating frequency the impedance must be very close to 50 ohms. Observe the Smith Chart plot, Fig 22-10 on Page 22.13, and note the cusp in the impedance plot at 0.95 +j0. During the development phase of the QFH I found that this impedance proved the self-phasing was working properly and was achieving excellent circular polarization. If the cusp was off from this point the circularity was jeopardized, as proven by measurements.

The reason I mention this is because one of the vital parameters in obtaining the + and - 90ï¿½ phase relationship between the two bifilars to obtain the self phasing is the diameter of the elements. It is the difference in the inductance of the elements, due to the difference in physical lengths, that obtains the 90ï¿½ phase relationship, and the diameter of the elements is crucial to the correct element inductance. So if the cusp of the swept input impedance plot is very far off from 50 + j0 you can expect that the circularity to be jeopardized.

Now to answer you original question concerning the use of copper or stainless steel, I would not expect to see a significant difference in performance between the two, especially considering the diameter of the conductors. The difference in loss resistance between the copper and stainless steel would be insignificant at this frequency when considering the diameter involved.

Please let me know if I can be of any further help.

Walt Maxwell, W2DU

1009. Re: In a ground plane, what dictates the number and spacing of radi...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 03:50:16 UTC
From: richardharrison@webtv.net
Message-ID: <7641-41E892F8-14@storefull-3254.bay.webtv.net>
Source record: 83401

Joel Kolstadt wrote:
"Hmm...how about...three! ground radials?"

Three radials should be fine where they are elevated to such height that they capture all the electric lines of force from the vertical radiator.Radials are balanced and their currents travel in offsetting directions. The radial system does not radiate itself because of its offsetting balances. Elevated radials must shield the earth from induced current. This requires few radials when the radials are far above the earth, but where the radials are near to the earth, many radials are needed to capture all the electric lines and shield the earth from lossy currents.

The number of radials and their effect on pattern and efficiency of radiation from a vertical antenna is well addressed by ON4UN in "Low-Band DXing". This is found in Chapter 9 of my 2nd edition. Choose the efficiency and elevation angle you are willing to accept ftom the graphs and tables presented.

Best regards, Richard Harrison, KB5WZI

1010. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 03:52:56 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <qm4hu0p0ohpusj6b74nsll49f7qtgg8k4b@4ax.com>
Source record: 83398

On 14 Jan 2005 11:09:33 -0800, nm5k@wt.net wrote:

>
>Walter Maxwell wrote:
>But a ground plane antenna suffers no
>> ground losses, so using as many as possible only applies to radials
>on
>> or in the ground.
>>
>> Walt, W2DU
>
>Or low to the ground in terms of wavelength. But you wouldn't have to
>use
>"as many as possible". With most VHF/UHF ground planes, they are
>usually
>several waves up off the ground, and ground loss is very low. But if
>you
>take a low band ground plane, say 1/8 wave off the ground, you will
>need
>quite a few more radials than 4, to equal the benchmark of 120 radials
>on
>the ground. According to charts I've seen, and also backed up with real
>
>world results, a ground plane 1/8 wave off the ground will need appx
>50-60 radials to equal the 120 on the ground. At 1/4 wave up, about
>8-10
>or so. At 1/2 wave up, 4, 3, or just 2 radials will all work fairly
>well.
>Of course, I would always prefer four, over two. Even if ground loss
>was
>not a factor due to being high up, the decoupling of the feedline is
>better with four, than two. In real world tests on VHF, I've noticed a
>noticable difference going from 4 radials, to say 8 , or even 10. And
>that was several waves up...So adding more radials does continue to
>improve the antenna. Probably more due to the improved decoupling of
>the feedline, rather than lower ground loss I would suspect...I've
>heard
>many a tale of disappointed hams having poor results with "low" ground
>planes, and not enough radials. But thats usually on 160,80, or 40
>meters.
>Actually, I don't know of any ground plane users on 160, but I have
>heard of quite a few on 80m..Four radials at 10 ft up on 80m, is better
>

>than four radials on the ground, I think, but not by a large amount...
>Ground loss will be fairly substantial if the ground quality is
>mediocre.
>In my HF experience with them, the lowest I would use four radials, and
>
>expect *good* performance, would be at 1/4 wave up. When I would lower
>the mast to 1/8 wave up, you could see quite a difference. That was on
>40m, where I ran a full size GP at 36 ft at the base, on a pushup mast.
>
>BTW, that was a great DX and late night antenna on 40m...I also had a
>24 volt relay to switch a base loading coil in for 17m use as a 5/8 GP.
>I changed bands here in the shack, by unplugging the transformer, for
>40m use..That bypassed the 17m coil.
>MK

You're quite correct, Mark, but when I mentioned 'ground plane' I'm thinking in terms of VHF/UHF, with the antenna many wavelengths above ground.

Thanks for clarifying my omission of terms.

Walt, W2DU

1011. Re: Copper vs Stainless? *Ping Walter Maxwell

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 04:00:02 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <775hu0t5afua9aekdg1b17hab885ju1v0j@4ax.com>
Source record: 83399

On Tue, 11 Jan 2005 13:56:47 -0500, "Glenn Ashmore" <gashmore@cox.net>
wrote:

>You are talking a little over this sailor's head but I think I got the jist
>of it.
>
>The antennas are basically Bill Sykes and Bob Cobey's design.
>http://www.askrlc.co.uk/. I did change the ratio of height to width a
>little but verified the dimensions with John Copens' calculator.
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>The loops are different lengths so I would say it is self phasing. Both
>antennas are 3/8" tube but the copper is .065" wall and the stainless is
>.028" wall. Also at corners I used long Ell sweat fittings on the copper
>tube and bent the stainless on a 3/4" radius but the total centerline
>lengths are within half a mm on both antennas.
>
>I have tried two different balun designs. One is Paul Hayes design
>http://web.ukonline.co.uk/phqfh/phbalun1.pdf built inside a film can and
>the other just 4 turns of RG58U around the 1 1/2" support column. The RG58U
>balun worked better than the film can (probably due to my poor workmanship)
>but the relative performance between the two antennas was the same.
>
>I did read your QFH article in Reflections 2. Even understood about half of
>it. :-)
>
>I have plenty of stainless tube and building these things and seeing how
>they work is fun so starting over from scratch would not be a problem.
>Would 3/16 solid rod work better?

Hello Glenn,

I've finally found time to review your QFH design, and find it quite
close to that which I designed for the wx sats, now the polar-orbiting
NOAAs (TIROS-N).

The design for the NOAA wx sats follows the data at the bottom of Page
22-14 in Reflections 2, in which diameters D1 and D2 at 137.56 MHz are
34.0 and 37.7 cm, respectively. Yours are 35.6 and 36.4 cm,
respectively. The perimeter dimensions P1 and P2 for the wx sats are
221 and 244 cm, respectively, while yours are 222.8 and 236.2 cm,
respectively. The height of the longer of the two bifilars in the QFH
of the wx sats is 0.260 lambda, or 56.7 cm. I was unable to determine
the height of your model.

The element tubing diameter in the wx sats is 1.918 cm, or 0.755",
while yours is 3/8" (0.375"). We actually used 3/4" tubing on the NOAA

wx sats.

Have you measured the terminal impedance of the quadrifilar? If it is to radiate optimum CP at the operating frequency the impedance must be very close to 50 ohms. Observe the Smith Chart plot, Fig 22-10 on Page 22.13, and note the cusp in the impedance plot at 0.95 +j0. During the development phase of the QFH I found that this impedance proved the self-phasing was working properly and was achieving excellent circular polarization. If the cusp was off from this point the circularity was jeopardized, as proven by measurements.

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Now to answer you original question concerning the use of copper or stainless steel, I would not expect to see a significant difference in performance between the two, especially considering the diameter of the conductors. The difference in loss resistance between the copper and stainless steel would be insignificant at this frequency when considering the diameter involved.

Please let me know if I can be of any further help.

Walt Maxwell, W2DU

1012. Re: Setting up slitting saw for round stock?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 04:02:06 UTC
From: CW <cmagers@earthlink.net>
Message-ID: <d76dnW3xfu6uCHXcRVn-hw@comcast.com>
Source record: 83400
Cross-posted to: uk.rec.models.engineering,rec.crafts.metalworking,rec.radio.amateur.antenna

There are various methods. First, you have to specify what kind of equipment you are using. You never did say. BTW, American speakers spell it center. We left England so we were free to do it a better way.

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34pl4mF4cilq4U3@individual.net...
> How do you propose to set it on "center"? (English speakers
> spell that as, "centre"!). That is the nub of my enquiry.
>
>
> "CW" <cmagers@earthlink.net> wrote in message
> news:GMydnduI2fp9v3rcRVn-pQ@comcast.com...
> > Set it on center, set your depth of cut, set your speed and feed, cut.
> What
> > more do you want?
> > "Airy R.Bean" <Me@privacy.net> wrote in message
> > news:34nal3F4ak7h3U2@individual.net...
> > > Is there a "kink" for setting up a slitting saw to saw through
> > > round bar stock along the axis, so that the slot is exactly
> > > across a diameter? (I presume this to be a similar problem to
> > > setting up accurately for cross-drilling)
> > > This is actually a Ham Radio application; I wish to make
> > > up some very large banana-type plugs from the 1/4" round
> > > bar stock that I have in small quantities. For this, I will need
> > > to saw two diameters in a cross shape, and then splay
> > > out the leaves slightly to make a springy and rubbing contact.
>
>

1013. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 05:55:31 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10uhc2jjjobre26@corp.supernews.com>
Source record: 83402

I used a lawn edger....

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34nn8tF4c0i29U1@individual.net...
> Someone suggested this over the last few days.
>
> As I'm having trouble with soil sticking to the spade
> and creating a hole when the spade is pulled up
> instead of just a slit, could someone redescribe the
> meat cleaver technique?
>
>

1014. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 06:10:23 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10uhcug8nhe069@corp.supernews.com>
Source record: 83403

great explanation! I actually learned something. BTW, my answer was gonna be
,," majic"..

"Jim - NN7K" <nn7kexk7zfg@NOSPAMsbcglobal.net> wrote in message
news:NyZFd.1867$8Z1.1454@newssvr14.news.prodigy.com...
> Nah-- Think is is referred to as " Fresnel Zones", and other
> nomenclature- It has to do with multi-path - phase relationships
> of the recieved signal- similar to the drive down a country road
> at midnight, listening to an A.M. broadcast station (DX) fadeing
> in-out - if you measure the distance between the 2 fades, it
> equals 1/2 wavelength ! this effect works also in the verticle plane!
> and, at vhf- the effect is quite noticeable in the fades (every 40
> inchs at 2 meters, and about 18 inchs on 450) has to do with the
> multi path signals arriveing in phase, or out of phase (cancelling
> each other)! as info-- Jim - NN7K

1015. Re: How can this be?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 07:51:49 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e8ccea$1_2@127.0.0.1>
Source record: 83404

Jim - NN7K wrote:
> Nah--

Nah?

> this effect works also in the verticle plane!
> and, at vhf- the effect is quite noticeable in the fades (every 40
> inchs at 2 meters, and about 18 inchs on 450) has to do with the
> multi path signals arriveing in phase, or out of phase (cancelling
> each other)! as info-- Jim - NN7K

What you have described is constructive and destructive
interference - the same effect I described.

> Cecil Moore wrote:
>> Perhaps there was constructive multi-path interference
>> on your friend's signal at the location of the lower
>> antenna but not at the location of the higher antenna -
>> or vice versa.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1016. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 12:36:09 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34shauF4egn4uU1@individual.net>
Source record: 83405

Problem solved by using the bread knife. (New
replacement purchased for SWMBO)

The problem with a lawn edger is the heavy clay that
adheres to it, resulting in an unsightly hole rather than
a neat slit.

"Sarge" <sarge43@NOSPAMev1.net> wrote in message
news:10uhc2jjjobre26@corp.supernews.com...
> I used a lawn edger....
> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:34nn8tF4c0i29U1@individual.net...
> > Someone suggested this over the last few days.
> > As I'm having trouble with soil sticking to the spade
> > and creating a hole when the spade is pulled up
> > instead of just a slit, could someone redescribe the
> > meat cleaver technique?

1017. N8WWM..child abuser..felon...repeater jammer..ordered to see head shrink

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 13:34:31 UTC
From: Steveo <moparholic@hotmail-nospam.com>
Message-ID: <20050115083431.729$7o_-_@newsreader.com>
Source record: 83406
Cross-posted to:
rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.swap,alt.ham-radio.vhf-uhf,rec.radio.amateur.misc

N8WWM Doug Adair"Psychiatrist to keyclowns" <keyklonzrnutjobs@yahoo.com>
wrote:
>other people also think you are a mentally
> screwed up hunk of keyclown garbage.
>
You have a lot of nerve calling anyone mentally screwed up, Doug.

Questions:

1. How is the court ordered shrink working out for you?

2. How's the court ordered job hunt going?

3. How's the court ordered wage withholding going?

4. Have you made the rain report for jamming repeaters again, Doug?

5. Have you threatened to kick anyone elses ass, only to have them show
up at your section 8 slum and prove what a fucking coward you are, maggot?

Go lay down by your bowl, dogie.

1018. Re: Copper vs Stainless? *Ping Walter Maxwell

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 13:39:13 UTC
From: Glenn Ashmore <gashmore@cox.net>
Message-ID: <329Gd.18873$EG1.6315@lakeread04>
Source record: 83407

Thanks. I am going to print this out and digest it over the weekend. I will get back to you. The only test equipment I have is an old MJF 259 that is very unstable at 137 Mhz.

Glenn

--
Glenn Ashmore

I'm building a 45' cutter in strip/composite. Watch my progress (or lack there of) at: http://www.rutuonline.com
Shameless Commercial Division: http://www.spade-anchor-us.com

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>
> Please let me know if I can be of any further help.

>
> Walt Maxwell, W2DU
>
>

1019. Re: isolate a master tv antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 14:32:52 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <ndadna254NgItHTcRVn-ug@comcast.com>
Source record: 83408

"gb" <onw9mapsgb@no.arrl.spam.net> wrote in message
news:UIWdnXnajNKS-3XcRVn-jA@comcast.com...
> "ml" <m@di.net> wrote in message
> news:m-C4F3A7.21003313012005@news.verizon.net...
>> hi
>>
>> Realize this is perhaps a long shot but cavities and filters arent my
>> bag...
>>
Your approach (IMHO) will not work and should not be pursued.

Rather, have a discussion with building management. You would want to run
ONE cable from your apartment to roof and your antenna on the roof. Your
busiling management has likley been appraoched by other tenants (for
mounting satellite dishes - erlier tie-in) AND by cellualr phone companies
looking to place antennas on their roof. However, they are waving $$ in
front of their eyes (which should reduce your rent or increase their profit)
.. you pay rent (eave your $$) during discussion.

gb

1020. best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 14:39:18 UTC
From: alanh_27@yahoo.com
Message-ID: <1105799958.711877.246540@z14g2000cwz.googlegroups.com>
Source record: 83409
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,alt.engineering.electrical

I've had good luck with the kester 62/36/2% silver stuff, which is eutectic.

Many many years ago, I had some luck with a indium-bismuth solder paste in syringes from Indium Corp. Haven't fiddled with any of their stuff since then.

Radio Shack sells a bag of little peices of tape-form stuff. Never got it to work well.

Favorites?

1021. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 14:59:45 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41e92ee5.165016984@news.galilei.com>
Source record: 83410

"Sarge" <sarge43@NOSPAMev1.net> verbositized:

>I used a lawn edger....

Then you had dirt sprayed everywhere!

Using the meat cleaver I stretched the wires above ground first, slid
the wire through an eyehook and cut along the edge of the wire. The
eyehook did the burying of the wire as I moved along the ground.
When I was done, I was done! And the yard suffered no damage!
And it probably went a whole lot quicker than wrestling with a lawn
edger, getting the wire into the slot and holding it in place while
you covered the hole, and got rid of the dirt that sprayed all over
the place.

TTUL
Gary

1022. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 15:03:33 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e930ae.497318@news.iol.ie>
Source record: 83411
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote:

: Part of the problem is that people will respond to his rudeness, if you
: can't ignore it kill file him. He does it to disrupt the group and he can
: only do so IF WE LET HIM. If we don't let him he can't disrupt the group.
: Standard behaviour management.
said m3osn....

how do you spell NONSENSE anyway ?

1023. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 15:15:31 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e93383.1222552@news.iol.ie>
Source record: 83412
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

W9DMK<nobody@crosslink.net> (Robert Lay) wrote:

: >: If not, what reason does he give for the technique?
: >
: >capacitance is prop to gap between plates.
: >
:
: I think you meant that it's inversely proportional to the gap between
: the plates.
:

its still proportional....

1024. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 15:17:17 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e933a6.1257523@news.iol.ie>
Source record: 83413
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Cecil Moore <w5dxp@hotmail.com> wrote:

: W9DMK (Robert Lay) wrote:
:
: > zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net (ZZZPK)
: > wrote:
: >>capacitance is prop to gap between plates.
: >
: > I think you meant that it's inversely proportional to the gap between
: > the plates.
:
: I've made the same mistake - said "capacitance" when I really
: meant "capacitive reactance".
: --

capacitance and capacitive reactance are two separate things.

one is always there and the other needs something else

1025. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 15:24:09 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34sr2eF4e0qfgU1@individual.net>
Source record: 83414

But surely the eye-hook is on the top of the blade,
and not underneath the ground where it would need to
be to draw the wire into the slit?

(One radial installed using the bread-knife, many more
to go)

"Gary V. Deutschmann, Sr." <raiar@bbs.galilei.com.nospam> wrote in message
news:41e92ee5.165016984@news.galilei.com...
> Using the meat cleaver I stretched the wires above ground first, slid
> the wire through an eyehook and cut along the edge of the wire. The
> eyehook did the burying of the wire as I moved along the ground.

1026. Re: Are these antennas any good for both transmit and receive?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 15:33:14 UTC
From: CW <cmagers@earthlink.net>
Message-ID: <_rqdneHjIomyqnTcRVn-iw@comcast.com>
Source record: 83415

You will prbably get a bunch of "don't buy Radio Shack junk" posts but I
have had one up and working fine for about ten years.

<stryped@hotmail.com> wrote in message
news:1105645305.842819.282460@z14g2000cwz.googlegroups.com...
>
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&product%5Fid=20-043
>

1027. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 15:46:35 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e93ac5.3081068@news.iol.ie>
Source record: 83416
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote:

: Part of the problem is that people will respond to his rudeness, if you
: can't ignore it kill file him. He does it to disrupt the group and he can
: only do so IF WE LET HIM. If we don't let him he can't disrupt the group.
: Standard behaviour management.

youve been reading LORD OF THE FLIES again.

havent you ?

1028. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 16:31:40 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e94710_2@127.0.0.1>
Source record: 83417
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

ZZZPK wrote:
> youve been reading LORD OF THE FLIES again.

Heh, heh, after presenting the play, "Annie", this year
(I was FDR) the Madison County Arts Council asked for ideas
on a play for next year that would employ a bunch of kids.
I suggested, "Lord of the Flies", which met with a very
cool reception. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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1029. Re: Amateur Antennae

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 16:35:13 UTC
From: JB <nospam@pleaes.com>
Message-ID: <41e9473e$1_1@127.0.0.1>
Source record: 83418

Well said!

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:inaes05luhvstg0p0ve14hldkc3qvcjvgc@4ax.com...
> On Mon, 20 Dec 2004 18:42:00 +0000 (UTC), "Reg Edwards"
> <g4fgq.regp@ZZZbtinternet.com> wrote:
>
> >The original English word for "Antenna" is "Aerial".
>
> Hi Reggie,
>
> The Oxford English Dictionary reveals that both terms came into
> identical (RF) usage in the same year: 1902...

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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1030. Re: Amateur Antennae

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 16:36:53 UTC
From: samm <asdf@lkjsdf.com>
Message-ID: <41e94834_2@127.0.0.1>
Source record: 83419

Huh?

"JB" <nospam@pleaes.com> wrote in message news:41e9473e$1_1@127.0.0.1...
> Well said!
>
>
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:inaes05luhvstg0p0ve14hldkc3qvcjvgc@4ax.com...
> > On Mon, 20 Dec 2004 18:42:00 +0000 (UTC), "Reg Edwards"
> > <g4fgq.regp@ZZZbtinternet.com> wrote:

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1031. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 16:46:24 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <l5iiu0pvkmuve8par6221cf3mi6qmcbc8j@4ax.com>
Source record: 83420
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sat, 15 Jan 2005 10:31:40 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:
>I suggested, "Lord of the Flies", which met with a very cool reception. :-)
Didn't Texas send that as a road show to D.C.?

1032. Re: Are these antennas any good for both transmit and receive?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 16:52:15 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7diiu0hng76hd4mhbie37e4tr9h08edgom@4ax.com>
Source record: 83421

On Sat, 15 Jan 2005 07:33:14 -0800, "CW" <cmagers@earthlink.net>
wrote:
>You will prbably get a bunch of "don't buy Radio Shack junk" posts but I
>have had one up and working fine for about ten years.
>http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&product%5Fid=20-043

Try the Radio Shack on 1134 W 9th St. or simply call them at 726-3099

1033. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 17:31:11 UTC
From: CW <cmagers@earthlink.net>
Message-ID: <W9qdna7sUalOz3TcRVn-1Q@comcast.com>
Source record: 83422
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Did you notice the word "amature" in the newsgroup title? You might want to
consult a dictionary for the definition of that word.

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34nqn4F4ed6fqU1@individual.net...
Engineers who are driven by
> such a penny pinching approach usually end up bankrupting their company as
> their products are poor.
>
>
> --
> Brian Reay
> www.g8osn.org.uk
> www.amateurradiotraining.org.uk
> FP#898
>
>
>
>
>

1034. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 17:37:08 UTC
From: CW <cmagers@earthlink.net>
Message-ID: <INKdnQIDc8ClyXTcRVn-tw@comcast.com>
Source record: 83423
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Right you are, Mr. bean. Some individuals can't seem to separate their personal from their business lives. They need to assign a dollar value to everything. Many of these people, when not at work, do nothing as they dismiss most leisure time activities as an inefficient waste of man-hours.

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34nssfF4borpmU4@individual.net...
> You don't seem to have the qualities that makes
> for a _REAL_ Radio Ham, OM!
>
> There are no labour costs when you do things for yourself!
>
> There are no machining costs in cutting up a CD with a pair of scissors.

1035. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 18:01:14 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34t42vF4eq7u6U1@individual.net>
Source record: 83424
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"CW" <cmagers@earthlink.net> wrote in message
news:W9qdna7sUalOz3TcRVn-1Q@comcast.com...
> Did you notice the word "amature" in the newsgroup title? You might want
to
> consult a dictionary for the definition of that word.
>

No. But, then again, it isn't there so I wouldn't have.

If you meant amateur, that work doesn't not mean 'bodger'. Just because you
are doing something for fun is no excuse not to do it well.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

1036. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 18:23:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <baniu0lcv8i924fvlotpv9m2v6rn2emh88@4ax.com>
Source record: 83426
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sat, 15 Jan 2005 18:01:14 -0000, "Brian Reay"
<brian.reay@(spamstopper)bigfoot.com> wrote:

> doing something for fun is no excuse not to do it well.

Hi OM,

The Calvinists left Britain to form the Puritans in the new world more
than 300 years ago (of course, many stayed behind to sulk during the
Restoration). Did you miss the boat?

73's
Richard Clark, KB7QHC

1037. longwire attachment question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 18:25:01 UTC
From: mw <m@spamoff.org>
Message-ID: <1edGd.10739$UT.793814@weber.videotron.net>
Source record: 83425

Hi all,
newbie question here...sorry if its covered elsewhere. My radio has a clip terminal for an ext. antenna, and wants to see 500 ohms. I want to put a transformer at the longwire for the coax feeder to show it 50 ohms for the trip into the house...will it work if I put another transformer in the house to get it back to hi-z?
The transformers will be home made ferrite coil jobs as described in John Bryants excellent article.
TIA
mike

1038. Re: longwire attachment question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 18:30:06 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e96280$1_2@127.0.0.1>
Source record: 83427

mw wrote:
> Hi all,
> newbie question here...sorry if its covered elsewhere. My radio has a
> clip terminal for an ext. antenna, and wants to see 500 ohms. I want to
> put a transformer at the longwire for the coax feeder to show it 50 ohms
> for the trip into the house...

How do you know the impedance of your longwire is 500 ohms?
If it is unterminated at the end, the impedance is definitely
not 500 ohms, except by complete accident.
--
73, Cecil http://www.qsl.net/w5dxp

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1039. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 18:40:46 UTC
From: Bill Janssen <billj9@ieee.org>
Message-ID: <OsdGd.157$H63.53@news02.roc.ny>
Source record: 83428
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

Jim - NN7K wrote:

> Also, consider : low temperature solder-- can be melted with a match-
> tho NOT advocating THAT technique, would recommend that with a butane
> iron, or torch in inclemate weather! And, have used the butane irons
> in blizzard conditions, in the Sierras (repairing equipment for the
> railroad), useing these. highly recommend them for use in adverse wx!
> Jim NN7K

I have a selction of different sizes of "soldering Coppers" that I heat
with a torch.
They work good and I can control where I put heat. They are however not
easy
to heat with the torch.

Bill K7NOM

>
> Cecil Moore wrote:
>
>> NSM wrote:
>>
>>> "Jamie" <jamie_5_not_valid_after_5_Please@charter.net> wrote in message
>>> news:vjUFd.2799$uT.742@fe06.lga...
>>>
>>> | look for "Cold heat soldering iron"
>>> | battery operated and it very fast.
>>> | its not good for very fine detailed work but
>>> | may work well for your use.
>>> |
>>> | https://www.asseenontvnetwork.com/vcc/coldheat/coldheat/115785/
>>>
>>> Buy one on eBay if you want to try it but it's a joke outside in a
>>> slight
>>> breeze. Even a 25 W AC iron won't work there and these toys are no
>>> good at
>>> all.
>>
>>
>>
>> And ... they are not non-electric.
>

1040. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 18:45:05 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <34t6l6F4f6mb7U1@individual.net>
Source record: 83429
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:baniu0lcv8i924fvlotpv9m2v6rn2emh88@4ax.com...
> On Sat, 15 Jan 2005 18:01:14 -0000, "Brian Reay"
> <brian.reay@(spamstopper)bigfoot.com> wrote:
>
> > doing something for fun is no excuse not to do it well.
>
> Hi OM,
>
> The Calvinists left Britain to form the Puritans in the new world more
> than 300 years ago (of course, many stayed behind to sulk during the
> Restoration). Did you miss the boat?
>
> 73's
> Richard Clark, KB7QHC

Well Richard, over the years I'm met many Americans (I am pleased to say).
I've always though they sought to do things well- even within their hobbies.
Clearly, you are the exception.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

1041. Recent own-goals by Mr.Reay.....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 18:50:50 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34t75tF4dqnkaU1@individual.net>
Source record: 83430
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

A couple of days ago Mr.Reay published a homily on the
undesirability of uttering rude remarks and the way in which
such remarks foment ill-feeling in the NG.....

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34t6l6F4f6mb7U1@individual.net...
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:baniu0lcv8i924fvlotpv9m2v6rn2emh88@4ax.com...
> > On Sat, 15 Jan 2005 18:01:14 -0000, "Brian Reay"
> > <brian.reay@(spamstopper)bigfoot.com> wrote:
> > > doing something for fun is no excuse not to do it well.
> > The Calvinists left Britain to form the Puritans in the new world more
> > than 300 years ago (of course, many stayed behind to sulk during the
> > Restoration). Did you miss the boat?
> Well Richard, over the years I'm met many Americans (I am pleased to say).
> I've always though they sought to do things well- even within their
hobbies.
> Clearly, you are the exception.

1042. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 18:51:52 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41e9679a$1_2@127.0.0.1>
Source record: 83431
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

Bill Janssen wrote:
> I have a selction of different sizes of "soldering Coppers" that I heat
> with a torch.
> They work good and I can control where I put heat. They are however not
> easy
> to heat with the torch.

The "cold heat" soldering iron works on the same principle as
an electric welding machine. Thus, there is the germ of a good
idea there. How about a soldering iron using the same principle
as the "cold heat" soldering machine except run off of 110VAC?
It could be transformer isolated, run on low voltage, and thus
be perfectly safe, but with a nearly unlimited source of power
to overcome the battery power limitation.
--
73, Cecil http://www.qsl.net/w5dxp

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1043. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 19:03:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <87qiu09tpo9gvseapbu120jfebjmb4e4l3@4ax.com>
Source record: 83432
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sat, 15 Jan 2005 18:45:05 -0000, "Brian Reay"
<brian.reay@(spamstopper)bigfoot.com> wrote:

>Clearly, you are the exception.

Thanx for the flowers.

73's
Richard Clark, KB7QHC

1044. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 19:16:17 UTC
From: NSM <nowrite@to.me>
Message-ID: <5_dGd.99266$dv1.85134@edtnps89>
Source record: 83433
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41e9679a$1_2@127.0.0.1...

| The "cold heat" soldering iron works on the same principle as
| an electric welding machine. Thus, there is the germ of a good
| idea there. How about a soldering iron using the same principle
| as the "cold heat" soldering machine except run off of 110VAC?
| It could be transformer isolated, run on low voltage, and thus
| be perfectly safe, but with a nearly unlimited source of power
| to overcome the battery power limitation.

Hmm, doing that up a pole in wet, cold weather. Why do I see a Homer Simpson
episode in my mind?

N

1045. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 20:02:19 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <41E976CB.EDE8BEE5@rica.net>
Source record: 83434
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

Bill Janssen wrote:

> I have a selction of different sizes of "soldering Coppers" that I heat
> with a torch.
> They work good and I can control where I put heat. They are however not
> easy
> to heat with the torch.

Especially while hanging from a tower, 50 feet up. ;-)

--
John Popelish

1046. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 20:04:32 UTC
From: "Jock." <real_class_a2003@yahoo.fr>
Message-ID: <sptiu01dkg29046dim1ncg01qenfa15qj4@4ax.com>
Source record: 83435
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sat, 15 Jan 2005 09:31:11 -0800, "CW" <cmagers@earthlink.net> wrote:

>Did you notice the word "amature" in the newsgroup title? You might want to
>consult a dictionary for the definition of that word.

Isn't in my dictionary.

Jock.

--

"The graveyards are full of indispensable men."
- Charles de Gaulle (1890-1970)

1047. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 20:06:15 UTC
From: "Jock." <real_class_a2003@yahoo.fr>
Message-ID: <6ttiu0leja2dbgcnn6nvc11p8714pn0l1u@4ax.com>
Source record: 83436
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sat, 15 Jan 2005 18:45:05 -0000, "Brian Reay"
<brian.reay@(spamstopper)bigfoot.com> wrote:

>"Richard Clark" <kb7qhc@comcast.net> wrote in message
>news:baniu0lcv8i924fvlotpv9m2v6rn2emh88@4ax.com...
>> On Sat, 15 Jan 2005 18:01:14 -0000, "Brian Reay"
>> <brian.reay@(spamstopper)bigfoot.com> wrote:
>>
>> > doing something for fun is no excuse not to do it well.
>>
>> Hi OM,
>>
>> The Calvinists left Britain to form the Puritans in the new world more
>> than 300 years ago (of course, many stayed behind to sulk during the
>> Restoration). Did you miss the boat?
>>
>> 73's
>> Richard Clark, KB7QHC
>
>Well Richard, over the years I'm met many Americans (I am pleased to say).
>I've always though they sought to do things well- even within their hobbies.
>Clearly, you are the exception.

They are unerringly stupid - to a man.

Jock.

--

"The graveyards are full of indispensable men."
- Charles de Gaulle (1890-1970)

1048. what Z range ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 20:22:58 UTC
From: RB <rbig@bellsouth.nospam.net>
Message-ID: <9WeGd.47639$zy6.19052@bignews5.bellsouth.net>
Source record: 83437

Longwire antenna. Coil in parallel with var cap for matching circuit.

What is the likely Z range such a circuit might match?

1049. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-15 23:41:56 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41e9a9e6.31533991@news.iol.ie>
Source record: 83438
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Richard Clark <kb7qhc@comcast.net> wrote:

: On Sat, 15 Jan 2005 18:45:05 -0000, "Brian Reay"
: <brian.reay@(spamstopper)bigfoot.com> wrote:
:
: >Clearly, you are the exception.
:
: Thanx for the flowers.
:
: 73's
: Richard Clark, KB7QHC

Hey Richard... if you try to put your side of the story any further he'll
'''threaten''' you with being put into his killfile.

something akin to a kindergard(t)en teacher putting the wayward kid
outside the door.

1050. Re: what Z range ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 01:07:12 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <csceo0$91a$1@sparta.btinternet.com>
Source record: 83440

"RB" wrote
> Longwire antenna. Coil in parallel with var cap for matching circuit.
>
> What is the likely Z range such a circuit might match?

Easy! Just say how long is the wire, at what height, at what frequency, and the impedance of the ground connection, and lo-and-behold, all will be revealed by a calculation which will involve arithmetic. And arithmetic is an unwelcome subject on this newsgroup.

Not that the resulting value of Z = X + jY will be of much use to you. What plans do you have to do with it?

In a fraction of the time expended in vague questions and obtaining even more vague replies, why not erect the wire, as you propose, and connect the capacitor in parallel to see what happens.

But you may save even more time by connecting the capacitor in series.

Good luck with your experiments.

Reg.

1051. tune swr of tram 1180 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 02:00:04 UTC
From: Michael <gyrocfi@cedar-rapids.net>
Message-ID: <10ujbgq9e25vla8@corp.supernews.com>
Source record: 83439

Is someone familiar with tuning steps for a Tram 1180 antenna?

1052. Best coax and entry route. (And newbie question).

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 02:02:46 UTC
From: stryped@hotmail.com
Message-ID: <1105840966.074652.185330@f14g2000cwb.googlegroups.com>
Source record: 83442

Well, I went to my first hamfest and I am now the owner of an alinco dr 590 dual band radio I wish to use as a base station. I must now decide where to locate an antenna. I have a tv town that I could mount it on but It would require about 70 feet of cable and fishing of the coax through some insulated walls upstairs. Or, I could mount the antennas to my vinyle chimney somehow and only have about a 20 foot run. But how would I get the cable inside my house? The only way I see is drillling a hole in the side of the house which I am not crazy of.

What is the best/most econmical cable to use? How would you do this installation?

Also, I dont have a power supply. I do have a deep cycle battery. Would it be improper to use this in my house as a temporary measure?

By the way this radio has two antenna inputs. I think I will use two different antennas. I am thinking of building a beam for 440 and using a j pole or ground plane for 2 meters.
I appreciate any advice you could give me!

1053. Re: Best coax and entry route. (And newbie question).

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 03:03:36 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <u1mju0d1hlbpp72j2s97nsuldkl2cv8c9j@4ax.com>
Source record: 83443

On 15 Jan 2005 18:02:46 -0800, stryped@hotmail.com wrote:

>Well, I went to my first hamfest and I am now the owner of an alinco dr
>590 dual band radio I wish to use as a base station. I must now decide
>where to locate an antenna. I have a tv town that I could mount it on
>but It would require about 70 feet of cable and fishing of the coax
>through some insulated walls upstairs. Or, I could mount the antennas
>to my vinyle chimney somehow and only have about a 20 foot run. But how
>would I get the cable inside my house? The only way I see is drillling
>a hole in the side of the house which I am not crazy of.
>
>What is the best/most econmical cable to use? How would you do this
>installation?
>
>Also, I dont have a power supply. I do have a deep cycle battery. Would
>it be improper to use this in my house as a temporary measure?
>
>By the way this radio has two antenna inputs. I think I will use two
>different antennas. I am thinking of building a beam for 440 and using
>a j pole or ground plane for 2 meters.
>I appreciate any advice you could give me!

Any beginning ham is going to have a million questions -- have you considered getting a copy of the ARRL Handbook for Radio Amateurs? You can get it at www.arrl.org in their product store, or from www.amazon.com for a probably lower price. It will answer just about any question about setting up your station, including all of the questions above, and the million or more you'll have in the coming days :-)

Have fun!

Bob
k5qwg

1054. Re: tune swr of tram 1180 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 03:52:18 UTC
From: Michael <gyrocfi@cedar-rapids.net>
Message-ID: <10uji344dcbdd88@corp.supernews.com>
Source record: 83441

Michael wrote:

> Is someone familiar with tuning steps for a Tram 1180 antenna?
Got the answer from a friend. He explained a little bit about antenna theory and sent me away to hack away at my antenna (and it worked).

Thanks to any who may be writing a response to me though. Mike

1055. Re: longwire attachment question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 04:35:49 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <z6mGd.10863$Zv5.8810@bignews1.bellsouth.net>
Source record: 83444

"mw" <m@spamoff.org> wrote in message
news:1edGd.10739$UT.793814@weber.videotron.net...
> Hi all,
> newbie question here...sorry if its covered elsewhere. My radio has a
> clip terminal for an ext. antenna, and wants to see 500 ohms. I want to
> put a transformer at the longwire for the coax feeder to show it 50 ohms
> for the trip into the house...will it work if I put another transformer
> in the house to get it back to hi-z?
> The transformers will be home made ferrite coil jobs as described in
> John Bryants excellent article.
> TIA
> mike

Just hook the longwire to the radio directly at first.
Then run a ground wire to the [gnd] terminal.
(assuming its receive only).
You can also play around with an antenna tuner too - pick one up at a
hamfest for a few bucks.
But its also fun to play with xfrmrs too! You didn't mention the freq you're
listening to or how long the wire was, so you don't really know the
antenna's impedence, so an antenna tuner looks better and better.
Have fun!

1056. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 04:43:35 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <RdmGd.10877$Zv5.4305@bignews1.bellsouth.net>
Source record: 83445
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,alt.engineering.electrical

<alanh_27@yahoo.com> wrote in message
news:1105799958.711877.246540@z14g2000cwz.googlegroups.com...
> I've had good luck with the kester 62/36/2% silver stuff, which is
> eutectic.
>
> Many many years ago, I had some luck with a indium-bismuth solder paste
> in syringes from Indium Corp. Haven't fiddled with any of their stuff
> since then.
>
> Radio Shack sells a bag of little peices of tape-form stuff. Never got
> it to work well.
>
> Favorites?
>
plain old 60-40 rosin-core electrical solder has worked well for me - got
mine at a hamfest on a half-pound roll.
the silver stuff (I believe) melts at higher temperatures - and higher
temperatures are not good for electronics.
eutectic (if my memory serves) just means it's either solid or liquid - and
won't just 'soften' - like ice and water.
hth
Hal w4pmj

1057. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 05:16:11 UTC
From: Isaac Wingfield <isw@witzend.com>
Message-ID: <isw-CD796D.21161115012005@comcast.dca.giganews.com>
Source record: 83446
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,alt.engineering.electrical

In article <RdmGd.10877$Zv5.4305@bignews1.bellsouth.net>,
"Hal Rosser" <hmrosser@bellsouth.net> wrote:

> <alanh_27@yahoo.com> wrote in message
> news:1105799958.711877.246540@z14g2000cwz.googlegroups.com...
> > I've had good luck with the kester 62/36/2% silver stuff, which is
> > eutectic.
> >
> > Many many years ago, I had some luck with a indium-bismuth solder paste
> > in syringes from Indium Corp. Haven't fiddled with any of their stuff
> > since then.
> >
> > Radio Shack sells a bag of little peices of tape-form stuff. Never got
> > it to work well.
> >
> > Favorites?
> >
> plain old 60-40 rosin-core electrical solder has worked well for me - got
> mine at a hamfest on a half-pound roll.
> the silver stuff (I believe) melts at higher temperatures - and higher
> temperatures are not good for electronics.

Silver-bearing solder is for use with silver plated terminal strips
(such as Tektronix used to use); silver in the solder prevents the
silver on the terminals from being dissolved by the solder and ruined.

Isaac

1058. venture 8500 actulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 05:19:19 UTC
From: pdrunen@aol.com
Message-ID: <20050116001919.25385.00000028@mb-m13.aol.com>
Source record: 83447

Hi Group,

I have an Venture maxi 8500 actulator I picked up for a Sate-disk project. The system is about 20 years old.

The motor does not want to run off of 13V, it will sometimes start but most of the time not.

Maybe someone on the group recalls if these motors are 24v or higher? The motor resistance is about 2.5 ohms.

If anyone has a schematic of the gear box, that would help, other than the motor power wire set, there is a green and brown wire set in a shield coming down the cable, any thoughts on what these are for?

Tnx de KJ4UO..

1059. cable modems?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 05:22:35 UTC
From: pdrunen@aol.com
Message-ID: <20050116002235.25385.00000029@mb-m13.aol.com>
Source record: 83448

Hi Group,

Do cable modems modulate the data on a carrier and send down the line or do they just use baseband?

If they are carrier control, what frequency do they operate?

Thanks,

De KJ4UO

1060. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 05:46:12 UTC
From: JeffM <jeffm_@email.com>
Message-ID: <1105854372.725121.89910@z14g2000cwz.googlegroups.com>
Source record: 83449
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc

>>I've had good luck with the kester 62/36/2% silver stuff,
>>which is eutectic.
>> alanh_27
>
>plain old 60-40...worked well for me
> Hal Rosser
>
If you say so. That wasn't the question.

>the silver stuff (I believe) melts at higher temperatures
>
No.
http://216.239.57.104/search?q=cache:WG_VLmYPkY8J:www.kappalloy.com/SolderElectronic.html+62-36-2+179-354+60-40-183-191

>the silver stuff (I believe) melts at higher temperatures
>
No.
http://216.239.57.104/search?q=cache:WG_VLmYPkY8J:www.kappalloy.com/SolderElectronic.html+62-36-2+179-354+60-40-183-191

>eutectic (if my memory serves) just means it's either solid or liquid
>--and won't just 'soften' -- like ice and water
>
Yup--and that's important for good results.

1061. Re: cable modems?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 06:18:26 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <TrGdnYDS1OCpmnfcRVn-pg@comcast.com>
Source record: 83450

"PDRUNEN" <pdrunen@aol.com> wrote in message
news:20050116002235.25385.00000029@mb-m13.aol.com...
> Hi Group,
>
> Do cable modems modulate the data on a carrier and send down the line or
> do
> they just use baseband?
>
> If they are carrier control, what frequency do they operate?
>
> Thanks,
>
> De KJ4UO

They do not operate (downstream data) on standard cable TV video channels
used by the local cable provider, but usually for upstream select from
available bandwidth below 42 MHz) The service is bi-directional (which
requires upgrades to some older CATV equipment to support this
functionality)

Cable Modems since about 1996 operate under the DOCSIS standard (there is
also a Euro-DOCSIS)
http://www.cablemodem.com/

The three successive versions of the DOCSIS cable modem specifications:
DOCSIS® 1.0, DOCSIS® 1.1, and DOCSIS® 2.0, provide increasing levels of
capabilities and functionality, while maintaining multi-vendor
interoperability and full backward and forward compatibility of DOCSIS.
a.. DOCSIS 1.0 specifications include technology that was available in the
1995-1996 timeframe, and have become very widely deployed around the world.

b.. DOCSIS 1.1 specifications provide improved operational flexibility,
security, and Quality-of-Service (QoS) features that enable real-time
services such as voice-over-IP telephony (VoIP), interactive gaming, and
tier-based services.

c.. DOCSIS 2.0 specifications provide dramatically increased upstream
throughput for symmetric services. DOCSIS 2.0 provides 30 Mbps of capability
Digital data signals are transmitted over radio frequency (RF) carrier
signals on a cable system. For two-way communication, there is one carrier
signal that carries data in the "downstream" direction (from the cable
network to the customer), and another that carries data in the "upstream"
direction (from the customer to the cable network). Cable modems are devices
at the subscriber premises that convert digital information into a modulated
RF signal in the upstream direction, and convert the RF signals to digital
information in the downstream direction. Another piece of equipment, called

a Cable Modem Termination System (CMTS), performs the converse operation for multiple subscribers at the cable operator's headend.

Typically, a few hundred users may share a 6-MHz downstream channel and one or more upstream channels. The downstream channel occupies the space of a single television transmission channel in the cable operator's channel lineup. It is compatible with digital set-top MPEG transport stream modulation (64 or 256 QAM), and can provide up to 40 Mbps. In DOCSIS 1.0 and 1.1, the upstream channels can be up to 3.2-MHz wide, and can deliver up to 10 Mbps-per-channel. In DOCSIS 2.0, upstream channels can deliver up to 30 Mbps over channels as wide as 6.4 MHz. A media access control (MAC) layer coordinates shared access to the upstream bandwidth.

Google on DOCSIS for thousands of references and technical documents.

gb

1062. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 06:33:41 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <8k2ku0d2am3r93qmnas042b6undiipdu5p@4ax.com>
Source record: 83451
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,alt.engineering.electrical

On Sat, 15 Jan 2005 23:43:35 -0500 "Hal Rosser"
<hmrosser@bellsouth.net> wrote:

>eutectic (if my memory serves) just means it's either solid or liquid - and
>won't just 'soften' - like ice and water.

The eutectic alloy is the one which has the right proportions to give
it the minimum melting point for a given set of constituent metals.
I've only seen the word applied to binary alloys, but I suppose it
could be applied to alloys of 3 or more metals, too. I'm not sure if
that's a proper use of the term, however.

A side effect of using the eutectic alloy is that there is a
distinctive melting point. When the alloy is non-eutectic, there are
separate solidus and liquidus points, between which the alloy is just
more or less "slushy."

There is no slushy region when a eutectic alloy melts. This sounds
like what Hal was describing above.

-

Jim Adney jadney@vwtype3.org
Madison, WI 53711 USA

1063. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 08:06:52 UTC
From: "R. F. Burns" <R.F.>
Message-ID: <poiju0hhch25dcccb6gkb0vabtdf82bgop@4ax.com>
Source record: 83452
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Fri, 14 Jan 2005 07:55:20 -0500, default <none@defaulter.net>
wrote:

>On 12 Jan 2005 02:45:43 -0800, "G1LVN" <google@g1lvn.org.uk> wrote:
>
>>Unlike heavy mobile phone use it has been proven that increasing
>>Oxydisation of cell structures causes, cancer, aging and ultimately
>>death. Doesn't stop anyone breathing though does it? If we al stopped
>>breathing there would be no cancer, no aging.
>>
>>Seriously though, as an illustration, say that in 20 years time we find
>>that the heating effect of RF from mobile phones provides a catalyst
>>for increased oxydisation in the brain when combined with the
>>inhilation of plastics vapour from the material used in cellphone keypd
>>membranes to cause cancer of the nose (it could happen!!). This would
>>be a totally unforseen risk to our health. What this report says that
>>is as a precaution to unforseen health risks it is better not to let
>>childern use mobile phones and audults only when absolutly necessary
>>and to limit use. This is an example of the "precautionary principle",
>>specifically used to limit or halt future crisis.
>>
>>see: http://en.wikipedia.org/wiki/Precautionary_principle
>>http://www.spiked-online.com/Articles/00000006DE2F.htm
>>http://www.emfacts.com/papers/newspeak.pdf
>>http://www.chstm.man.ac.uk/outreach/mobile-phones.htm
>>http://www.seas.upenn.edu/~kfoster/precautionary_foster.PDF
>
>
>The "standards" for RF safety assume that heating is the only thing
>that affects health.
>

Sunlight is Electromagnetic radiation and hardly anybody seems to
mention this when talking about cell phone sand RF safety. Sunlight
also causes heating effects and lots of it. (I know I enjoy it) 1000W
per square metre of radiation hitting the earth on a nice day. That's
a bit more than a cell phone emits I believe AND it contains the
ionizing type of radiation too which is known to cause cancer of
course.

I believe that if there is something to this cell phone thing that it
may be from the electric part of the near field.

I'm certainly not too worried because they seem to have too hard of a
time proving anything. Unlike smoking and lung cancer anyway.

my 2 cents.

R.F.

>The standard as tested and applied will prevent problems due to
>heating - and make the world a safer place for Jello.
>
>I seem to remember at least one case of a researcher in the US turning
>up some evidence that low frequency magnetic fields inhibit a bodies
>ability to either use or produce "T" cells.
>
>Personally, I don't think there is enough research into it. (and
>there isn't likely to be enough)

1064. Re: Best coax and entry route. (And newbie question).

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 09:28:18 UTC
From: nick smith <NickS@ntlworld.com>
Message-ID: <SsqGd.6$4S1.0@newsfe1-win.ntli.net>
Source record: 83453

I would drill one hole, if you really don't want to drill two, and use a diplexer. Cable losses are worth saving for that - its no big deal drilling a hole - much more of mounting aerials safely.
Even better drill a 30 to 40 mm diameter hole, sleeve it with waste pipe, then run whatever cables you want, when you want. I guess you won't like that though !
Always use good quality cable - its a cheap "upgrade" - no point in spending 500 to 1500 on a superb rig and wasting half its power in cable losses ! UR67 or RG213 at least - in UK I use Wesflex 103.
A power supply is a good investment - secondhand they are not expensive, but many use batteries and chargers so its an option.
Wire it up safely ! Fuses where appropriate etc and thick power cables to minimise losses there - no "bell wire".
As the other poster said - borrow the ARRL or similar from the library or buy it new or secondhand - the contents don't change too much too fast........

Hope that helps,

Welcome to Amateur Radio !

Nick

1065. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 11:09:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10ukir41fo7bc75@corp.supernews.com>
Source record: 83454
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,alt.engineering.electrical

The eutectic combination of tin and lead is 63% tin, 37% lead. 60/40 has a slightly higher melting point, and unlike the eutectic alloy, has a plastic stage between liquid and solid. Consequently, 63/37 is a better choice for solder.

Roy Lewallen, W7EL

Hal Rosser wrote:
>
> plain old 60-40 rosin-core electrical solder has worked well for me - got
> mine at a hamfest on a half-pound roll.
> the silver stuff (I believe) melts at higher temperatures - and higher
> temperatures are not good for electronics.
> eutectic (if my memory serves) just means it's either solid or liquid - and
> won't just 'soften' - like ice and water.
> hth
> Hal w4pmj
>
>

1066. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 11:38:03 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <k9kku0h8hdc4qshmtcbkk4roef85govji4@4ax.com>
Source record: 83455
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

back to amateur radio and the theme "ATU capacitor",

see http://home.online.no/~la8ak/a1.htm for an idea how you can
convert an old BC capacitor to a high voltage variable capacitor for a
80 (40m) antenna tuner

LA8AK

J. M. Noeding, LA8AK, N-4623 Kristiansand
http://home.online.no/~la8ak/c.htm

1067. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 11:42:38 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34v2f2F4gsrahU1@individual.net>
Source record: 83456
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

If you have something to contribute to the debate, then
discuss it. It is very poor debating to send your readers off
somewhere else.

Besides, I thought that you refused to participate in this NG,
uk.radio.amateur because it was populated only by those, who
in your terms, were CBers.

Are you now admitting to be a CBer?

Is, "LA8AK" some Norwidgian form of the gangrenous degeneration
that is the M3/CB Fools' Licence here in Britland?

"J M Noeding" <la8ak@online.no> wrote in message
news:k9kku0h8hdc4qshmtcbkk4roef85govji4@4ax.com...
> back to amateur radio and the theme "ATU capacitor",
>
> see http://home.online.no/~la8ak/a1.htm for an idea how you can
> convert an old BC capacitor to a high voltage variable capacitor for a
> 80 (40m) antenna tuner
>
> LA8AK
> ---
> J. M. Noeding, LA8AK, N-4623 Kristiansand
> http://home.online.no/~la8ak/c.htm

1068. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 12:49:42 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <9moku05gpfk0ojgg45javq8q6sf365rao4@4ax.com>
Source record: 83457
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sun, 16 Jan 2005 11:42:38 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>If you have something to contribute to the debate, then
>discuss it. It is very poor debating to send your readers off
>somewhere else.

But, of course, you have just done this very thing to someone else!

Sheesh.....
--
from
Aero Spike

1069. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 13:15:23 UTC
From: huLLy <hully@despammed.com>
Message-ID: <34v7mtF4geg55U1@individual.net>
Source record: 83458
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Spike" <Aero.Spike@Speed.invalid> wrote in message
news:9moku05gpfk0ojgg45javq8q6sf365rao4@4ax.com...
> On Sun, 16 Jan 2005 11:42:38 -0000, "Airy R.Bean" <Me@privacy.net>
> wrote:
>
>>If you have something to contribute to the debate, then
>>discuss it. It is very poor debating to send your readers off
>>somewhere else.
>
> But, of course, you have just done this very thing to someone else!
>
> Sheesh.....

That doesn't register in the mind of the terminally insane...

--
huLLy
VOIP SIP Phone Number 4823176 on Global Village

1070. vertical antenna choices

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 13:16:34 UTC
From: Jerseyj <jerseyj69@comcast.net>
Message-ID: <jerseyj69-935C89.08163416012005@comcast.dca.giganews.com>
Source record: 83459

Hi all,
Seems like there is a bewildering choice in vertical antennas. My "dream antenna" would be:

Not higher than 35 feet
Requires no guying
covers 10-160 including WARC bands
Has a "reasonable" bandwidth in each band with
less than 2:1 SWR (I know this is a tough one to include 160 for)
No radials
Automatically tunes for each band (meaning I don't have to go
to the antenna to do something to change from 10 meters to working
on 40 Meters)

There seems to be a large number of choices, none of which does quite all of that (maybe I missed some, suggestions are welcome). Seems like I have at least some good choices going 10-80 but when I include 160 they go away.

I'm interested in any suggestions or experiences with verticles as noted above.
'
Jerry

1071. It's the L.I.A.R. wot stokes the fire.....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 13:57:49 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34vaicF45bke6U8@individual.net>
Source record: 83460
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34qdujF4dc60sU1@individual.net...
> All signs of insecurity. If Gareth was sure of himself he could debate /
> discuss at a technical level. I can't ever actually recall him doing this.
> I'm sure there will be a name for his condition, probably even treatment.

1072. It's the L.I.A.R. wot stokes the fire.....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 13:59:02 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34vaidF45bke6U9@individual.net>
Source record: 83461
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34oa47F4culmgU1@individual.net...
> Part of the problem is that people will respond to his rudeness, if you
> can't ignore it kill file him. He does it to disrupt the group and he can
> only do so IF WE LET HIM. If we don't let him he can't disrupt the group.
> Standard behaviour management.
> If we just ignore his rude posts (or the bits of his few other posts that
> are rude), the problem would go away. Sometimes some of the stuff I seen
> responded to recently hasn't been that bad- maybe his engineering skills
are
> wanting but this is a forum to ask questions. If he could just stop being
so
> rude and negative I'd happily try and help him learn.
> Thing is, he seems to see every mention of failure as a reference to him.
I
> can only assume he has very low self esteem. This does make helping him a
> challenge. Pity we don't have an SEN teacher in the group- they would be
> ideal to advise us on the best plan. He could draw up an IEP for him.

1073. It's the L.I.A.R. wot stokes the fire.....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 13:59:55 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34vaidF45bke6U10@individual.net>
Source record: 83462
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:34nqn4F4ed6fqU1@individual.net...
> The CD idea falls flat as, while they may be cheap, the amount of
machining
> 'saved' is mininmal. I suppose if you are totally strapped for cash, out
of
> work and with time on your hands, they may offer some advantage, but you
> end up with a 'product' of inferior quality. Engineers who are driven by
> such a penny pinching approach usually end up bankrupting their company as
> their products are poor.

1074. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 14:36:56 UTC
From: default <none@defaulter.net>
Message-ID: <cosku0prhhfhlqq3438sn1581pv35h5ptn@4ax.com>
Source record: 83463
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On 16 Jan 2005 02:06:52 -0600, R. F. Burns <R.F.> wrote:
snipped
>
>Sunlight is Electromagnetic radiation and hardly anybody seems to
>mention this when talking about cell phone sand RF safety. Sunlight
>also causes heating effects and lots of it. (I know I enjoy it) 1000W
>per square metre of radiation hitting the earth on a nice day. That's
>a bit more than a cell phone emits I believe AND it contains the
>ionizing type of radiation too which is known to cause cancer of
>course.
>
>I believe that if there is something to this cell phone thing that it
>may be from the electric part of the near field.
>
>I'm certainly not too worried because they seem to have too hard of a
>time proving anything. Unlike smoking and lung cancer anyway.
>
>my 2 cents.
>
>R.F.
>
>
Agreed. From my vague recollection, the researcher that was seeing
effects in the immune system from low frequency emf exposure
attributed it to the magnetic field, and was looking at power line
frequencies.

There is some epidemiological evidence that shows a positive
correlation between certain types of cancer, leukemia in children and
nervous system & brain cancers in adults, and Weak LF EMF.

The standard test when it comes to RF safety is for tissue heating - a
cube of gelatin is exposed to the field and heat rise measured. That
assumes that heating is the only ill effect of RF radiation
(forgetting for the moment obvious stuff like RF burns or ozone damage
etc.) - it is possible that there are other, less active, or slower
developing deleterious effects. And that was my point . . .

Like the new approach to pharmaceutical safety in the US - clinical
testing is expensive - it will turn up in the epidemiological evidence
or actuarial statistics eventually - after industry has a chance to
make a profit.

It is unrealistic to expect government to initiate the research until enough people become aware of a problem. That only happens when something is self-evident to a large number of people; and that, in turn, depends on the media to correctly report it.

1075. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 15:53:00 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cse2kr$7vl$1@sparta.btinternet.com>
Source record: 83464
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

To Jan M Noeding, a fellow European.

In this international newsgroup -

Please accept an ordinary Englishman's apologies for the obnoxious behaviour of a fellow human being, a disgraceful citizen with democratic voting rights, of the United Kingdom, who writes here under the false name of Airy R Bean.

Yours, Reg, G4FGQ

"Obnoxious" = liable to harm or evil, or attack, offensive, objectionable, polluting, universally disliked, and more.

==========

1076. Re: It's the L.I.A.R. wot stokes the fire.....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 16:29:33 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <34vj32F4dobp1U1@individual.net>
Source record: 83465
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Airy R.Bean, village idiot added nothing to the following:
> "Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
> news:34nqn4F4ed6fqU1@individual.net...
>
>>The CD idea falls flat as, while they may be cheap, the amount of
>
> machining
>
>>'saved' is mininmal. I suppose if you are totally strapped for cash, out
>
> of
>
>>work and with time on your hands, they may offer some advantage, but you
>>end up with a 'product' of inferior quality. Engineers who are driven by
>>such a penny pinching approach usually end up bankrupting their company as
>>their products are poor.
>
>
>
Beanie, I'm sure I'm not alone in questioning your repeat of several
posts without adding ANYTHING, not even your usual crap.
...(_!_)...

1077. Re: vertical antenna choices

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 16:36:33 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cse56h$sk0$1@hercules.btinternet.com>
Source record: 83466

Jerry, KISS

The best vertical is an approximately vertical wire, rod or mast, as tall as possible, with a set of shallow-buried ground radials, a dozen or so in number, with a length roughly equal to antenna height. The whole contraption, if you can manage it, being well away from man-made buildings and dense tall trees.

Any experimental modifications, such as loading coils, will result in very minor changes, hardly noticeably better on some bands but inevitably worse on others.

The most important component in the system is always the tuner, next the ground system, and finally the antenna wire. KISS again!

Reg, G4FGQ

1078. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 17:09:16 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34vlmgF4genldU1@individual.net>
Source record: 83468
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Reg - I think that you need to be aware of Noedings
disparaging remarks about this NG that prompted my
critique of him.

You do not represent me in any way, BTW.

"Airy R.Bean" is not a false name, it is a pseudonym, and is
a practice to be commended to all who have dealings with
u.r.a because of the presence of several vicious and mentally
unstable characters who vent their CB spleens herein.

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cse2kr$7vl$1@sparta.btinternet.com...
> To Jan M Noeding, a fellow European.
> In this international newsgroup -
> Please accept an ordinary Englishman's apologies for the obnoxious
behaviour
> of a fellow human being, a disgraceful citizen with democratic voting
> rights, of the United Kingdom, who writes here under the false name of
Airy
> R Bean.

1079. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 17:09:31 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10ul7ud95qr8c5a@corp.supernews.com>
Source record: 83467

OH ok.. see its top soil here so it was easy. Clay is a bummer..

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34shauF4egn4uU1@individual.net...
> Problem solved by using the bread knife. (New
> replacement purchased for SWMBO)
>
> The problem with a lawn edger is the heavy clay that
> adheres to it, resulting in an unsightly hole rather than
> a neat slit.

1080. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 17:44:55 UTC
From: Spike <Aero.Spike@Speed.invalid>
Message-ID: <0r9lu0hh0e02un94ubm6fmi4dunmc90jcr@4ax.com>
Source record: 83469
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sun, 16 Jan 2005 17:09:16 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>"Airy R.Bean" is not a false name, it is a pseudonym

You forgot to mention that in your eyes you are the only one allowed
to use such a pseudonym.

You have spoken vituperatively about others who use them.

The technique is known idiomatically or colloquially as 'dog in a
manger'.
--
from
Aero Spike

1081. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 17:48:13 UTC
From: W3JXP <jxp16@psu.edu>
Message-ID: <K66dna8IhK1DNXfcRVn-jw@adelphia.com>
Source record: 83470

One of the locals here used a chainsaw to cut the groves for his ground
radials.

--
John Passaneau
Physics Electronics/Lab Prep
jxp16@psu.edu
"Sarge" <sarge43@NOSPAMev1.net> wrote in message
news:10ul7ud95qr8c5a@corp.supernews.com...
> OH ok.. see its top soil here so it was easy. Clay is a bummer..
>
>
> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:34shauF4egn4uU1@individual.net...
>> Problem solved by using the bread knife. (New
>> replacement purchased for SWMBO)
>>
>> The problem with a lawn edger is the heavy clay that
>> adheres to it, resulting in an unsightly hole rather than
>> a neat slit.
>
>

1082. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 17:59:03 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <34vohkF4ev7edU1@individual.net>
Source record: 83471

I did come across a local plumber using a handsaw
to ensure that the edges of his trench were clean.

"W3JXP" <jxp16@psu.edu> wrote in message
news:K66dna8IhK1DNXfcRVn-jw@adelphia.com...
> One of the locals here used a chainsaw to cut the groves for his ground
> radials.
> "Sarge" <sarge43@NOSPAMev1.net> wrote in message
> news:10ul7ud95qr8c5a@corp.supernews.com...
> > OH ok.. see its top soil here so it was easy. Clay is a bummer..
> > "Airy R.Bean" <Me@privacy.net> wrote in message
> > news:34shauF4egn4uU1@individual.net...
> >> Problem solved by using the bread knife. (New
> >> replacement purchased for SWMBO)
> >> The problem with a lawn edger is the heavy clay that
> >> adheres to it, resulting in an unsightly hole rather than
> >> a neat slit.

1083. Re: longwire attachment question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 18:19:21 UTC
From: m <m@spam.off>
Message-ID: <plyGd.3057$%K3.181694@weber.videotron.net>
Source record: 83322

thanks for the input!

the antenna I ve started in a 60 ft. 14g. copper wire, up in the trees
away from the house. I,d like to feed this into the house with rg58. my
radio tunes continuosly from 3 to 30 K, but I have also been mucking
around with some crystal sets which are more limited.

I,ve read that the antenna impedance is likely to be around 450 ohms,
which would be fine staight to the antenna connection on the receiver I
guess, but I would like to use the coax to protect the signal from all
nasty stuff my house generates (and to protect the house from the
potentially nasty stuff my antenna might!). So I would like the signal
to go from 450-ish to 50 and back to around 500...

Thanks again...and dont worry about me not having fun...;)
Mike

Hal Rosser wrote:
> "mw" <m@spamoff.org> wrote in message
> news:1edGd.10739$UT.793814@weber.videotron.net...
>
>>Hi all,
>>newbie question here...sorry if its covered elsewhere. My radio has a
>>clip terminal for an ext. antenna, and wants to see 500 ohms. I want to
>>put a transformer at the longwire for the coax feeder to show it 50 ohms
>>for the trip into the house...will it work if I put another transformer
>>in the house to get it back to hi-z?
>>The transformers will be home made ferrite coil jobs as described in
>>John Bryants excellent article.
>>TIA
>>mike
>
>
> Just hook the longwire to the radio directly at first.
> Then run a ground wire to the [gnd] terminal.
> (assuming its receive only).
> You can also play around with an antenna tuner too - pick one up at a
> hamfest for a few bucks.
> But its also fun to play with xfrmrs too! You didn't mention the freq you're
> listening to or how long the wire was, so you don't really know the
> antenna's impedence, so an antenna tuner looks better and better.
> Have fun!
>
>
>

1084. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 18:41:37 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <34vqqmF4h9h4pU1@individual.net>
Source record: 83323
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Spike wrote:
> On Sun, 16 Jan 2005 17:09:16 -0000, "Airy R.Bean" <Me@privacy.net>
> wrote:
>
>
>>"Airy R.Bean" is not a false name, it is a pseudonym
>
>
> You forgot to mention that in your eyes you are the only one allowed
> to use such a pseudonym.
>
> You have spoken vituperatively about others who use them.
>
> The technique is known idiomatically or colloquially as 'dog in a
> manger'.
Airy R. Bean is known idiomatically or colloquially as a retarded twat.
--
;>)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

1085. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 18:47:38 UTC
From: Bob Nielsen <nielsen@removethis.oz.net>
Message-ID: <slrnculdm1.7nq.nielsen@n7xy.net>
Source record: 83324

On Sat, 15 Jan 2005 23:43:35 -0500, Hal Rosser wrote:
>
><alanh_27@yahoo.com> wrote in message
> news:1105799958.711877.246540@z14g2000cwz.googlegroups.com...
>> I've had good luck with the kester 62/36/2% silver stuff, which is
>> eutectic.
>>
>> Many many years ago, I had some luck with a indium-bismuth solder paste
>> in syringes from Indium Corp. Haven't fiddled with any of their stuff
>> since then.
>>
>> Radio Shack sells a bag of little peices of tape-form stuff. Never got
>> it to work well.
>>
>> Favorites?
>>
> plain old 60-40 rosin-core electrical solder has worked well for me - got
> mine at a hamfest on a half-pound roll.
> the silver stuff (I believe) melts at higher temperatures - and higher
> temperatures are not good for electronics.
> eutectic (if my memory serves) just means it's either solid or liquid - and
> won't just 'soften' - like ice and water.
> hth
> Hal w4pmj
>

63/37 solder is eutectic.

1086. Tuning an AEA Halo on 6m?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 19:21:07 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <C8zGd.18246$ph.7545@okepread01>
Source record: 83325

I got a AEA halo for 6m and put it up. Worked good but the
low SWR point was 51.000 with a 1mhz 2:1 bandwidth.

I wanted to adjust it so I got a 1:1 SWR at 50.500 so I took
it down and loosened the loop overlap screws. I then stretched
the loop out 2", figuring longer = lower freq.

The low SWR point CLIMBED 800 khz!?!?!? WTF?

I pulled it back down and made the antenna *shorter* than I started
and bingo! It now shows 1:1 SWR at 50.500 mhz yet still shows
acceptable SWR on the local 6m repeater's input (51.130). 52.525
is out - SWR too high. :-(

Will someone please explain why this antenna seems to defy
conventional tuning standards?

Ken KG0WX

1087. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 19:58:58 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41eac5a9.269148843@news.galilei.com>
Source record: 83326

Hi Airy

In my particular case I used the eyehook to hold a split tube.
But the eyehook can be bolted in, bent downward toward the blade and
manage to keep the wire at least 2 inches underground.

Also, if you hold the cleaver at a 45 degree angle, with the eyehook
at the top, you are still setting the wire about 2 inches below the
surface.

In practice, I lay the cleaver across the uncut grass, whack it with a
rubber mallet, tip it up 45 degrees and tap it with the mallet through
the cut. Before tilting it back down for the next grass cutting whack
I tamp the sod behind the head of the blade to hold the wire in place
so it don't pop back out.

I buried 3,500 feet of radials in one afternoon using the rubber
mallet and cleaver with eyehook. I only added the split tube because
I kept getting the eyehook caught in the sod which required an extra
whack with the mallet. After sticking the tube through the eyehook,
not only did I not get stuck in the sod, but the wire would stay in
place without jumping out occasionally also.

TTUL
Gary

1088. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 20:07:32 UTC
From: dplatt@radagast.org
Message-ID: <10ulic4g6ca6ncb@corp.supernews.com>
Source record: 83327
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,alt.engineering.electrical

In article <10ukir41fo7bc75@corp.supernews.com>,
Roy Lewallen <w7el@eznec.com> wrote:

>The eutectic combination of tin and lead is 63% tin, 37% lead. 60/40 has
>a slightly higher melting point, and unlike the eutectic alloy, has a
>plastic stage between liquid and solid. Consequently, 63/37 is a better
>choice for solder.

I understand that there's a tradeoff involved. The 63/37 eutectic has
a lower melting point and no plastic stage, and some people feel that
the latter reduces the risk of 'cold' solder joints somewhat. On the
other hand, I've read that the 60/40 alloy is somewhat superior in its
"wetting" property - it adheres and bonds to some base metals better
than the eutectic does, and might make superior joints as a result.

I tend to prefer the eutectic, or a eutectic modified with 2% silver.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1089. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 20:57:16 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <LyAGd.2722$0B.312@fed1read02>
Source record: 83328
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34vlmgF4genldU1@individual.net...
> Reg - I think that you need to be aware of Noedings
> disparaging remarks about this NG that prompted my
> critique of him.
>
> You do not represent me in any way, BTW.
>
> "Airy R.Bean" is not a false name, it is a pseudonym, and is
> a practice to be commended to all who have dealings with
> u.r.a because of the presence of several vicious and mentally
> unstable characters who vent their CB spleens herein.

Spleens got vents?!

Ed
wb6wsn

1090. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 21:08:40 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <sJAGd.11052$wZ2.2706@newssvr13.news.prodigy.com>
Source record: 83329
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,alt.engineering.electrical

Also, there are things like stainless steel, and aluminium that don't
like regular 60/40 solder-- however silver solder will solder to
stainless antenna rods (repair antenna whips, ect). and aluminium
is easy to solder to, but consider : 1) that aluminium oxide WON'T allow
solder to adhear to it, and that : 2) aluminium oxidizes almost
immedietly ! The way to solder to aluminium without special solders/
fluxes is to scrape the surface, and then immediatly apply hot iron and
solder. Then solder will adhear to it! As a side note, concerning
the oxidation of aluminium, consider that the silver powder in fireworks
is powdered aluminium! Have a friend , whose dad told of his experience
with it (powdered)-- was used to make aluminium based paint- he was told
by his boss to get rid of it-- threw it into an incinerator-- and,
KABKOOIE ! as info, Jim NN7K

Isaac Wingfield wrote:
>
> Silver-bearing solder is for use with silver plated terminal strips
> (such as Tektronix used to use); silver in the solder prevents the
> silver on the terminals from being dissolved by the solder and ruined.
>
> Isaac

1091. DO YOU WANT TO OBTAIN MANY DOLLARS?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 21:10:08 UTC
From: darting@latinmail.com
Message-ID: <e12fe651.0501161310.2574ca6e@posting.google.com>
Source record: 83330

YOU WANT TO OBTAIN MANY DOLLARS ?
I've been trying to figure out the way to make extra money in the internet, checking news groups and ads. It's not easy but I try to keep an open mind to opportunities. In these websites you would find messages like the one described further below. The message got me thinking:This is just a chain, I don't buy it. But, what if it works? It's not something new. People have been doing it for decades and I've never heard of anyone that have acctually made some money out of it. But, what if it works? When you really think obout it, this is a real job. I finally made up my mind and here I go. If you made up yuour mind too, or if you're still giving it a little more thought, keep reading. It won't be easy. Putting this message on every single website that you can think of, like news, newsgroups and ads will be necessary. The more you do it, the better for you (and for me too, of course), that's why it's a real job. It'll take several hours of advertising and promoting.
This chain is different because it doesn't deppend on five or ten persons to whom the masseges would have to be sent by tradditional mail. With the internet, the message is sent worldwide, available to thousands and someone (like me) it's going to go for it. Finally, did you think how much you're going to learn from this kind of task so you can use this knowledge on future jobs or projects?
Now my name is the last one on the list, where, if you decide to go on, you'll put yours at the end leaving my name as the one before last. I wish you good luck, because part of this luck is for me too.
This is the message I found:
"A few days back, when I was visiting news websites, just like you are now, I saw an article, very similiar to this one, saying you can make thousands of dollars in just a few weeks by investing only US$6ï¿½ï¿½! I thougt: "Oh no! Another fraud?" But just like most of us, I got very curious and I kept reading. The article showed six names and addresses for you to send US$1ï¿½ï¿½. Then, you have to write your name at the end of the list replacing the one on #6 and send the article to at least 200 "newsgroups" (there are thousands of these all around the world). There's no trick, that was it.
The big difference between this chain system and others is that you have a list of six members instead of five. This means that your average proffit will be fifteen times higher!!! After thinking it through with my friends, I decided to give it a try. After all, I had nothing to lose but six stamps and US$6ï¿½ï¿½, right?
I was worried about the whole thing being legal, so I contacted the Correo Central de Chile and they confirmed this chain is completely legal!!
So I invested my US$6ï¿½ï¿½.....GUESS WHAT!!!... seven days later, I

started to recieve money by mail!!! I was really surprised!!! I still thought this would end in a few days, but the money kept comming!!!
The first week I made from US$20ï¿½ï¿½ to US$30ï¿½ï¿½. By the end of the second week, I had made a total of US$1.000ï¿½ï¿½!!!!! By the third week I got more than US$10.000ï¿½ï¿½ and I was getting more. This is my fourth week and I've made over US$41.000ï¿½ï¿½ and It's still comming (my family spend the time opening the envelopes and I spend my time finding "newsgroups"). This is getting serious!!!
At the end, it really paid the US$6ï¿½ï¿½ and six stamps investment. I sure spent more on lotto!!!
Let me explain how it works, and most of all, the reason why it works so well. Make sure to print a copy of this article RIGHT NOW so you can get all the information needed.
It's a very simple 3 step process:
STEP Nï¿½1: Get six pieces of paper and write this down on everyone: "PLEASE INCLUDE ME IN YOUR ADDRESS LIST OR E-MAIL." Now get six US$1ï¿½ï¿½ bills. Then, fold the papers and put the one dollar bill in each so it won't be seen through the envelope. It'll be better if you cover the bill with a dark color paper so it won't be stolen. At the end you'll have six sealed envelopes with six one dollar bills enclolsed. By doing this you're creating a "service" which makes it ABSOLUTELY LEGAL!!!
Send the envelopes to the following addresses:

1. Oscar Javier Rodrï¿½guez z
CR 31 # 45 - 23 barrio el triunfo, Villavicencio Colombia

2. Jorge Balcï¿½zar
Convento San Juan de los Lagos Nï¿½ 36, Jardines de Santa Mï¿½nica, C.P. 54050, Tlalnepantla, Estado de Mexico, Mï¿½XICO

3. Marco Vinicio Gramajo Leal
2a. Avenida 4-66 Zona 1, Mazatenango Suchitepequez, Guatemala, Centro Amï¿½rica.

4. Ricardo Portillo Arteaga
Calle Gonzalo de Berceo Nï¿½ 52 piso 2ï¿½ letra B, codigo postal 26005, Logroï¿½o - La Rioja, Espaï¿½a.

5. Javier Piï¿½eros Barreto
Carrera 72 No 62 f 33 sur, manzana 2 entrada 3 apto 102, Urbanizaciï¿½n Calabria, Bogota Colombia,

6. JAVIER DARIO ARENAS
Apartado postal : 243003
ADPOSTAL: Palmira - Valle Del Cauca - Colombia
Email: adarting@hotmail.com o darting@latimail.com

STEP2: Remove name #1 of the top of the list and move the other names one number up (#6 becomes #5 and so on), add your name and address as #6. REMEMBER, YOU MUST REMOVE #1 NOT #6, MODIFY THE NUMBER ON THE REMAINING NAMES AND ADD YOUR NAME AND ADDRESS TO THE LIST AS #6.

STEP3: Change all those things you consider to be changed in this article, but try to keep it as close to the original as possible. Now put your article on at least 200 "newsgroups" (there are more than 24.000 groups). Just search in google.com by the keyword "newsgroups" and you'll find more than 56.000 items. You just need 200, but the more you put the article on line, the more money you'll get!!
These are instructions to get into the "Newusgroups":
Nï¿½1 Since you must have your own article, there's no need to write it all over again. Just select the whole text and use the "copy" function from the "edit" menu.
Nï¿½2 Create a "notepad" file and "paste" the text, also using this function from the "edit" menu. Now you have the text as a notepad file and you can add your name and address as #6.
Nï¿½3 Save the text as a .txt file. This will make It easier for you to make chages on the text whenever you want.
FOR THOSE WHO USE NETSCAPE
Nï¿½4 In the Netscape browser go to "window" and select "netscapeNews". Then, select "options" from the menu and then selct "show all Newsgroups" so you can get the list of all the "Newsgroups" in the server. Click on any of the newsgroups, and then click on "TO NEWS", it should appear at the top on the left. This will lead you to the messages box.
Nï¿½5 Fill in that space. That will be the title everyone will see when visiting any group.
Nï¿½6 Copy your article and paste it there. Go back to the Newsgroup and "TO NEWS" and you'll be creating and pasting inside the program or "posting".
Nï¿½7 Click on "send" AND YOU'RE DONE!..CONGRATULATIONS!!
TO THOSE WHO USE INTERNET EXPLORER
Step Nï¿½4 Go to Newsgroups and select "Post an article".
Step Nï¿½5 Load the article
Step Nï¿½6 Repeat step Nï¿½6 for the Netscape users.
Step Nï¿½7 Press "Post"
THAT'S ALL! All you have to do is search for different Newsgroups. After a few loads, It'll take like 30 seconds to put the article in each newsgroup!
Eventually you might want to get a P.O Box ‘cause you're gonna get a great ammount of envelopes. You can also use a nickname as long as the address is correct. MAKE SURE THAT ALL THE ADDRESSES ARE CORRECT.
Now, let's check the numbers:
Supose I only get 5 answers out of 200 sent messages (which is a really low example), then I made US$5ï¿½ï¿½ with my name as #6 on the list. Now, if everyone who sent me US$1ï¿½ï¿½ contact a minimum of 200 Newsgroups too, all of them with my name as #5 on the list, and just five answer to the 5 original messages, I'll get US$25ï¿½ï¿½. This 25 persons put my name as #4 on a minimum of 200 Newsgroups getting just 5 answers I'd be makin another US$125ï¿½ï¿½. Then, 125 persons put my name as #3 on a minimum of 200 Newsgroups, again getting just 5 answers, I'd be getting another US$625ï¿½ï¿½ and so on!! With my name as #2 I'll get US$3.125ï¿½ï¿½, and as #1, US$15.625!!!

Now, as I said before, getting only 5 answers is extreeme, the real average of answers is 20 to 30, so DO THE MATH!!!
Once your name is out of the list, get the last ad on the newsgroup and send the US$6ï¿½ï¿½ to the names listed and put yours as #6 and start all over!!
Just remember: Thousands of people all around the world surf the Internet every day reading the article just like you and me! So I think many of them wont see a problem on investing US$6ï¿½ï¿½ to see if it really works. I know that some will think, "what if no one answers?" No way!!! What are the chances that will happen, when there are millions of honest persons (like us) who need to pay bills, who are looking for financial independence and who are willing to give it a shot.
You can also do this by getting at least 200 e-mails. With this system, the probbability of success is 5% to 15%. Eather way you do it, always remember to be honest and I promaise you It will work.
Just make sure to print this article NOW. Try to keep a list to track all those who sent you money. Keep checking the newsgroups so you can see if everyone is playing fair. REMEMER, HONESTY ES THE BEST WAY TO GET WHAT YOU WANT. I've heard of people who sent the message with their names on the list but without sending the money and they hardly recieved any money back.
TIME IS IMPORTANT! Don't wait more than seven days from the moment you see this article! Let's follow the rules so we can all win! Don't forget to mention this extra money on your tax declaration. THANK YOU AND GOOD LUCK!

1092. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 21:12:27 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <3503v9F4fva6hU2@individual.net>
Source record: 83332
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Venting of one's spleen" is an idiomatic expression
of the English-speaking world, but not, apparently
of Yankland.

"Ed Price" <edprice@cox.net> wrote in message
news:LyAGd.2722$0B.312@fed1read02...
> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:34vlmgF4genldU1@individual.net...
> > Reg - I think that you need to be aware of Noedings
> > disparaging remarks about this NG that prompted my
> > critique of him.
> > You do not represent me in any way, BTW.
> > "Airy R.Bean" is not a false name, it is a pseudonym, and is
> > a practice to be commended to all who have dealings with
> > u.r.a because of the presence of several vicious and mentally
> > unstable characters who vent their CB spleens herein.
> Spleens got vents?!

1093. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 21:15:40 UTC
From: CW <cmagers@earthlink.net>
Message-ID: <KOmdnffjQo1yRXfcRVn-vg@comcast.com>
Source record: 83331
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

You have a defective dictionary.

"Jock." <real_class_a2003@yahoo.fr> wrote in message
news:sptiu01dkg29046dim1ncg01qenfa15qj4@4ax.com...
> On Sat, 15 Jan 2005 09:31:11 -0800, "CW" <cmagers@earthlink.net> wrote:
>
> >Did you notice the word "amature" in the newsgroup title? You might want
to
> >consult a dictionary for the definition of that word.
>
> Isn't in my dictionary.
>
>
> Jock.
>
> --
>
> "The graveyards are full of indispensable men."
> - Charles de Gaulle (1890-1970)

1094. Re: Tuning an AEA Halo on 6m?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 21:26:07 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <PZAGd.11054$wZ2.211@newssvr13.news.prodigy.com>
Source record: 83333

Ken- consider that these are a high "Q" device (narrow bandwidth)
and, that they are a tuned loop (the ends of the two rods form a
CAPACITOR-- and the plates of a capacitor increase capacitance, the
closer they get! The higher the capacitance, the lower the frequency.
The antenna , itself , is an inductor, and that INDUCTANCE doesnt
change.
"Tis that simple-- Jim NN7K

Ken Bessler wrote:
> I got a AEA halo for 6m and put it up. Worked good but the
> low SWR point was 51.000 with a 1mhz 2:1 bandwidth.
>
> I wanted to adjust it so I got a 1:1 SWR at 50.500 so I took
> it down and loosened the loop overlap screws. I then stretched
> the loop out 2", figuring longer = lower freq.
>
> The low SWR point CLIMBED 800 khz!?!?!? WTF?
>
> I pulled it back down and made the antenna *shorter* than I started
> and bingo! It now shows 1:1 SWR at 50.500 mhz yet still shows
> acceptable SWR on the local 6m repeater's input (51.130). 52.525
> is out - SWR too high. :-(
>
> Will someone please explain why this antenna seems to defy
> conventional tuning standards?
>
> Ken KG0WX
>
>
>

1095. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 22:21:33 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <3507n1F4eseqdU1@individual.net>
Source record: 83334
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Airy R.Bean wrote:

> "Venting of one's spleen" is an idiomatic expression
> of the English-speaking world, but not, apparently
> of Yankland.
more likely an expression used on your planet, TheAnus, but not planet
Earth.
...(_!_)...

1096. Re: It's the L.I.A.R. wot stokes the fire.....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 22:30:56 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <10ulqop79i6h259@corp.supernews.com>
Source record: 83335
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Airy R.Bean wrote:

> "Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
> news:34qdujF4dc60sU1@individual.net...
>
>>All signs of insecurity. If Gareth was sure of himself he could debate /
>>discuss at a technical level. I can't ever actually recall him doing this.
>>I'm sure there will be a name for his condition, probably even treatment.
>
>
>
So when are you going to stop?

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

1097. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 23:05:19 UTC
From: "Jock." <real_class_a2003@yahoo.fr>
Message-ID: <pmslu0ln941k97jtmv2u9a33lsp9cd0uvr@4ax.com>
Source record: 83336
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sun, 16 Jan 2005 13:15:40 -0800, "CW" <cmagers@earthlink.net> a cretinous
top-poster, wrote:

>"Jock." <real_class_a2003@yahoo.fr> wrote in message
>news:sptiu01dkg29046dim1ncg01qenfa15qj4@4ax.com...
>> On Sat, 15 Jan 2005 09:31:11 -0800, "CW" <cmagers@earthlink.net> wrote:
>>
>> >Did you notice the word "amature" in the newsgroup title? You might want
>to
>> >consult a dictionary for the definition of that word.
>>
>> Isn't in my dictionary.

>You have a defective dictionary.

Really? Suppose you tell us what it means to save me looking
it up.

Jock.

--

"Do not fear to be eccentric in opinion, for every
opinion now accepted was once eccentric."
- Bertrand Russell

1098. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 23:30:32 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41eafa6b$1_2@127.0.0.1>
Source record: 83337
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

NSM wrote:
> "Cecil Moore" <w5dxp@hotmail.com> wrote in message
> news:41e9679a$1_2@127.0.0.1...
>
> | The "cold heat" soldering iron works on the same principle as
> | an electric welding machine. Thus, there is the germ of a good
> | idea there. How about a soldering iron using the same principle
> | as the "cold heat" soldering machine except run off of 110VAC?
> | It could be transformer isolated, run on low voltage, and thus
> | be perfectly safe, but with a nearly unlimited source of power
> | to overcome the battery power limitation.
>
> Hmm, doing that up a pole in wet, cold weather. Why do I see a Homer Simpson
> episode in my mind?

Completely transformer/shielded. Why would it be less safe than a
welding machine?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1099. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 23:34:50 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41eafb6e$1_2@127.0.0.1>
Source record: 83339
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Jock. wrote:

> "Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote:
>>Well Richard, over the years I'm met many Americans (I am pleased to say).
>>I've always though they sought to do things well- even within their hobbies.
>>Clearly, you are the exception.
>
> They are unerringly stupid - to a man.

Stupid enough to save Europe's posterior at least nthree
times in 100 years at tremendous cost and sacrifice.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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1100. Re: I have a dumb question about antenna building

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 23:39:22 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10uluo1bmfdg0e6@corp.supernews.com>
Source record: 83338

Dear Roy:
No, Mr. Clark is not a lawyer. As I recall, he is a long time grad
student with an exceptional vocabulary and a dislike of some of the
Constitution.

I am a lawyer and a patent attorney (and I support every bit of the
Constitution). No exception exists to make a copy of a patented item for
personal use.

73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10tml4f5rqq0f0a@corp.supernews.com...

>
> So by your interpretation of the law, it's ok for anyone to make a copy of
> a patented item for personal use (which was the original statement)?
> That's not obvious to me from the short quotes you gave, and I'm
> surprised in any case that you can draw such a sweeping conclusion from
> a couple of paragraphs. But then, I'm not a lawyer. Are you?
>
> Roy Lewallen, W7EL

1101. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 23:42:41 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41eafd45$1_2@127.0.0.1>
Source record: 83340
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

R. F. Burns wrote:
> I'm certainly not too worried because they seem to have too hard of a
> time proving anything. Unlike smoking and lung cancer anyway.

How many years was it from the first smoke until the lung cancer link
was suspected? How many years was it from the first cellphone until
brain tumors were suspected? It is unlike only in the amount of time.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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1102. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 23:45:30 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41eafdee$1_2@127.0.0.1>
Source record: 83342
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Reg Edwards wrote:
> Please accept an ordinary Englishman's apologies for the obnoxious behaviour
> of a fellow human being ...

I don't know about that, Reg. He doesn't seem to be the same
species as you.
--
73, Cecil http://www.qsl.net/w5dxp

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1103. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 23:48:15 UTC
From: Dave D <dave-d@dave-d.com>
Message-ID: <41eafd3e$0$16573$cc9e4d1f@news-text.dial.pipex.com>
Source record: 83341
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,alt.engineering.electrical

"Jim - NN7K" <nn7kexk7zfg@NOSPAMsbcglobal.net> wrote in message
news:sJAGd.11052$wZ2.2706@newssvr13.news.prodigy.com...
As a side note, concerning
> the oxidation of aluminium, consider that the silver powder in fireworks
> is powdered aluminium! Have a friend , whose dad told of his experience
> with it (powdered)-- was used to make aluminium based paint- he was told
> by his boss to get rid of it-- threw it into an incinerator-- and,
> KABKOOIE ! as info, Jim NN7K
>

IIRC, 'Thermite' is made from Iron Oxide and Aluminium powder, and that
burns rather hot!

Dave

1104. Re: vertical antenna choices

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 23:49:44 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41eafeeb$1_2@127.0.0.1>
Source record: 83343

Reg Edwards wrote:
> The best vertical is an approximately vertical wire ...

Hi Reg, IMO, the best vertical is horizontal. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
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1105. Re: DO YOU WANT TO OBTAIN MANY DOLLARS?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-16 23:53:44 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41eaffdc$1_2@127.0.0.1>
Source record: 83344

javier wrote:
> YOU WANT TO OBTAIN MANY DOLLARS ?

Nope, the dollar is tanking. I would much rather obtain
many ounces of gold.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
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1106. Re: vertical antenna choices

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 00:26:46 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <ub1mu0t3mv5phvlua988mjng7b07rn7a2e@4ax.com>
Source record: 83345

On Sun, 16 Jan 2005 08:16:34 -0500, Jerseyj <jerseyj69@comcast.net>
wrote:

>Hi all,
>Seems like there is a bewildering choice in vertical antennas. My "dream
>antenna" would be:
>
> Not higher than 35 feet
> Requires no guying
> covers 10-160 including WARC bands
> Has a "reasonable" bandwidth in each band with
> less than 2:1 SWR (I know this is a tough one to include 160 for)
> No radials
> Automatically tunes for each band (meaning I don't have to go
> to the antenna to do something to change from 10 meters to working
> on 40 Meters)
>
>There seems to be a large number of choices, none of which does quite
>all of that (maybe I missed some, suggestions are welcome). Seems like I
>have at least some good choices going 10-80 but when I include 160 they
>go away.
>
>I'm interested in any suggestions or experiences with verticles as noted
>above.
>'
>Jerry

The feature set you're looking for probably doesn't exist. Try
http://www.cebik.com/radio.html for all kinds of homebrew ideas,
vertical, horizonal and other planes, too...

bob
k5qwg

1107. Re: Stub revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 00:39:55 UTC
From: jgboyles@aol.com
Message-ID: <20050116193955.10663.00000095@mb-m29.aol.com>
Source record: 83346

>What is an example of using a stub on a ham antenna, its real purpose
>and how it does it?

Hi, A stub used on a ham antenna is generally a "matching" stub. It is a section of transmission line that exhibits capacitive or inductive reactance depending on the length and termination of the line. (open or short). Used to transform a complex antenna impedance to the feedline characteristic impedance. It may or not require other devices to realize a successful impedance transformation.
I don't know what an R5 is, on beams, a hairpin match (stub) is often used for impedance matching.
73 Gary N4AST

1108. Re: DO YOU WANT TO OBTAIN MANY DOLLARS?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 00:55:08 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <10um37t5cm7307@corp.supernews.com>
Source record: 83347

Cecil Moore wrote:
> javier wrote:
>
>> YOU WANT TO OBTAIN MANY DOLLARS ?
>
>
> Nope, the dollar is tanking. I would much rather obtain
> many ounces of gold.

Actually you should invest in platinum. It is about twice as valuable as gold.

1109. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 01:20:07 UTC
From: NSM <nowrite@to.me>
Message-ID: <bpEGd.105296$dv1.35887@edtnps89>
Source record: 83348
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41eafa6b$1_2@127.0.0.1...
| NSM wrote:

| > Hmm, doing that up a pole in wet, cold weather. Why do I see a Homer
Simpson
| > episode in my mind?
|
| Completely transformer/shielded. Why would it be less safe than a
| welding machine?

Homer and electricity. Not a good combination - ever <G>!

N

1110. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 01:20:08 UTC
From: NSM <nowrite@to.me>
Message-ID: <cpEGd.105298$dv1.49822@edtnps89>
Source record: 83349
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,alt.engineering.electrical

"Dave D" <dave-d@dave-d.com> wrote in message
news:41eafd3e$0$16573$cc9e4d1f@news-text.dial.pipex.com...

| IIRC, 'Thermite' is made from Iron Oxide and Aluminium powder, and that
| burns rather hot!

A similar product was used to paint the Hindenburg and it is now believed by many (but not all) that it was this that destroyed it. The film of the flames looks 'wrong' for a hydrogen fire. A sample of the skin, which had been saved for many years, was subjected to a spark test and burned with great enthusiasm.

See http://en.wikipedia.org/wiki/Hindenburg_disaster

N

1111. Re: ATU capacitors?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 01:38:00 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <350j7cF4g28eaU1@individual.net>
Source record: 83350
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Airy R.Bean, village idiot" <retarded@twat> wrote in message
news:34vlmgF4genldU1@individual.net...
>
> You do not represent me in any way, BTW.
Thanks Beanie, that must be a great relief to him.
>
> "Airy R.Bean" is not a false name, it is a pseudonym, and is
> a practice to be commended to all who have dealings with
> u.r.a because of the presence of several vicious and mentally
> unstable characters who vent their CB spleens herein.
>
but since everyone here (with the possible exception of yourself) knows your
real name, that won't work.
The sock puppet you use is an anagram of another contributor, a person of
whom you appear insanely jealous.
Grow up Mr Evans, at nearly 54 years old you should know better.
...(_!_)...

1112. Re: DO YOU WANT TO OBTAIN MANY DOLLARS?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 02:06:26 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <41eb2055_3@news1.prserv.net>
Source record: 83351

The Euro seems to be the best bet at the moment. But wait for deregulation of the Yuan. And what Platinum prices are
you using? When I checked many years ago when someone touted Platinum as a good hedge bet, it ran some 15-20% higher
per ounce than Gold. Then Gold went up while Platinum stagnated, and the per ounce price was close to the same for a
while. I admit, not being a Gold Bug, I haven't followed it in a number of years, however.

--
Crazy George
Remove N O and S P A M imbedded in return address
"David G. Nagel" <nagel@core.com> wrote in message
news:10um37t5cm7307@corp.supernews.com...
> Cecil Moore wrote:
> > javier wrote:
> >
> >> YOU WANT TO OBTAIN MANY DOLLARS ?
> >
> >
> > Nope, the dollar is tanking. I would much rather obtain
> > many ounces of gold.
>
>
> Actually you should invest in platinum. It is about twice as valuable as
> gold.
>

1113. Re: N8WWM..child abuser..felon...repeater jammer..ordered to see head shrink

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 02:13:43 UTC
From: Nisyros Nyiragongo <rolf183@yahoo.com>
Message-ID: <350la7F4efqieU1@individual.net>
Source record: 83352
Cross-posted to:
rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.swap,alt.ham-radio.vhf-uhf,rec.radio.amateur.misc

"Steveo" <moparholic@hotmail-nospam.com> wrote in message
news:20050115083431.729$7o_-_@newsreader.com...
> N8WWM Doug Adair"Psychiatrist to keyclowns" <keyklonzrnutjobs@yahoo.com>
> wrote:
> >other people also think you are a mentally
> > screwed up hunk of keyclown garbage.
> >
> You have a lot of nerve calling anyone mentally screwed up, Doug.
>
> Questions:
>
> 1. How is the court ordered shrink working out for you?
>
> 2. How's the court ordered job hunt going?
>
> 3. How's the court ordered wage withholding going?
>
> 4. Have you made the rain report for jamming repeaters again, Doug?
>
> 5. Have you threatened to kick anyone elses ass, only to have them show
> up at your section 8 slum and prove what a fucking coward you are, maggot?
>
> Go lay down by your bowl, dogie.

very poor. you get a D- in Insulting 101. Not even Troll Grade.

1114. Re: DO YOU WANT TO OBTAIN MANY DOLLARS?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 02:25:05 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <fb8mu01l0klp59mvlm36t5had7jsr2br8o@4ax.com>
Source record: 83353

On Sun, 16 Jan 2005 17:53:44 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

>javier wrote:
>> YOU WANT TO OBTAIN MANY DOLLARS ?
>
>Nope, the dollar is tanking. I would much rather obtain
>many ounces of gold.

Had a stockbroker tell me once an ounce of gold has always been worth
about what a cheap men's suit costs. Not much more, not much less.
Probably better investments.

bob
k5qwg

1115. Tuner smoke!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 02:29:30 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <eqFGd.18256$ph.4264@okepread01>
Source record: 83354

I have 2 HF antennas - a 160/80 trap dipole (coax traps)
fed with 60' of coax directly and a shortened Van Gordon
"All Bander", cut to 7.165 mhz, fed in the following order:

Tuner
20' RG58 coax leading outside
9 turns rg 58 on a 5-1/4" air form
50' 450 ohm ladder line
Antenna

I tried tuning the 160 antenna on 18mhz and the tuner was
fighting me all the way. Would I do better to try and only
use the 40m antenna with the tuner from 30-10m because
of the ladder line? I'm guessing that I'd do better on 60m
with the larger antenna but I'm not sure. 95% of my HF
operating is below 7.300mhz, where the tuner is in bypass
mode.

Facts:

Rig FT-857D
Power 100w
Tuner: MFJ-941C
The big antenna resonantes at 1.875 & 3.890 mhz.....

73's de Ken KG0WX

1116. Re: vertical antenna choices

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 03:25:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10umc288398rs01@corp.supernews.com>
Source record: 83355

For DX or anything beyond a few hundred miles, you shouldn't make your vertical taller than about 5/8 wavelength. At greater heights, the radiation at low angles decreases and the radiation at high angles increases. So taller isn't always better. You probably won't be able to construct a single vertical that's reasonably efficient on the lower frequency bands without being too long for low angle radiation on the higher frequency bands, unless you include some sort of trap(s) to limit the length of the radiating portion on the higher bands.

Roy Lewallen, W7EL

Reg Edwards wrote:
> Jerry, KISS
>
> The best vertical is an approximately vertical wire, rod or mast, as tall as
> possible . . .

1117. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 03:31:15 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10umcc9n66176a8@corp.supernews.com>
Source record: 83356
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,alt.engineering.electrical

2 or 3% silver is added to tin-lead solder to prevent leaching of gold or silver terminations from certain surface mount components (and the terminal strips in very old Tektronix scopes). These components are often used for hybrid circuits, but solder-coated terminations seem a lot more common for components intended for PCB use. I haven't seen a leaching problem with the solder-coated terminations using ordinary tin-lead solder.

Is there some other advantage of a 2 or 3% silver addition?

Roy Lewallen, W7EL

Dave Platt wrote:
> . . .

> I tend to prefer the eutectic, or a eutectic modified with 2% silver.
>

1118. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 03:35:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10umck0j74q9kc5@corp.supernews.com>
Source record: 83357
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,alt.engineering.electrical

It's inevitable that every time this topic comes up, someone confuses the 2 or 3% silver-loaded tin-lead solder with the hard solders known as "silver solder". They're entirely different things. The 2 or 3% silver-loaded tin-lead solder is a soft solder, very similar in use and properties to ordinary tin-lead solder. The "silver solders" used for brazing stainless steel and other materials are hard solders, with a much higher melting point and very different properties.

Roy Lewallen, W7EL

Jim - NN7K wrote:
> Also, there are things like stainless steel, and aluminium that don't
> like regular 60/40 solder-- however silver solder will solder to
> stainless antenna rods (repair antenna whips, ect). . .

1119. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 03:37:16 UTC
From: keith <krw@att.bizzzz>
Message-ID: <pan.2005.01.17.03.37.14.943243@att.bizzzz>
Source record: 83358
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,alt.engineering.electrical

On Mon, 17 Jan 2005 01:20:08 +0000, NSM wrote:

>
> "Dave D" <dave-d@dave-d.com> wrote in message
> news:41eafd3e$0$16573$cc9e4d1f@news-text.dial.pipex.com...
>
> | IIRC, 'Thermite' is made from Iron Oxide and Aluminium powder, and that
> | burns rather hot!
>
> A similar product was used to paint the Hindenburg and it is now believed by
> many (but not all) that it was this that destroyed it. The film of the
> flames looks 'wrong' for a hydrogen fire. A sample of the skin, which had
> been saved for many years, was subjected to a spark test and burned with
> great enthusiasm.

I guesss. Hydrogen/oxygen burns without a visible flame. The shell of
the Hindenburgh was obviously on fire. ...and it was painted with an
aluminum paint (Iron??), which was quite normal at the time.

--
Keith

1120. Re: best non-electric soldering iron?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 03:59:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bqdmu0phoebk2m9tf4mcqgpb319e55uqtq@4ax.com>
Source record: 83359
Cross-posted to:
rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,sci.engr.radar+sonar,rec.radio.amateur.homebrew

```
On Mon, 17 Jan 2005 01:20:07 GMT, "NSM" <nowrite@to.me> wrote:

>
>"Cecil Moore" <w5dxp@hotmail.com> wrote in message
>news:41eafa6b$1_2@127.0.0.1...
>| NSM wrote:
>
>| > Hmm, doing that up a pole in wet, cold weather. Why do I see a Homer
>Simpson
>| > episode in my mind?
>|
>| Completely transformer/shielded. Why would it be less safe than a
>| welding machine?
>
>Homer and electricity. Not a good combination - ever <G>!

Hmmm, the episode I see is from Married With Children where Al and
Jefferson are putting together a workbench.
```

1121. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 04:24:16 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <10umffglpc3de1a@corp.supernews.com>
Source record: 83360
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,alt.engineering.electrical

Yes. This little addition of silver adds a very LARGE amount of strength to the joint. PLEASE don't ask me to climb up to the top shelf to give you numbers.... {;-)

Jim

> Is there some other advantage of a 2 or 3% silver addition?
>
> Roy Lewallen, W7EL

1122. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 05:04:27 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <csfh0r$2ok$1@mail.specsol.com>
Source record: 83361
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,alt.engineering.electrical

In rec.radio.amateur.antenna Roy Lewallen <w7el@eznec.com> wrote:
> 2 or 3% silver is added to tin-lead solder to prevent leaching of gold
> or silver terminations from certain surface mount components (and the
> terminal strips in very old Tektronix scopes). These components are
> often used for hybrid circuits, but solder-coated terminations seem a
> lot more common for components intended for PCB use. I haven't seen a
> leaching problem with the solder-coated terminations using ordinary
> tin-lead solder.

> Is there some other advantage of a 2 or 3% silver addition?

> Roy Lewallen, W7EL

Higher melting point and greater strength; specialty applications.

--
Jim Pennino

Remove -spam-sux to reply.

1123. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 05:41:36 UTC
From: dplatt@radagast.org
Message-ID: <10umk0gc7lpot84@corp.supernews.com>
Source record: 83362
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,alt.engineering.electrical

In article <10umcc9n66176a8@corp.supernews.com>,
Roy Lewallen <w7el@eznec.com> wrote:

>2 or 3% silver is added to tin-lead solder to prevent leaching of gold
>or silver terminations from certain surface mount components (and the
>terminal strips in very old Tektronix scopes). These components are
>often used for hybrid circuits, but solder-coated terminations seem a
>lot more common for components intended for PCB use. I haven't seen a
>leaching problem with the solder-coated terminations using ordinary
>tin-lead solder.
>
>Is there some other advantage of a 2 or 3% silver addition?

A fair number of surface-mount components (caps and resistors) use
silvered terminations. Some of them have an anti-leaching coating
over the silver (nickel, or solder with or without silver), others
don't. There's also silver plating on some of the RF connectors I
use. I'm probably being excessively cautious, but figure that it
can't hurt to use a silver-loaded solder and it might save me one or
two failures over time.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1124. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 05:55:45 UTC
From: NSM <nowrite@to.me>
Message-ID: <BrIGd.106013$dv1.103538@edtnps89>
Source record: 83363
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,alt.engineering.electrical

"keith" <krw@att.bizzzz> wrote in message
news:pan.2005.01.17.03.37.14.943243@att.bizzzz...
| I guesss. Hydrogen/oxygen burns without a visible flame. The shell of
| the Hindenburgh was obviously on fire. ...and it was painted with an
| aluminum paint (Iron??), which was quite normal at the time.

Apparently this was the first time this particular product was used - and
the last as the Zeppelin company did further tests on the paint and never
used it again.

N

1125. Is BPL going to take up more spectrum?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 08:14:41 UTC
From: yea right <spam@spam.spam>
Message-ID: <pan.2005.01.17.08.14.38.913453@spam.spam>
Source record: 83364
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.radio.amateur.dx

http://broadcastengineering.com/newsletters/bth/20050116/gigabit-data-power-20050116/

With a repeater every mile, they will not be able to fulfill the goal of
cheap Internet for rural users. AUT (another useless technology)

1126. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 10:14:25 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <fU2iVfABA56BFw98@g3ohx.demon.co.uk>
Source record: 83365
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In message <41eafd45$1_2@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
writes
>R. F. Burns wrote:
>> I'm certainly not too worried because they seem to have too hard of a
>> time proving anything. Unlike smoking and lung cancer anyway.
>
>How many years was it from the first smoke until the lung cancer link
>was suspected? How many years was it from the first cellphone until
>brain tumors were suspected? It is unlike only in the amount of time.

It is also 'unlike' in that the link between smoking and lung cancer is
a 100% proven fact (well known since the 1950s) whereas the link between
cellphones and brain tumours is at best tenuous.

Surprisingly, people are suing tobacco companies on the grounds that
'they didn't know' that smoking was bad for you. I suspect that these
are the same type of people who want to ban phone masts, but not the
phones themselves, of course, ie pretty thick!

Ian.
--

1127. Re: It's the L.I.A.R. wot stokes the fire.....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 11:16:07 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <351lqrF4hkhpvU1@individual.net>
Source record: 83366
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Mr.Westcott continues with his series of vacuous and infantile posts.....

"Tim Wescott" <tim@wescottnospamdesign.com> wrote in message
news:10ulqop79i6h259@corp.supernews.com...
> Airy R.Bean wrote:
> > "Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
> > news:34qdujF4dc60sU1@individual.net...
> >>All signs of insecurity. If Gareth was sure of himself he could debate /
> >>discuss at a technical level. I can't ever actually recall him doing
this.
> >>I'm sure there will be a name for his condition, probably even
treatment.
> So when are you going to stop?

1128. MOS-FET 10 Watt PA

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 13:49:54 UTC
From: andreas magun <achmagun@bluewin.ch>
Message-ID: <41ebc236$1_2@news.bluewin.ch>
Source record: 83367

can some kind soul point me to the schematics of a linear
(approx.) 10 Watt MOSFET Poweramplifier with protection against
a wide range of load impedances (short or open).

Andreas

1129. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 14:24:15 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41ebcbe4$1_1@127.0.0.1>
Source record: 83368
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Ian Jackson wrote:
> It is also 'unlike' in that the link between smoking and lung cancer is
> a 100% proven fact (well known since the 1950s) whereas the link between
> cellphones and brain tumours is at best tenuous.

That is only a time displacement. In 1900, after hundreds (thousands?)
of years of tobacco use, the link between smoking and lung cancer was
"at best tenuous".
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1130. Re: MOS-FET 10 Watt PA

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 14:28:21 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <vtGdnQ4kDOziVnbcRVn-1Q@comcast.com>
Source record: 83369

"andreas magun" <achmagun@bluewin.ch> wrote in message
news:41ebc236$1_2@news.bluewin.ch...
> can some kind soul point me to the schematics of a linear
> (approx.) 10 Watt MOSFET Poweramplifier with protection against
> a wide range of load impedances (short or open).
>
> Andreas

Check out www.communication-concepts.com . They have ap notes and kits of parts based on Motorola designs. There are bipolar amplifiers, down to about 20 W. FETs generally require at least 28 or 48 VDC, and you will have trouble finding a design for less than about 100W output, although I have seen some low power amps (in QST) based on IRF series switching transistors.

If this is for VHF or UHF, you can go to www.rfparts.com , and find complete Mitsubishi and Toshiba modules.

Tam/WB2TT

1131. MFJ vs SGC automatic antenna tuners??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 15:06:12 UTC
From: Spam <spamcollector@sympatico.ca>
Message-ID: <pan.2005.01.17.15.06.11.322900@sympatico.ca>
Source record: 83273

I have used an SGC 230 automatic antenna tuner in a maritime mobile application.

It is basically a PI-network tuner. However the capacitors on the input or output side of the PI-network need not be utilized, so it self configures as:

1. PI-network

2. L-network with an input capacitor for matching low Z loads.

3. L-network with an output capacitor for matching high Z loads.

The switched input capacitor values are 100, 200, 400, 800, 1620, and 3200 pf.

The switched output capacitor values are 25, 50, 100, 200, and 400 pf.

The switched inductor values are .25, .50, 1, 2, 4, 8, 16 and 32 uh.

The capacitors are switched in and out in parallel. The inductors are switched in and out in series.

The input C can assume values from 100 to 6320 pf in steps of 100 pf. The output C can assume values from 25 to 775 pf in steps of 25 pf. L can assume values from .25 to 63.75 in steps of .25 uh.

The ARRL antenna tuner analyser software calculates the impedance ranges such a tuner can match.

When the 230 tuned up, it worked well. When it didn't, often tuning up on an alternate frequency and then tuning up on the desired frequency would solve the problem. Sometimes, but not always, pactor would drive the unit crazy. It would launch a tune up sequence for each packet. SGC has a mod that locks the tuned position disabling repeat tune ups. Our 230 was too old for the mod.

Unfortunately the 230 died when it was stored in tropical Australia for 3 years. Water condensed inside the sealed unit, totally filling it and corroding the circuit board. Three monsoon seasons can do that. Furuno RADAR domes have flexible plastic breather tubes designed to prevent condensation. I wish SGC had done that too or filled them with pressurized nitrogen or taken some other measure to prevent condensation.

Live and learn. I am looking for a replacement tuner.

The MFJ website states they are L-network tuners. Are they C input or C output L's?

What are the impedance ranges an MFJ tuner can match?

Are the MFJ units designed as a hefty tuner for use at the antenna or a light weight used to flatten the SWR at the transmitter?

Since they are not weather proofed, I suspect they are designed for use at the transmitter. Ditto for LDG tuners.

How would an MFJ tuner stack up against a SGC 230 or ICOM AT-120 tuner?

Tnx

Greg, ve0acr
gblair _at_ sympatico _dot_ ca

1132. Re: DO YOU WANT TO OBTAIN MANY DOLLARS?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 15:12:52 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <UBQGd.18599$by5.12730@newssvr19.news.prodigy.com>
Source record: 83370

... Same old 'pyramid' scheme. Illegal in lots of places.
Silly in all places. It's your money, though, spend it
how you like.
'Doc

PS - Invest in beer. Seriously doubt if it's price will ever
go down.

1133. Re: vertical antenna choices

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 15:15:55 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <LEQGd.18601$by5.4721@newssvr19.news.prodigy.com>
Source record: 83371

Jerry,
"Dream antenna" is exactly right...unfortunately.
'Doc

1134. Re: Best coax and entry route. (And newbie question).

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 15:19:19 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <XHQGd.18602$by5.9232@newssvr19.news.prodigy.com>
Source record: 83272

stryped,
I'd be willing to bet that you already have a 'hole' or
two in your house. Use one of those (eave vents?). The
suggestion to read all you can get your hands on is a good
one!
'Doc

1135. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictat...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 15:24:11 UTC
From: richardharrison@webtv.net
Message-ID: <10719-41EBD89B-176@storefull-3251.bay.webtv.net>
Source record: 83275

ZZZPK wrote:
"Capacoitance and capacitive reactance are two separate things."

Yes. But, they are inextricably related by:

Capacitive reactance = 1 / 2 pi f C
where pi = approx. 3.1416,
f = frequency in Hertz,
Capacitance is in Farads, and
capacitive reactance is in Ohms.

Best regards, Richard Harrison, KB5WZI

1136. Re: longwire attachment question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 15:25:48 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <0OQGd.18604$by5.18029@newssvr19.news.prodigy.com>
Source record: 83274

Mike,
A 'long wire' (really a 'random wire', but that's being
picky) can have an input impedance all over the place depending
on the frequency of use. Most receivers just aren't too
picky about it, so try it and see what you get in reception.
You can always experiment with antenna length or matching
systems to improve things, but in most cases, they aren't
going to make a lot of difference.
'Doc

1137. Re: what Z range ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 15:44:05 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <csgmg5dqo1@hercules.btinternet.com>
Source record: 83276

> "RB" wrote
> > Longwire antenna. Coil in parallel with var cap for matching circuit.
> >
> > What is the likely Z range such a circuit might match?

> --

To put you in a good-enough ball-park, the input impedance of a vertical wire, or an inverted-L antenna, is R + jX, where -

R = Square(24 * L / Lambda) ohms.

X = - 550 / Tangent(Angle) ohms,

and where

L = overall length of the wire in metres.

Lambda = free-space wavelength in metres.

Angle = 2 * Pi * L / Lambda, in radians.

Or alternatively,

Angle = 360 * L / Lambda, in degrees.

For a thick lattice mast, change 550 to 350.

If you know what it is, add the ground electrode resistance to R. Otherwise make a guess.

The foregoing good-enough approximations apply to overall wire lengths or heights of 3/8 wavelengths or shorter.

Note that when L / Lambda passes through 1/4-wavelength, the reactance X passes through zero and changes from negative (capacitative) to positive (inductive). And R passes through 36 ohms as is common knowledge.

About the only practical use of the above pair of equations is if you intend to follow by designing your own tuner, coil and capacitor values. Or checking that a commercial tuner has an adequate range of operation. For this a small computer program is needed unless you have hours to spend on doing the unavoidable calculations.

But the real value of such simple equations lies in their ability to precisely and very succinctly describe how antennas WORK. Far, far better than thousands of vague words, spread over years, from agumentative, disruptive, albeit well-intentioned do-gooders.

Reg, G4FGQ

1138. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 15:54:45 UTC
From: KW <ken.g1itv@MTLworld.com>
Message-ID: <9dRGd.73$Om2.5@newsfe2-gui.ntli.net>
Source record: 83277
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41ebcbe4$1_1@127.0.0.1...
> Ian Jackson wrote:
>> It is also 'unlike' in that the link between smoking and lung cancer is a
>> 100% proven fact (well known since the 1950s) whereas the link between
>> cellphones and brain tumours is at best tenuous.
>
> That is only a time displacement. In 1900, after hundreds (thousands?)
> of years of tobacco use, the link between smoking and lung cancer was
> "at best tenuous".

and at worst..... "Tumor(ous)"

KW

1139. Re: MOS-FET 10 Watt PA

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 16:53:47 UTC
From: streamliner@aol.com
Message-ID: <41ebebfa.10130116@usenet.magma.ca>
Source record: 83278

On Mon, 17 Jan 2005 14:49:54 +0100, andreas magun
<achmagun@bluewin.ch> wrote:

The ARRL handbook 2004 page 17.87 has WA2EBY plans for an IRF510
MOSFET linear amp 160 thru 10 meters, 20 watts at 13.8 volts or 40
watts plus on 28 volts.
Nigel VE3ELQ

>can some kind soul point me to the schematics of a linear
>(approx.) 10 Watt MOSFET Poweramplifier with protection against
>a wide range of load impedances (short or open).
>
>Andreas

1140. Help Re wireing a Mizuho KX-2 Sky Coupler

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 17:45:56 UTC
From: big boy now <shogun1965@lycos.co.uk>
Message-ID: <oRSGd.164761$Z7.122187@fe2.news.blueyonder.co.uk>
Source record: 83279

I know its a cheap make but the build quality is very good to excellent and it matches in with my AOR AR5000 and SDU5600 and works well....

were i need the help is the only weak point with this ATU is the two small switches. one of has fell apart inside. i have just got two good quality replacements. when i removed the top cover i found one wire off. this wire is about one and a half inches long it is connected to the tuning 2 variable capacitor this wire can only have come off the coupler off switch.....

i am looking for somebody who has this very model (MIZUHO KX-2 Sky Coupler) i want to ask could you remove the top cover and take a photo of the internal parts mainly the front controls including the two variable capacitors so i can inspect the photo,s and find out were this wire connects to....

i have searched the internet but can not find much information on this model....does anybody have or know were i can obtain a copy of the wiring diagram for the KX-2.......

John

1141. Re: MFJ vs SGC automatic antenna tuners??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 17:54:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jrunu0lukbsn7mg9op5e62ltqpvv5q4163@4ax.com>
Source record: 83280

On Mon, 17 Jan 2005 10:06:12 -0500, Spam <spamcollector@sympatico.ca>
wrote:

>What are the impedance ranges an MFJ tuner can match?
>
>Are the MFJ units designed as a hefty tuner for use at the antenna or a
>light weight used to flatten the SWR at the transmitter?

Hi Greg,

These, and other questions, are answered at:
http://www.mfjenterprises.com/man/pdf/MFJ-991.pdf

At a minimum:
"256 values of capacitance and 256 values of inductance are
available. With the inductance switched
between the input and output side, this provides a total of
131,072 L/C tuning combinations. The nominal
tuning ranges are 0 to 3900 pF and 0 to 24 ï¿½H."

73's
Richard Clark, KB7QHC

1142. Antenna lengths (apart)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 18:55:52 UTC
From: stryped@hotmail.com
Message-ID: <1105988152.345261.67890@c13g2000cwb.googlegroups.com>
Source record: 83281

How far apart should a roof mounted 440 and a 2 meter be from each other?

1143. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 19:25:57 UTC
From: Prometheus <Prometheus@127.0.0.1>
Message-ID: <glO2UpGFFB7BFwQo@newbrain.demon.co.uk>
Source record: 83282
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <fU2iVfABA56BFw98@g3ohx.demon.co.uk>, Ian Jackson
<IanJacksonRemoveThisBit@g3ohx.demon.co.uk> writes
>In message <41eafd45$1_2@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
>writes
>>R. F. Burns wrote:
>>> I'm certainly not too worried because they seem to have too hard of a
>>> time proving anything. Unlike smoking and lung cancer anyway.
>>
>>How many years was it from the first smoke until the lung cancer link
>>was suspected? How many years was it from the first cellphone until
>>brain tumors were suspected? It is unlike only in the amount of time.
>
>It is also 'unlike' in that the link between smoking and lung cancer is
>a 100% proven fact (well known since the 1950s) whereas the link
>between cellphones and brain tumours is at best tenuous.
>
>Surprisingly, people are suing tobacco companies on the grounds that
>'they didn't know' that smoking was bad for you. I suspect that these
>are the same type of people who want to ban phone masts, but not the
>phones themselves, of course, ie pretty thick!

The are probably also quite happy to have a TV transmitting mast at a
thousand or more times the power.
--
Ian G8ILZ

1144. Re: Mobile Phone/Cell Phone Health Issue (Sorry, OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 19:35:54 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <352if3F4fc5a8U1@individual.net>
Source record: 83283
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Prometheus" <Prometheus@127.0.0.1> wrote in message
news:glO2UpGFFB7BFwQo@newbrain.demon.co.uk...
> >Surprisingly, people are suing tobacco companies on the grounds that
> >'they didn't know' that smoking was bad for you. I suspect that these
> >are the same type of people who want to ban phone masts, but not the
> >phones themselves, of course, ie pretty thick!
>
> The are probably also quite happy to have a TV transmitting mast at a
> thousand or more times the power.

It is a well know fact that RF modulated with naff TV (East Enders, Big
Brother etc) is rendered safe and has no adverse effects (unless you watch
the programmes).

For those with limited technical knowledge of EM radiation (eg at a level
where they believe in heat bands) the above is intended as humour.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

1145. Re: Antenna lengths (apart)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 19:41:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <p05ou018abr0kenqduiq02s5jn35d1q7ik@4ax.com>
Source record: 83284

On 17 Jan 2005 10:55:52 -0800, stryped@hotmail.com wrote:
>How far apart should a roof mounted 440 and a 2 meter be from each
>other?

Three to Six feet from closest tips. Further is better, but not often necessary. This depends on if they remain in tune, or if you can re-obtain a tune.

1146. Re: Antenna lengths (apart)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 21:45:00 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncuoces.2na.bit-bucket@shell.config.com>
Source record: 83285

On 17 Jan 2005 10:55:52 -0800, stryped@hotmail.com wrote:
> How far apart should a roof mounted 440 and a 2 meter be from each
> other?

A "roof mounted 440 and a 2 meter" WHAT?

Antennas I suppose -- but the volume of OT posts here does not
preclude something else.

What kind of antennas? Vertical, horizontal, loop, yagi,
co-linear, fixed, rotated, common-mast, side-by-side, one
above the other?

The better questions _always_ get the better answers.

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

1147. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 22:05:24 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <41ec3962_1@news1.prserv.net>
Source record: 83286
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,alt.engineering.electrical

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10umcc9n66176a8@corp.supernews.com...

<snip>
(and the
> terminal strips in very old Tektronix scopes).
<snip>
> Roy Lewallen, W7EL

HEY! I resemble that statement. What do you mean VERY OLD? Seems like just last week.

--
Crazy George
Remove N O and S P A M imbedded in return address

1148. Re: Antenna lengths (apart)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 22:18:42 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41ec3b18$1_2@127.0.0.1>
Source record: 83287

stryped@hotmail.com wrote:
> How far apart should a roof mounted 440 and a 2 meter be from each
> other?

Separate transmitters? How much power? The answer is different for
two 500w repeaters than it is for a dual-band 5w HT.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1149. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 23:20:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10uoi2p9cir511b@corp.supernews.com>
Source record: 83288
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,alt.engineering.electrical

Thanks, a web search was educational. Although one or two sources show only a single melting/solidifying temperature of 179 degrees C for 62Sn/36Pb/2Ag solder, others show a 10 degree C pasty range, with solid and liquid temperatures of 179 and 189 degrees respectively. This range is a bit wider than for, say, 60/40 solder which has an 8 degree range. This would be a disadvantage (probably a minor one) to using the silver-loaded solder.

I found two different sets of data for strength:

Tensile PSI Shear PSI
63/37 7500 6200
32/36/2 7000 7540

and

Tensile PSI Shear PSI
63/37 7600 5400
32/36/2 8600 6600

So it does appear that the silver-loaded solder has higher shear strength, and might have greater or less tensile strength, than unloaded solder. Despite the different numbers, both sources agree that the shear strength increase is about 22%. I wouldn't call that a "very LARGE amount" of difference, but that's certainly a matter of opinion.

Perhaps some people will find that the considerably greater expense, reduced availability, and non-eutectic behavior of silver-loaded solder is worth the modest increase (my opinion of 22% greater) in shear strength. But I doubt that many will. I keep a small quantity on hand for soldering SMD parts which have silver or gold terminations, but am satisfied with 63/37 for everything else.

Roy Lewallen, W7EL

RST Engineering wrote:
> Yes. This little addition of silver adds a very LARGE amount of strength to
> the joint. PLEASE don't ask me to climb up to the top shelf to give you
> numbers.... {;-)
>
> Jim
>
>
>
>>Is there some other advantage of a 2 or 3% silver addition?
>>

>>Roy Lewallen, W7EL
>
>
>

1150. Re: Antenna impedance analyzer comparison

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-17 23:51:00 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10uojpkpninjj03@corp.supernews.com>
Source record: 83289

Dear Rick:
I missed your response of some days ago.
Now I understand the actual issue.
When I feel like it, I have a manually adjustable vacuum variable capacitor that I use to shunt feed a tall tower for 160 meters. The "tap" is such that the real part of the impedance is about 50 ohms and the capacitor cancels the inductive part of the impedance. I use an AEA CIA right at the capacitor to find the right adjustment and then connect the Heliax.

In your case, a partner at the base might make small adjustments while you radio back what you wish for him/her to do next.

Do let us all know the solution you find. Good luck. 73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Rick Karlquist N6RK" <richard@karlquist.removethis.com> wrote in message news:z62dnW4btex77ULcRVn-qg@comcast.com...
> But I want to adjust the matching network at the base
> of the antenna. I need real time feedback to when I
> turn a know. An indicator 1000 ft away is useless.
>
> Rick N6RK
>

1151. PHOTOS - inside Ameritron AL-80B 1KW amp

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 00:50:14 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10uonb57mpkora3@news.supernews.com>
Source record: 83290
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

1. http://www.ad5th.com/AL-80B.html

--

Charlie
Ham Radio - AD5TH
www.ad5th.com

1152. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 02:35:33 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <xA_Gd.24984$tF.5252@bignews6.bellsouth.net>
Source record: 83291
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc

> >plain old 60-40...worked well for me
> > Hal Rosser
> >
> If you say so. That wasn't the question.

****
Oh contraire Pierre - the question was ...."Favorites ?" (look at the
Original post)
That was mine - because it works for me.. sheesh !
****
>
> >eutectic (if my memory serves) just means it's either solid or liquid
> >--and won't just 'soften' -- like ice and water
> >
> Yup--and that's important for good results.
>
*****
I thought so
******

1153. Re: longwire attachment question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 02:57:11 UTC
From: m <m@spam.off>
Message-ID: <Y0%Gd.15554$YI4.1054669@wagner.videotron.net>
Source record: 83292

'Doc wrote:
> Mike,
> A 'long wire' (really a 'random wire', but that's being
> picky) can have an input impedance all over the place depending
> on the frequency of use. Most receivers just aren't too
> picky about it, so try it and see what you get in reception.
> You can always experiment with antenna length or matching
> systems to improve things, but in most cases, they aren't
> going to make a lot of difference.
> 'Doc

I<ve been reading up a bit more (and I see what you mean...I<m not sure the missus would be keen on a real long wire in the backyard!) and I think I<ll play around with some DIY antenna tuners to see whats what. I was mainly concerned with signal loss due to load mismatch if I use coax to get the signal into the basement for the wire.
thanks again
Mike

1154. WANTED: Mosley Mini-33 Tribander Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 07:51:33 UTC
From: Roland S Geter Sr <NoSpam@NoSpam.com>
Message-ID: <he3Hd.36183$NC6.27470@newsread1.mlpsca01.us.to.verio.net>
Source record: 83293
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

Will pay cash and pick-up or shipping the subject antenna.
Reply to roland@geter.org or call 602-690-1227
Roland S Geter Sr - WB6LNA

1155. test message rec.radio.amateur.antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 10:01:04 UTC
From: bait@infosynaptics.com
Message-ID: <csimp0siu100@reader01.singnet.com.sg>
Source record: 83296

Just a quick test post for the sole purpose of spreading this email address.
Only some random garbage below. Nothing for you to see here, please move along :)

>>> one who pulls out first is known as "first over."
>>>>
Ren, no that's fine. It's useful to note the geographical differences. This

>>>>
horseracing game is hard enough, and now there's another complication!

>
>>>
>>> In harness racing, with the horses racing along the rail, one who pulls
>
>>> "with cover." Racing with cover is supposed to have an advantage as the
>>>
>>>>
Mark
>>> horse is protected from the exposure to wind and other elelments. The
>>>> or a bad thing for a horse to be 'without cover'?
:-)
>>>
--
>>>
> If this isn't what you were asking for then obviously discard this post.
news:aLbGd.139$F_2.99@news02.roc.ny...
>
>>> to the outside with no horse in front is racing "without cover." The
>>>> What does the expression 'without cover' mean? And is it a good thing
>>>> Hi,
> Ren
>>> horse that pulls out and follows that one one the outside is racing
> "Danzig" <tyatcak@telus.net> wrote in message
>>>
>>>> Thanks,
>>>
>> byrdman wrote:

"Ren" <cyborgo@frontiernet.net> wrote in message

> is *covered up* in the UK is one that is racing in behind others, it is to
> help the horse get settled and not pull for its head so hard.
>
>> it in the T-breds

> news:%xbGd.98756$dv1.34668@edtnps89...
>
>> and it is HOGWASH ...hear the Aussie hosts all the time rambling on about
>>> byrdman
>>> Mark, Devon wrote:
> I'm not sure if this is soley a US question or not Mark but a horse that
---
Hormel Trappitus
bait@infosynaptics.com

View Spam trap mailbox in real time: http://zipurl.org/4g0c3

1156. It's the L.I.A.R. wot stokes the fire.....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 10:31:04 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35479nF4i72ilU1@individual.net>
Source record: 83295
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:352if3F4fc5a8U1@individual.net...
> For those with limited technical knowledge of EM radiation (eg at a level
> where they believe in heat bands) the above is intended as humour.

1157. Re: PHOTOS - inside Ameritron AL-80B 1KW amp

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 10:37:07 UTC
From: philipnocode@hotmail.com
Message-ID: <csiospcqm1@news6.svr.pol.co.uk>
Source record: 83294
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

come on now, he's shown you his, you show him yours.

1158. Re: longwire attachment question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 11:43:26 UTC
From: "Ron, KC4YOY" <kc4yoy@carolina.rr.con>
Message-ID: <yD6Hd.26642$dt3.2418359@twister.southeast.rr.com>
Source record: 83297

> I<m not sure the missus would be keen on a real long wire in the
> backyard!)

What a WIMP!!!

Ron

1159. Re: Antenna lengths (apart)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 13:31:47 UTC
From: stryped@hotmail.com
Message-ID: <1106055107.155028.140880@c13g2000cwb.googlegroups.com>
Source record: 83298

Cecil Moore wrote:
> stryped@hotmail.com wrote:
> > How far apart should a roof mounted 440 and a 2 meter be from each
> > other?
>
> Separate transmitters? How much power? The answer is different for
> two 500w repeaters than it is for a dual-band 5w HT.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> -----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World!
>100,000 Newsgroups
> ---= East/West-Coast Server Farms - Total Privacy via Encryption =---

This is for a dual mode radio with two antenna outputs. (ALinco dr 590)
I am thinking of using a yagi for 440 and some type of omnidirectional
for 2 meters like a 1/4 ground plane.

1160. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 13:54:33 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41ed1510.2773978@news.crosslink.net>
Source record: 83299
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Sat, 15 Jan 2005 15:15:31 GMT,
zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net (ZZZPK)
wrote:

>W9DMK<nobody@crosslink.net> (Robert Lay) wrote:
>
>: >: If not, what reason does he give for the technique?
>: >
>: >capacitance is prop to gap between plates.
>: >
>:
>: I think you meant that it's inversely proportional to the gap between
>: the plates.
>:
>
>its still proportional....
>

That doesn't qualify as worthy of a response.
Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1161. Minimum distance above roof

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 14:08:08 UTC
From: stryped@hotmail.com
Message-ID: <1106057288.625424.279350@z14g2000cwz.googlegroups.com>
Source record: 83300

Is there a minimum distance an anteena needs to be above the roof? I am runnign into trouble thinking of mounting locations.

1162. Re: PHOTOS - inside Ameritron AL-80B 1KW amp

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 17:09:15 UTC
From: aRKay <REMOVEarkay@qsl.net>
Message-ID: <REMOVEarkay-748952.11091518012005@newssvr12-ext.news.prodigy.com>
Source record: 83301
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

In article <1tmpu0ddtvrboke78852ksej0j1qkq0s2c@4ax.com>,
Walt Davidson <g3nyy@despammed.com> wrote:

> On Mon, 17 Jan 2005 18:50:14 -0600, "Charlie" <charlie@earthlink.com>
> wrote:
>
> >1. http://www.ad5th.com/AL-80B.html

Great pictures. Too bad it exhaust heat to the left side. My
AL-80X exhaust heat out the rear. I would consider 80B if it
could be modified to exhaust heat on the right side.

Dick, AA5VU

1163. Re: what Z range ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 17:37:53 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <csjhhhelj1@hercules.btinternet.com>
Source record: 83302

Dear (I really mean it) Roy,

For my (unstated) benefit, you semi-seriously describe yourself as an 'old wife'.

Now, I have NEVER described anyone as being an 'old wife'. I am too polite. Although, I must admit, I do occasionly infer that such people do exist. They are not objectionable

If you think the cap fits, then wear it. (Old English proverb.) But you don't!

But for the benefit of anyone mildly interested, who may be unfamiliar with the goings-on on this newsgroup, YOU are the VERY last person who I would remotely associate with being an 'old wife'.

Just keep yourself familiar with 'arithmetic' and 'maths' will look after itself. ;o)

History, Arithmetic and Elementary Statistics are the most neglected subjects in English primary schools. They are easy and simple enough and occupy little time. But what can be expected from ill-educated teachers? I suspect the same applies in the USA.

I understand school teachers in the USA wear bullet-proof jackets. But, in general, I am restricted to the BBC and the largely US-controlled unruly English newspapers which concentrate on swasticas and the royal family, nudes, the sexual habits of film-stars, cat-walk celebraties and overpaid Manchester United football players. After all, everybody has a right to make a living of some sort!

Just another advert from Reg, G4FGQ

1164. Re: what Z range ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 18:01:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6kjqu0dm7fmiek8hpbrsulnpm13befnh96@4ax.com>
Source record: 83303

On Tue, 18 Jan 2005 17:37:53 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>and overpaid Manchester United football players

Hi Reggie,

Just can't get Yanks (their goalie) off the radar screen, hmmm?

73's
Richard Clark, KB7QHC

1165. Hex Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 18:14:20 UTC
From: Win <winlyn@winlyn.us>
Message-ID: <j7kqu0pt3tiqd3bsv9g8f206ufn9aak1rc@4ax.com>
Source record: 83304

I am thinking of HBing a 40 Meter Hex Beam now that the higher bands are slowing down. I have read all the good reviews. Are there any downsides ?

win/w0lz

1166. Pvc ok for boom

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 18:56:10 UTC
From: stryped@hotmail.com
Message-ID: <1106074570.823810.38560@f14g2000cwb.googlegroups.com>
Source record: 83305

Will sch 40 pvc be ok for a 440 mhz boom? Or will it eventially warp in the sun? (We have brutal summers sometimes).

1167. WANTED - B&W "Portable Antenna"

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 19:13:00 UTC
From: zugboat@gmail.com
Message-ID: <acc44abd.0501181113.572692ea@posting.google.com>
Source record: 83306

Hi,

I am looking for a B&W "Portable Antenna" model AP-10A or AP-10B. I will ever consider the older model with the seperate loading coils.

If you have one available please e-mail me at: zugboat@gmail.com

Thanks,

Bill

1168. Anyone here of a "SLim Jim" antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 20:52:16 UTC
From: stryped@hotmail.com
Message-ID: <1106081536.273535.15300@c13g2000cwb.googlegroups.com>
Source record: 83307

I wonder how well these work and if anyone has used them?
http://www.hamuniverse.com/slimjim.html

1169. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 21:04:57 UTC
From: JeffM <jeffm_@email.com>
Message-ID: <1106081999.961649.46300@c13g2000cwb.googlegroups.com>
Source record: 83308
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc

>>>plain old 60-40...worked well for me
>>> Hal Rosser
>>
>>If you say so. That wasn't the question.
>> JeffM
>
>Oh contraire Pierre - the question was ...."Favorites ?"
>(look at the Original post)
>That was mine - because it works for me.. sheesh !
> Hal Rosser

Next time, just before you hit the Post button,
you might want to look at the title of the thread.
If he just meant *solder*,
he wouldn't have included *low-temp* in the Subject line.

1170. Re: what Z range ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 22:23:50 UTC
From: richardharrison@webtv.net
Message-ID: <10719-41ED8C76-428@storefull-3251.bay.webtv.net>
Source record: 83311

RB wrote:
"What is the likely Z range such a circuit might match?"

A coil in parallel with a variable capacitor can be tuned to offset reactance in the antenna. At resonance, a parallel circuit with a high Q has a very high impedance.

Edmund A. Laport in "Radio Antenna Engineering" writes on page 310: "Experiment has shown that the correct termination of a long-wire in this manner (low-characteristic impedance wire to maximize antenna current) requires a complex impedance and not solely a resistance. The terminal impedance is of the type R+jX. The inductive reactance can be obtained from the extension wire by making it longer than one-quarter wavelength. This means that the correct resistance, obtained by experiment, must also be located in the correct place along the wire, and that the correct location is more than one-quarter wavelength from the end of the wire. The resistance has an order of magnitude of 400 to 600 ohms in many cases, and 500 ohms is suggested as a starting place for trials when the antenna consists of a single wire. The reactance values required usually should be between j150 and j250 ohms, so that with thin wire, the extension wire whould be somewhere around 105 degrees long."

Best regards, Richard Harrison, KB5WZI

1171. Re: Pvc ok for boom

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 22:31:27 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns95E293E22585Bspectrumhogstarbandn@207.106.92.175>
Source record: 83309

> Will sch 40 pvc be ok for a 440 mhz boom? Or will it eventially warp in
> the sun? (We have brutal summers sometimes).
>

Its OK

Ed

1172. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 22:37:48 UTC
From: John <res0b06f@verizon.net>
Message-ID: <0dgHd.9692$5t2.4649@trnddc01>
Source record: 83310

Can you post a photo of the cleaver with the eyehook etc?
Tnx
John

Gary V. Deutschmann, Sr. wrote:
> Hi Airy
>
> In my particular case I used the eyehook to hold a split tube.
> But the eyehook can be bolted in, bent downward toward the blade and
> manage to keep the wire at least 2 inches underground.
>
> Also, if you hold the cleaver at a 45 degree angle, with the eyehook
> at the top, you are still setting the wire about 2 inches below the
> surface.
>
> In practice, I lay the cleaver across the uncut grass, whack it with a
> rubber mallet, tip it up 45 degrees and tap it with the mallet through
> the cut. Before tilting it back down for the next grass cutting whack
> I tamp the sod behind the head of the blade to hold the wire in place
> so it don't pop back out.
>
> I buried 3,500 feet of radials in one afternoon using the rubber
> mallet and cleaver with eyehook. I only added the split tube because
> I kept getting the eyehook caught in the sod which required an extra
> whack with the mallet. After sticking the tube through the eyehook,
> not only did I not get stuck in the sod, but the wire would stay in
> place without jumping out occasionally also.
>
> TTUL
> Gary
>

1173. Re: Pvc ok for boom

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 23:30:15 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncur707.2meu.bit-bucket@shell.config.com>
Source record: 83312

On Tue, 18 Jan 2005 22:31:27 GMT, Ed wrote:
>
>> Will sch 40 pvc be ok for a 440 mhz boom? Or will it eventially warp
>> in the sun? (We have brutal summers sometimes).
>
> Its OK

For selected definitions of "OK".
The UV radiation will eventually turn it to dust. Here at 7,700',
that occurs in about 3 years. Painting it may delay that problem.

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

1174. Re: Anyone here of a "SLim Jim" antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-18 23:35:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cm6ru0llvnagd93asgei1cglve3dngh5du@4ax.com>
Source record: 83313

On 18 Jan 2005 12:52:16 -0800, stryped@hotmail.com wrote:

>I wonder how well these work and if anyone has used them?
>http://www.hamuniverse.com/slimjim.html

For material taken from that site, the spelling is generally an
indicator of the quality of reporting:
>... considerable gain and this is consentrated almost parallel to ground ...
with sentence structure providing an inverse relation (note, the
original was 43 words long).

More spelling indicators:
>hense the name SLIM JIM.

And from the editor (sic):
>Editor's note: ... What have you got to loose?

It is simply a J-Pole, with what the medicos would call "a redundant
prepuce."

1175. Re: Pvc ok for boom

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 00:09:13 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <JyhHd.944$PA2.832@newsread2.news.atl.earthlink.net>
Source record: 83314

<stryped@hotmail.com> wrote in message
news:1106074570.823810.38560@f14g2000cwb.googlegroups.com...
> Will sch 40 pvc be ok for a 440 mhz boom? Or will it eventially warp in
> the sun? (We have brutal summers sometimes).
>
I don't know how well it will work on 440 but I built a 220 quagi about 20 years ago and put at 40 feet. It is still up and working. The boom was not PVC but some of the grey electrical conduit. That is suspose to be more UV resistant than PVC pipe.

1176. Re: Pvc ok for boom

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 00:27:37 UTC
From: Topaz305RK <k7sam@arrl.net>
Message-ID: <zNydnZTLOt9PNXDcRVn-iQ@vnet-inc.com>
Source record: 83315

Have had CPVC break down and "go away" but never PVC.

Sam

1177. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 01:23:24 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <aDiHd.6941$vh.5715@bignews4.bellsouth.net>
Source record: 83316
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc

>
> Next time, just before you hit the Post button,
> you might want to look at the title of the thread.
> If he just meant *solder*,
> he wouldn't have included *low-temp* in the Subject line.
>
so -
what's your "favorite" solder, dude?

1178. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 01:42:04 UTC
From: DaveB
Message-ID: <41edbadb.22907159@news.dslextreme.com>
Source record: 83317
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc

On Tue, 18 Jan 2005 20:23:24 -0500, "Hal Rosser"
<hmrosser@bellsouth.net> wrote:

>>
>> Next time, just before you hit the Post button,
>> you might want to look at the title of the thread.
>> If he just meant *solder*,
>> he wouldn't have included *low-temp* in the Subject line.
>>
>so -
>what's your "favorite" solder, dude?

The silver stuff

Regards
>
>

Daveb

1179. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 04:07:51 UTC
From: NSM <nowrite@to.me>
Message-ID: <r2lHd.124287$KO5.13073@clgrps13>
Source record: 83318
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:aDiHd.6941$vh.5715@bignews4.bellsouth.net...
| >
| > Next time, just before you hit the Post button,
| > you might want to look at the title of the thread.
| > If he just meant *solder*,
| > he wouldn't have included *low-temp* in the Subject line.
| >
| so -
| what's your "favorite" solder, dude?

Best of British: "Multicore Solders Ltd, Kelsey House, Wood Lane End, Hemel
Hempstead"

N

1180. Re: PHOTOS - inside Ameritron AL-80B 1KW amp

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 04:34:45 UTC
From: Old Ed <eXseniorsDeleteThisAndTheX@earthlink.net>
Message-ID: <FrlHd.10345$pZ4.3199@newsread1.news.pas.earthlink.net>
Source record: 83319

Hi Dick -

I haven't looked at "Charlie's" pix, but it sounds like he might have
reversed them. The AL-80B DOES exhaust out the right side.
That's where the tube is, and it gets the air last.

BTW, keep me in mind if you get serious about looking for an 80B.
Mine has been serving me very well, but I'm thinking about upgrading
to an ACOM 1000.

73, Ed, W6LOL

"aRKay" <REMOVEarkay@qsl.net> wrote in message
news:REMOVEarkay-748952.11091518012005@newssvr12-ext.news.prodigy.com...
> In article <1tmpu0ddtvrboke78852ksej0j1qkq0s2c@4ax.com>,
> Walt Davidson <g3nyy@despammed.com> wrote:
>
> > On Mon, 17 Jan 2005 18:50:14 -0600, "Charlie" <charlie@earthlink.com>
> > wrote:
> >
> > >1. http://www.ad5th.com/AL-80B.html
>
> Great pictures. Too bad it exhaust heat to the left side. My
> AL-80X exhaust heat out the rear. I would consider 80B if it
> could be modified to exhaust heat on the right side.
>
> Dick, AA5VU

1181. Re: Minimum distance above roof

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 04:35:34 UTC
From: richardharrison@webtv.net
Message-ID: <29994-41EDE396-516@storefull-3254.bay.webtv.net>
Source record: 83320

Bill. W6WRT wrote:
"If the roof is made of non-conductor material such as wood or composition shingle, the antenna will not "see" it and the height above ground is the important thing."

Yes, at least one of the important things. Antenna elevation is important to lower the elevation angle of propagation. It`s also possible there are noise generators within the house which make reception more difficult when a conductive roof isn`t present to shield the roof mounted antenna from noise. A small separation can make a large difference in noise source "signal" strength. A one wavelength separation can lower noise source received level by 22 dB. Then 6 dB more every time the distance doubles after the initial 22 dB loss. It`s best to have receiving antennas located well away from noise sources.

Best regards, Richard Harrison, KB5WZI

1182. Re: MFJ vs SGC automatic antenna tuners??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 05:27:50 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <rdmHd.18719$B95.14756@lakeread02>
Source record: 83321

"Richard Clark" <kb7qhc@comcast.net> wrote
Spam <spamcollector@sympatico.ca>
> wrote:
>
> >What are the impedance ranges an MFJ tuner can match?
> >
> >Are the MFJ units designed as a hefty tuner for use at the antenna or a
> >light weight used to flatten the SWR at the transmitter?
>
> Hi Greg,
>
> These, and other questions, are answered at:
> http://www.mfjenterprises.com/man/pdf/MFJ-991.pdf
>
> At a minimum:
> "256 values of capacitance and 256 values of inductance are
> available. With the inductance switched
> between the input and output side, this provides a total of
> 131,072 L/C tuning combinations. The nominal
> tuning ranges are 0 to 3900 pF and 0 to 24 &#65533;H."
>
> 73's
> Richard Clark, KB7QHC

I use an MFJ-994 in a Maritime Fixed-Land. It is advertised to handle 12-800 ohms. It has its quirks too, but is easy to shift from line-flattening every transmit to memory-only.

Jack Painter
Virginia Beach, Virginia

1183. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 07:21:49 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <10us2kkg2oolu78@corp.supernews.com>
Source record: 83222
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc

Back when I was doing microwave stripline-on-sapphire, the solder of choice was a mixture of tin and indium (and perhaps a bit of bismuth) that we called tindium. It melted well below the boiling point of water. (No, it wasn't Wood's metal.)

Jim

1184. Re: PHOTOS - inside Ameritron AL-80B 1KW amp

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 07:23:23 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10us2okd8f9t0ec@news.supernews.com>
Source record: 83223

Hi Dick,
It does exhaust out the right side as it draws in from the left side.

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"Old Ed" <eXseniorsDeleteThisAndTheX@earthlink.net> wrote in message
news:FrlHd.10345$pZ4.3199@newsread1.news.pas.earthlink.net...
> Hi Dick -
>
> I haven't looked at "Charlie's" pix, but it sounds like he might have
> reversed them. The AL-80B DOES exhaust out the right side.
> That's where the tube is, and it gets the air last.
>
> BTW, keep me in mind if you get serious about looking for an 80B.
> Mine has been serving me very well, but I'm thinking about upgrading
> to an ACOM 1000.
>
> 73, Ed, W6LOL
>
> "aRKay" <REMOVEarkay@qsl.net> wrote in message
> news:REMOVEarkay-748952.11091518012005@newssvr12-ext.news.prodigy.com...
>> In article <1tmpu0ddtvrboke78852ksej0j1qkq0s2c@4ax.com>,
>> Walt Davidson <g3nyy@despammed.com> wrote:
>>
>> > On Mon, 17 Jan 2005 18:50:14 -0600, "Charlie" <charlie@earthlink.com>
>> > wrote:
>> >
>> > >1. http://www.ad5th.com/AL-80B.html
>>
>> Great pictures. Too bad it exhaust heat to the left side. My
>> AL-80X exhaust heat out the rear. I would consider 80B if it
>> could be modified to exhaust heat on the right side.
>>
>> Dick, AA5VU
>
>
>
>
>

1185. Re: Anyone here of a "SLim Jim" antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 07:30:28 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <WRlb9UDUyg7BFAUs@ifwtech.co.uk>
Source record: 83225

Richard Clark wrote:
>On 18 Jan 2005 12:52:16 -0800, stryped@hotmail.com wrote:
>
>>I wonder how well these work and if anyone has used them?
>>http://www.hamuniverse.com/slimjim.html
>
>For material taken from that site, the spelling is generally an
>indicator of the quality of reporting:
>>... considerable gain and this is consentrated almost parallel to ground ...

Leaving aside the spelling, the real nonsense is "considerable gain". It looks very like a J-pole, and has a very similar radiation pattern and gain.

>It is simply a J-Pole, with what the medicos would call "a redundant
>prepuce."

:-)

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1186. Coax Switch To Switch One Antenna Lead Between Several HF Transceivers ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 07:32:19 UTC
From: Gary
Message-ID: <5l2su0pe4heegft8g945p0jkrjt6176439@4ax.com>
Source record: 83224

Can anyone recommend a good coax switch that I could use to switch between 2 or more HF transcievers (100 W) to one antenna lead ? I've got a friend that uses an old Heathkit coax switch to do as I've described to switch between a TS-2000 a Corsair II and a TS-830 but I'd like to make sure there's sufficient isolation or that the unused inputs are grounded before I go and fry a front end.

Thanks in advance.

73 Gary K8IQ

1187. Re: Anyone here of a "SLim Jim" antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 11:41:49 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <356vj5F4iquknU1@individual.net>
Source record: 83226

ISTR designed by G2BCX and published in one of the
Britland "Camm's Comics" about 25 years ago.

<stryped@hotmail.com> wrote in message
news:1106081536.273535.15300@c13g2000cwb.googlegroups.com...
> I wonder how well these work and if anyone has used them?
> http://www.hamuniverse.com/slimjim.html
>

1188. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 12:56:20 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <3573tkF4ibnvrU1@individual.net>
Source record: 83227

Swapped them around!

SWMBO of the opinion that brand-new "Kitchen Devil"
("Lifetime's Guarantee") bread/carving knife is blunter and
of less use than 20-year-old version!

(And yet we have never attempted to sharpen the old one
due to mechanically-difficult serrated edges!)

"Airy R.Bean" <Me@privacy.net> wrote in message
news:34shauF4egn4uU1@individual.net...
> Problem solved by using the bread knife. (New
> replacement purchased for SWMBO)
>

1189. Re: Anyone here of a "SLim Jim" antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 13:26:40 UTC
From: stryped@hotmail.com
Message-ID: <1106141200.109907.257230@z14g2000cwz.googlegroups.com>
Source record: 83228

Ian White, G3SEK wrote:
> Richard Clark wrote:
> >On 18 Jan 2005 12:52:16 -0800, stryped@hotmail.com wrote:
> >
> >>I wonder how well these work and if anyone has used them?
> >>http://www.hamuniverse.com/slimjim.html
> >
> >For material taken from that site, the spelling is generally an
> >indicator of the quality of reporting:
> >>... considerable gain and this is consentrated almost parallel to
ground ...
>
> Leaving aside the spelling, the real nonsense is "considerable gain".
It
> looks very like a J-pole, and has a very similar radiation pattern
and
> gain.
>
> >It is simply a J-Pole, with what the medicos would call "a redundant
> >prepuce."
>
> :-)
>
>
> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

So it is basically a j pole? I guess it would perform like one? I am going back and forth and cant decide what to do for two meters. It looked like a fun project. I j=have some 1/2 inch conduit and thought about welding it togther like that just to see how it worked. And installing some stainless steel bolts in the ends to "tune" it.

The problem is figuring out how to mount it. It says it has to be insulated and at least 20 inches away from metal.

1190. 5/8 WAVE BASIC QUESTION.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 14:09:26 UTC
From: stryped@hotmail.com
Message-ID: <1106143766.184393.226900@c13g2000cwb.googlegroups.com>
Source record: 83229

WHAT IS THE "COIL" USED TO MATCH A 5/8 WAVE VERTICLE? i MEAN WHAT IS IT MADE FROM AND WHERE DO YOU GET THEM?

1191. Re: Anyone here of a "SLim Jim" antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 14:19:52 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <3578q5F4iqdssU1@individual.net>
Source record: 83230

I'd suggest one to be moving-coil and the other to be digital.

<stryped@hotmail.com> wrote in message
news:1106141200.109907.257230@z14g2000cwz.googlegroups.com...

> I guess it would perform like one? I am
> going back and forth and cant decide what to do for two meters.

1192. Re: 5/8 WAVE BASIC QUESTION.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 14:45:58 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41ee7401$1_2@127.0.0.1>
Source record: 83231

stryped@hotmail.com wrote:
> WHAT IS THE "COIL" USED TO MATCH A 5/8 WAVE VERTICLE? i MEAN WHAT IS IT
> MADE FROM AND WHERE DO YOU GET THEM?

The end feedpoint impedance of a 5/8WL vertical is about
150 - j600 ohms. The coil is used as a loading coil to cancel
that capacitive reactance and is usually tapped and fed at
the 50 ohm point. Construction details for a 2m 5/8WL mobile
antenna are contained in "The ARRL Antenna Book" which is
an excellent first book on the subject of antennas.

Here's what EZNEC sez about a 1/4WL Vs a 5/8WL vertical.

1/4WL 5/8WL
-0.14 dBi at 26 deg. TOA 0.1 dBi at 26 deg.
-0.75 dBi at 17 deg. 1.4 dBi at 17 deg. TOA

Whether that 2 dB advantage at 17 deg. is worth all that
extra effort depends upon what kind of operating you do.
It can make a difference for CW DX.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1193. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 15:20:54 UTC
From: Roby <roby@no-address.net>
Message-ID: <L4-dncrvV84r53PcRVn-1g@adelphia.com>
Source record: 83232
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc,alt.engineering.electrical

alanh_27@yahoo.com wrote:

> I've had good luck with the kester 62/36/2% silver stuff, which is
> eutectic.
>
> Many many years ago, I had some luck with a indium-bismuth solder paste
> in syringes from Indium Corp. Haven't fiddled with any of their stuff
> since then.
>
> Radio Shack sells a bag of little peices of tape-form stuff. Never got
> it to work well.
>
> Favorites?

Many many many years ago, one of my kid buddies built a Heathkit DX-35 transmitter. He couldn't get it to work, sold it to me.

The solder joints were absolutely TERRIBLE. Sooo, I plugged in my Weller gun and remelted one. A puff of acrid smoke erupted. He had used "Liquid Solder". Room temperature.

The good news: he had left all the component leads full-length, so I just clipped everything out, replaced the toob sockets and tiepoints and reinstalled the parts with real solder. It worked, I sold it.

Roby

1194. Re: Anyone here of a "SLim Jim" antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 15:30:25 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <j2vsu0hvdipoprl08mb0i5m9ose0vchfbc@4ax.com>
Source record: 83233

On 19 Jan 2005 05:26:40 -0800, stryped@hotmail.com wrote:

[snip]
|
|So it is basically a j pole? I guess it would perform like one? I am
|going back and forth and cant decide what to do for two meters.

Using the same site as a source:

http://www.hamuniverse.com/2metergp.html

Build this and be done with it. All this stuff about "gain" in a
monopole is so much BS.

1195. Re: Anyone here of a "SLim Jim" antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 16:36:42 UTC
From: Dan Richardson <dwr@mailinator.net>
Message-ID: <ht2tu01jthea0ta3j1po27do89r7q1nrtv@4ax.com>
Source record: 83234

On Wed, 19 Jan 2005 08:30:25 -0700, Wes Stewart <n7ws_@_yahoo.com>
wrote:
[snip]
>Using the same site as a source:
>
>http://www.hamuniverse.com/2metergp.html
>
>Build this and be done with it. All this stuff about "gain" in a
>monopole is so much BS.
>
Wes, you mean to tell me that you can't hear a whole whopping dB (or
less) difference? <G>

Danny, K6MHE

1196. Re: 5/8 WAVE BASIC QUESTION.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 16:49:13 UTC
From: stryped@hotmail.com
Message-ID: <1106153353.958568.136870@z14g2000cwz.googlegroups.com>
Source record: 83235

Cecil Moore wrote:
> stryped@hotmail.com wrote:
> > WHAT IS THE "COIL" USED TO MATCH A 5/8 WAVE VERTICLE? i MEAN WHAT
IS IT
> > MADE FROM AND WHERE DO YOU GET THEM?
>
> The end feedpoint impedance of a 5/8WL vertical is about
> 150 - j600 ohms. The coil is used as a loading coil to cancel
> that capacitive reactance and is usually tapped and fed at
> the 50 ohm point. Construction details for a 2m 5/8WL mobile
> antenna are contained in "The ARRL Antenna Book" which is
> an excellent first book on the subject of antennas.
>
> Here's what EZNEC sez about a 1/4WL Vs a 5/8WL vertical.
>
> 1/4WL 5/8WL
> -0.14 dBi at 26 deg. TOA 0.1 dBi at 26 deg.
> -0.75 dBi at 17 deg. 1.4 dBi at 17 deg. TOA
>
> Whether that 2 dB advantage at 17 deg. is worth all that
> extra effort depends upon what kind of operating you do.
> It can make a difference for CW DX.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> -----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World!
>100,000 Newsgroups
> ---= East/West-Coast Server Farms - Total Privacy via Encryption =---

Is that the same as a 1/4 ground plane vs 5/8 ground plane? It is just
I have seen 5/8 antennas advertised with gain.
On another topic, Would it be bad to use RG6 for the antenna and radio?

1197. Re: PHOTOS - inside Ameritron AL-80B 1KW amp

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 17:05:33 UTC
From: aRKay <REMOVEarkay@qsl.net>
Message-ID: <REMOVEarkay-35B7D1.11053319012005@newssvr12-ext.news.prodigy.com>
Source record: 83236

Left or Right depends on how you are viewing the AMP. From the
front (looking at the meters) it exits on the left side.

In article <10us2okd8f9t0ec@news.supernews.com>,
"Charlie" <charlie@earthlink.com> wrote:

> Hi Dick,
> It does exhaust out the right side as it draws in from the left side.
>
> --
>
> Charlie
> Ham Radio - AD5TH

1198. Re: longwire attachment question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 17:06:26 UTC
From: richardharrison@webtv.net
Message-ID: <26460-41EE9392-12@storefull-3254.bay.webtv.net>
Source record: 83237

Mike wrote:
"I was mainly concerned with signal loss due to load mismatch if I use coax to get the signal into the basement for the wire."

A versatile tuner allows a match between antenna and radio under most conditions. It does not prevent an unshielded and imbalanced line from picking up noise on the path to the radio. Coax may avoid noise pickup.

Autotransformers at each end of the coax can give high-impedance match at the antenna and at the radio. Such transformers are used to match Beverage Antennas to coax.. See the "ARRL Antenna Book" or ON4UN`s "Low-Band DXing" for ferrite-winding details.

An air-core transformer at each end of the coax can step up / down the impedance too. Suppose you want to match 450 ohms to 50 ohms. The impedance ratio is 9 to 1. The turns ratio is 3 to 1.

The reactance of the primary may ne chosen as about 10 times the 450 ohms or 550 ohms of the antenna. About 500 microhenries (0.5 mhy) would work. My ARRL L/C/F Calculator shows the number of turns per inch, wire size, coil diameter, and coil length needed to make the coil.. There`s nothing critical about it. Its inductance was an arbitrary choice.

The coils are tapped up about 1/3 of the turns from the cold (grounded) end of the coil, for the coax connection. The full coil is used across the antenna and across the receiver input.

If you have no noise, a single wire connecting your receiver to the antenna will likely grab more signal and lose less of it on its way to the receiver.

I`ve used the transformers on each end of the low-impedance line (twisted pair)) to the receiver. This system was part of a 1938 GE "V-Doublet" antenna kit. It was a quiet all-band signal grabber.

Best regards, Richarrd Harrison, KB5WZI

1199. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 17:31:33 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41ee9902.519861718@news.galilei.com>
Source record: 83238

Hi John

No, because my late wife made me take the eyehook back out, resharpen HER meat cleaver and sterilize it in boiling water.

Next time I'll buy my own meat cleaver and have a stainless steel tube welded to the side of it, hi hi....

FWIW: It was the 10 inch long 5 inch deep cleaver, not counting the handle. I think I would also have a flat steel plate welded to the top so it doesn't tear up the rubber mallet so bad too.

TTUL
Gary

1200. Re: Pvc ok for boom

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 17:57:32 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <gcxHd.3290$zr4.1315@tornado.tampabay.rr.com>
Source record: 83239

the typical White colored PVC will break down in the sun unless you
paint it with a UV shield paint
and you can always slide wooden dowel inside the PVC to keep it from bowing
good luck

stryped@hotmail.com wrote:
> Will sch 40 pvc be ok for a 440 mhz boom? Or will it eventially warp in
> the sun? (We have brutal summers sometimes).
>

1201. Re: Anyone here of a "SLim Jim" antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 18:54:28 UTC
From: stryped@hotmail.com
Message-ID: <1106160868.886868.57090@z14g2000cwz.googlegroups.com>
Source record: 83240

Wes Stewart wrote:
> On 19 Jan 2005 05:26:40 -0800, stryped@hotmail.com wrote:
>
> [snip]
> |
> |So it is basically a j pole? I guess it would perform like one? I am
> |going back and forth and cant decide what to do for two meters.
>
> Using the same site as a source:
>
> http://www.hamuniverse.com/2metergp.html
>
> Build this and be done with it. All this stuff about "gain" in a
> monopole is so much BS.
How would you get it to stand up to winds outside on a roof?

1202. Rg6

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 19:04:43 UTC
From: stryped@hotmail.com
Message-ID: <1106161483.347734.104200@z14g2000cwz.googlegroups.com>
Source record: 83241

Is RG 6u acceptable for about 30 feet for 2 meter/440?

1203. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 19:25:42 UTC
From: JeffM <jeffm_@email.com>
Message-ID: <1106162742.854880.91740@f14g2000cwb.googlegroups.com>
Source record: 83242
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc

>tindium. It melted well below the boiling point of water.
>(No, it wasn't Wood's metal.)
> Jim (RST Engineering)

I haven't seen it yet, but I've heard stories about guys
who make spoons of such stuff.
When the victim withdraws the stump from his coffee,
you're supposed to say,
"Man. That's some STRONG coffee".

1204. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 19:27:07 UTC
From: NSM <nowrite@to.me>
Message-ID: <fwyHd.36349$06.13698@clgrps12>
Source record: 83243

"Roby" <roby@no-address.net> wrote in message
news:L4-dncrvV84r53PcRVn-1g@adelphia.com...

...
| The solder joints were absolutely TERRIBLE. Sooo, I plugged in my Weller
| gun and remelted one. A puff of acrid smoke erupted. He had used "Liquid
| Solder". Room temperature.
...

Hey, it said 'Solder'! But that's happened oh so many times.

N

1205. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 19:40:00 UTC
From: JeffM <jeffm_@email.com>
Message-ID: <1106163600.368878.258150@z14g2000cwz.googlegroups.com>
Source record: 83244
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc

I have used hi-temp stuff for fixtures that go in burn-in ovens.
I almost always use readily-available 63/37.

Like you, I don't use low-temp solder.
Unlike you, I came to this thread to learn,
not to post OT comments.

1206. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 19:56:05 UTC
From: Bob <bob@telnet.com>
Message-ID: <pXyHd.15347$eT5.394@attbi_s51>
Source record: 83245

The best thing to use to bury radials is a sidewalk edger, a gas or an
electric one.

"Gary V. Deutschmann, Sr." <raiar@bbs.galilei.com.nospam> wrote in message
news:41ee9902.519861718@news.galilei.com...
> Hi John
>
> No, because my late wife made me take the eyehook back out, resharpen
> HER meat cleaver and sterilize it in boiling water.
>
> Next time I'll buy my own meat cleaver and have a stainless steel tube
> welded to the side of it, hi hi....
>
> FWIW: It was the 10 inch long 5 inch deep cleaver, not counting the
> handle. I think I would also have a flat steel plate welded to the
> top so it doesn't tear up the rubber mallet so bad too.
>
> TTUL
> Gary
>

1207. Re: Anyone here of a "SLim Jim" antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 20:09:35 UTC
From: harrogate2 <harrogate2@ntlworld.com>
Message-ID: <38zHd.572$05.42@newsfe3-gui.ntli.net>
Source record: 83246

Have a look at

http://www.johncath.force9.co.uk/omni%202mtr.htm

I have a so-called 'professional' Slim Jim obtained (I think) from
Sandpiper about 14 years ago and still going string. Although for 2m
primarily it is supposed to work from about 130-174MHz.

--
Woody

harrogate2 at ntlworld dot com

1208. my wife dumped me and this is my suicide note

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 21:01:38 UTC
From: vando_correo@yahoo.com
Message-ID: <1106168498.468081.304140@z14g2000cwz.googlegroups.com>
Source record: 83247

my dear friends, i found this awesome website in which you can post screenshots of your computer, everyone's doing it it is awesome!! you can even find porn in there, free videos and free pictures, no strings attached cüm with me and join this website, you wont regret it! http://desktop2k.proboards39.com

1209. Re: Rg6

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 21:06:13 UTC
From: larry d clark <buddycl@swbell.net>
Message-ID: <9ZzHd.17162$wi2.6342@newssvr11.news.prodigy.com>
Source record: 83248

stryped@hotmail.com wrote:
> Is RG 6u acceptable for about 30 feet for 2 meter/440?
>

other than a small impedance mismatch no problem. loss
should be next to nothing and the impedance mismatch
is of no consequence(except for those folks demand 1:1 ratio)

larry
kd5foy

1210. Re: my wife dumped me and this is my suicide note

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 21:07:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rritu058fiub6sh1ehcpnl3fhh5i7b3gm2@4ax.com>
Source record: 83249

On 19 Jan 2005 13:01:38 -0800, vando_correo@yahoo.com wrote:
>my dear friends, i found this ....
J * U * M * P !!!

Don't wait, don't hesitate - just
J * U * M * P !!!

1211. Re: 5/8 WAVE BASIC QUESTION.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 21:54:24 UTC
From: richardharrison@webtv.net
Message-ID: <8095-41EED710-98@storefull-3252.bay.webtv.net>
Source record: 83251

Cecil, W5DXP wrote:
"Construction details for a 2m 5/8 WL vertical mobile antenna are contained in "The ARRL Antenna Book" which is an excellent first book on the subject of antennas."

I agree the "ARRL Antenna Book" is a must have! Mine is the 19th edition and I didn`t find the 2-meter band 5/8-wavelength vertical. But, I also have the 1987 edition of the "ARRL Handbook". The 5/8-wavelength vertical for 2 meters appears on page 33-28 of that book.

Best regards, Richard Harrison, KB5WZI

1212. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 22:01:16 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <8PCdnTPJyPw3RXPcRVn-ug@adelphia.com>
Source record: 83250

Bob wrote:

> The best thing to use to bury radials is a sidewalk edger, a gas or an
> electric one.
>
> "Gary V. Deutschmann, Sr." <raiar@bbs.galilei.com.nospam> wrote in message
> news:41ee9902.519861718@news.galilei.com...
>
>>Hi John
>>
>>No, because my late wife made me take the eyehook back out, resharpen
>>HER meat cleaver and sterilize it in boiling water.
>>
>>Next time I'll buy my own meat cleaver and have a stainless steel tube
>>welded to the side of it, hi hi....
>>
>>FWIW: It was the 10 inch long 5 inch deep cleaver, not counting the
>>handle. I think I would also have a flat steel plate welded to the
>>top so it doesn't tear up the rubber mallet so bad too.

I'm the nutter that bought and used a cheap electric chainsaw to bury my radials. It was exceptionally easy to use. Simply start at the antenna and drag the thing backwards. After that, I tucked in the radials with my hands. I won't do that part again, I'll use some sort of tool to push it in. Hundreds of feet of radial laying can wear the skin off your hands.

The major effect on the chainsaw was to dull the chain, as you might expect. THere was some mud in it also. The saw is out of commission because I was an idiot and lost one of the parts when I cleaned it. But under normal circumstances, no damage aside from the chain.

But when I get the thing back together, and in the spring, I will lay some more radials as an experiment, and likely post pix of the operation - along with the required warnings to never ever ever do that sort of thing - on our website

- Mike KB3EIA -

1213. 21st Century E-Business Money Making Formula

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 22:42:45 UTC
From: NeoTycoon <neotycoon@netexecutive.com>
Message-ID: <1106174565.891262.174540@c13g2000cwb.googlegroups.com>
Source record: 83253

Neo Tech Party Administration
<>21st Century E-Business Money Making Formula
New Year Money For EveryOne True Honest and Legal

Posted By: B (205.188.197.157)
Date: 01/02/05

THIS IS REAL...TAKE YOUR TIME AND READ THIS.....NOBODY IS SCAMMING YOU
THE 5 MINUTES IT WILL TAKE YOU TO READ THIS WILL CHANGE YOUR FUTURE!

I'm sure you've read these letters asking you to send $1 to six different addresses. Putting your home address or mailing address on the internet can be risky, but through PayPal all you have to provide is your email address. It's safe and easy. Just go to WWW.PAYPAL.COM and set up your FREE account! No credit card is needed. I am not a gullible person and have never trusted things like this, but I gave it a try. Hey it's only $6. I figured at least 6 people would respond out of the millions of people that use the internet. You should give it a try too! You have nothing to lose, and thousands to gain! Read on for the letter that I found (of course, I added my PayPal e-mail on #6)...

HOW TO TURN $6 INTO $6,000+!!! THIS REALLY CAN MAKE YOU EASY MONEY!!!

IT WORKS!!! BUT YOU HAVE TO FOLLOW IT TO THE LETTER FOR IT TO WORK!!!!

A little while back, I was browsing through newsgroups, just like you are now and came across an article similar to this that said you could make thousands of dollars within weeks with only an initial investment of $6.00! So I thought, "Yeah, right, this must be some kind of scam" but like most of us, I was curious, so I kept reading. Anyway, it said that you send $1.00 though PayPal to each of the emails stated in the article. You then place your own email address in the bottom of the list at #6, and post the article in at least 200 news groups. (There are thousands) No catch. That was it. So after thinking it over, and talking to few people first, I thought about trying it. I figured what have I got to lose except $6.00, right? Like most of us I was a little skeptical and a little worried about the legal aspects of it. It follows the same regulations as the "mailed chain letters, which according to the U.S. Post Office (1-800-725-2161) is indeed legal! Then I invested the measly $6.00. Well GUESS WHAT!!? Within 7 days, I started getting money in my PayPal account! I was shocked! I figured it would end soon, but the money just kept coming in. In my first week, I made about $20.00. By the end second week I had made a total over

$1,200.00!!! In the third week I had over $10,000.00 and it's still

growing. This is now my fourth week and I have made a total of just over $36,000.00 and it's still coming in rapidly. It's Certainly worth $6.00. I have spent more than that on the lottery!! Let me tell you how this works and most importantly, why it works? Also, make sure you print a copy of this article now, so that you can get the information off of it as you need it.

$$

REQUIREMENTS: You must have a confirmed PayPal account. If you do not have a PayPal account you can go to www.paypal.com and follow the instructions to set up a free account. In order to place the initial $6 into your account, you will have to confirm your bank account with PayPal (which may take a few days). PayPal is 100% secure and is used my millions of people world wide. Confirming a www.paypal.com account simply means (1) PayPal will first ask you to confirm the email you used to sign up your PayPal account by sending you an email with a link for you to click to that email. As soon as you click that link your email is confirmed. (2) PayPal will then make two small deposits into your bank account if you set up your PayPal account with a checking or savings bank account. Or PayPal will make two small deposits to your credit card if you set up your PayPal account with your credit card. Then after a few days (it takes up to a few days for these deposits to appear in your bank account or on your credit card statement) then after a few days you go back to the www.paypal.com website and sign in. Then you click where it says this account is not yet confirmed. A screen will pop up that gives you 2 boxes to fill in. You then enter the numbers of the 2 small deposit amounts (two separate 2 digit numbers) that were deposited to your bank account or credit card. Now you have a working and confirmed PayPal account and can receive payments.

$$

[STEP 1]
Send, though PayPal, $1.00 to each email on the below list. Make the subject of the payment "Email List" and in the comments, write "PLEASE PUT ME ON YOUR EMAIL LIST." What you are doing is creating a service by this - and best of all you are not giving your address to anyone you do not know. THIS IS ABSOLUTELY LEGAL!! YOU ARE CREATING A SERVICE. Here are the latest PayPal e-mails on the e-mail lists:
#1) bigmicrosoft @ yahoo. com

#2) mr_skunky29 @ yahoo. com

#3) bmedsker @ cablespeed. com

#4) honesteyez @ yahoo. com

#5) spontaniuz @ msn. com

#6) dholla @ hotmail. com

www.paypal.com

Subject of Payment: ***Email List***

Comments: ***PLEASE PUT ME ON YOUR EMAIL LIST***

[STEP 2]
Now take the #1) email off the list that you see above, move the other addresses up one (6 becomes 5 & 5 becomes 4, etc) the put YOUR email address (the one used in your PayPal account) as #6) on the list. **MAKE SURE THE EMAIL YOU SUPPLY IS EXACTLY AS IT APPEARS IN YOUR PAYPAL ACCOUNT**

[STEP 3]
Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups, message boards, etc. (I think there are close to 32,000 groups) All you need is 200, but remember, the more you post, the more money you make - as well as everyone else on the list! In this situation your job is to let as many people see this letter as

possible. So they will make you and me reach!!!! You can even start

posting the moment your email is confirmed. Payments will still appear in your PayPal account even while your bank account is being confirmed.

$$

DIRECTIONS ON HOW TO POST TO NEWSGROUPS/MESSAGE BOARDS.

[Step 1]
You do not need to re-type this entire letter to do your own posting. Simply put your CURSOR at the beginning of this letter and drag your CURSOR to the bottom of this document, and select 'copy' from the edit menu. This will copy the entire letter into your computer's temporary memory.

[Step 2]
Open a blank Notepad file and place your cursor at the top of the blank page. From the 'Edit' menu select 'Paste'. This will paste a copy of the letter into notepad so that you can add your email to the list.

[Step 3]
Save your new Notepad file as a .txt file. If you want to do your postings in different sittings, you'll always have this file to go back to.

[Step 4]
Use Netscape or Internet Explorer and try searching for various newsgroups, on-line forums, message boards, bulletin boards, chat sites, discussions, discussion groups, online communities, etc. EXAMPLE: go to any search engine like yahoo.com, google.com, altavista.com, excite.com, then search with subjects like "millionaire message board" or "money making message board" or "opportunity message board" or "money making discussions" or "business bulletin board" or "money making forum" etc. You will find thousands and thousands of message boards. Click them one by one

then you will find the option to post a new message.

[Step 5]
Visit these message boards and post this article as a new message by highlighting the text of this letter and selecting 'Paste' from the 'Edit' menu. Fill in the Subject, this will be the header that everyone sees as they scroll thru the list of postings in a particular group, click the post message button. You're done with your first one! Congratulations! THAT'S IT!! All you have to do is jump to different newsgroups and post away. After you get the hang of it, it will take about 30 seconds for each newsgroup! **REMEMBER, THE MORE NEWSGROUPS AND/OR MESSAGE BOARDS YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200** That's it! You will begin receiving money within days! **JUST MAKE SURE THE EMAIL YOU SUPPLY IS EXACTLY AS IT APPEARS ON PAYPAL.**
Have fun!

1214. *CASH*CASH*CASH*

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 22:43:03 UTC
From: NeoTycoon <neotycoon@netexecutive.com>
Message-ID: <1106174583.218699.310780@f14g2000cwb.googlegroups.com>
Source record: 83252

Neo Tech Party Administration
*CASH*CASH*CASH*

Posted By: B (205.188.197.157)
Date: 01/02/05

Turn $6.00 into $42,000...read this to find out how!!! READING THIS COULD CHANGE YOUR LIFE! I found this on a bulletin board and decided to try it. A little while back, I was browsing through newsgroups, just like you are now, and came across an article similar to this that said you could make thousands of cash within weeks with only an initial investment of $6.00! So I thought, "Yeah right, this must be a scam", but like most of us, I was curious, so I kept reading. Anyway, it said that you send $1.00 to each of the 6 names and address stated in the article. You then place your own name and address in the bottom of the list at #6, and post the article in at least 200 newsgroups. (There are thousands) No catch, that was it. So after thinking it over, and talking to a few people first, I thought about trying it. I figured: "what have I got to lose except 6 stamps and $6.00, right?" Then I invested the measly $6.00. Well GUESS WHAT!!... within 7 days, I started getting cash in the mail! I was shocked! I figured it would end soon, but the cash just kept coming in. In my first week, I made about $25.00. By the end of the second week I had made a total of over $1,000.00! In the third week I had over $10,000.00 and it's still growing. This is now my fourth week and I have made a total of just over $42,000.00 and it's still coming in rapidly. It's certainly worth $6.00, and 6 stamps, I have spent more than that on the lottery!! Let me tell you how this works and most importantly, why it works....Also, make sure you print a copy of this article NOW, so you can get the information off of it as you need it. I promise you that if you follow the directions exactly, that you will start making more cash than you thought possible by doing something so easy! Suggestion: Read this entire message carefully! (print it out or download it.) Follow the simple directions and watch the cash come in! It's easy. It's legal. And, your investment is only $6.00 (Plus postage) IMPORTANT: This is not a rip-off; it is not indecent; it is not illegal; and it is virtually no risk - it really works!!!! If all of the following instructions are adhered to, you will receive extraordinary dividends. PLEASE NOTE: Please follow these directions EXACTLY, and $50,000 or more can be yours in 20 to 60 days. This program remains successful because of the honesty and integrity of the participants. Please continue its success by carefully adhering to the instructions. You will now become part of the Mail Order business. In this business your product is not solid and tangible, it's a service. You are in the business of developing Mailing Lists. Many large corporations are happy

to pay big bucks for quality lists. However, the cash made from the mailing lists is secondary to the income which is made from people like you and me asking to be included in that list. Here are the 4 easy steps to success: STEP 1: Get 6 separate pieces of paper and write the following on each piece of paper "PLEASE PUT ME ON YOUR MAILING LIST." Now get 6 US $1.00 bills and place ONE inside EACH of the 6 pieces of paper so the bill will not be seen through the envelope (to prevent thievery). Next, place one paper in each of the 6 envelopes and seal them. You should now have 6 sealed envelopes, each with a piece of paper stating the above phrase, your name and address, and a $1.00 bill. What you are doing is creating a service. THIS IS ABSOLUTELY LEGAL! You are requesting a legitimate service and you are paying for it! Like most of us I was a little skeptical and a little worried about the legal aspects of it all. So I checked it out with the U.S. Post Office (1-800-725-2161) and they confirmed that it is indeed legal! Mail the 6 envelopes to the following addresses:

1) Nathan Gilreath 6049 Porter Ave. East Lansing, MI 48823

2) Beth Collins 1012 Woodbine Ave., Toronto, Ontario M4C 4C1

3) Melody McKinley 8 Huntingdon Drive Dartmouth, Nova Scotia B2V 1w1

4) C. Witt 12 Pine ST. Attleboro, MA 02703

5) Ben Ervin 1281 Cadillac Dr. Hamilton, OH 45013

6) D J Kelly 661 powell st apt # 3 Brooklyn Ny 11212

STEP 2: Now take the #1 name off the list that you see above, move the other names up (6 becomes 5, 5 becomes 4, etc...) and add YOUR Name as number 6 on the list. STEP 3: Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups. (I think there are close to 24,000 groups) All you need is 200, but remember, the more you post, the more cash you make! This is perfectly legal! If you have any doubts, refer to Title 18 Sec. 1302 & 1341 of the Postal lottery laws. Keep a copy of these steps for yourself and, whenever you need cash, you can use it again, and again. PLEASE REMEMBER that this program remains successful because of the honesty and integrity of the participants and by their carefully adhering to the directions. Look at it this way. If you are of integrity, the program will continue and the cash that so many others have received will come your way. NOTE: You may want to retain every name and address sent to you, either on a computer or hard copy and keep the notes people send you. This VERIFIES that you are truly providing a service. (Also, it might be a good idea to wrap the $1 bill in dark paper to reduce the risk of mail theft.) So, as each post is downloaded and the directions carefully followed, six members will be reimbursed for their participation as a List Developer with one dollar each. Your name will move up the list geometrically so that when your name reaches the #1 position you will be receiving thousands of cash in CASH!!! What an opportunity for only

$6.00 ($1.00 for each of the first six people listed above) Send it now, add your own name to the list and you're in business! ---DIRECTIONS ----- FOR HOW TO POST TO NEWSGROUPS---------- Step 1) You do not need to re-type this entire letter to do your own posting. Simply put your cursor at the beginning of this letter and drag your cursor to the bottom of this document, and select 'copy' from the edit menu. This will copy the entire letter into the computer's memory. Step 2) Open a blank 'notepad' file and place your cursor at the top of the blank page. From the 'edit' menu select 'paste'. This will paste a copy of the letter into notepad so that you can add your name to the list. Step 3) Save your new notepad file as a .txt file. If you want to do your postings in different settings, you'll always have this file to go back to. Step 4) Use Netscape or Internet explorer and try searching for various newsgroups (on-line forums, message boards, chat sites, discussions.) Step 5) Visit these message boards and post this article as a new message by highlighting the text of this letter and selecting paste from the edit menu. Fill in the Subject, this will be the header that everyone sees as they scroll through the list of postings in a particular group, click the post message button. You're done with your first one! Congratulations...THAT'S IT! All you have to do is jump to different newsgroups and post away, after you get the hang of it, it will take about 30 seconds for each newsgroup! **REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE Cash YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200** That's it! You will begin receiving cash from around the world within days! You may eventually want to rent a P.O.Box due to the large amount of mail you will receive. If you wish to stay anonymous, you can invent a name to use, as long as the postman will deliver it. **JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT.** Now the WHY part: Out of 200 postings, say I receive only 5 replies (a very low example). So then I made $5.00 with my name at #6 on the letter. Now, each of the 5 persons who just sent me $1.00 make the MINIMUM 200 postings, each with my name at #5 and only 5 persons respond to each of the original 5, that is another $25.00 for me, now those 25 each make 200 MINIMUM posts with my name at #4 and only 5 replies each, I will bring in an additional $125.00! Now, those 125 persons turn around and post the MINIMUM 200 with my name at #3 and only receive 5 replies each, I will make an additional $626.00! OK, now here is the fun part, each of those 625 persons post a MINIMUM 200 letters with my name at #2 and they each only receive 5 replies, that just made me $3,125.00!!! Those 3,125 persons will all deliver this message to 200 newsgroups with my name at #1 and if still 5 persons per 200 newsgroups react I will receive $15,625.00! With an original investment of only $6.00! AMAZING! When your name is no longer on the list, you just take the latest posting in the newsgroups, and send out another $6.00 to names on the list, putting your name at number 6 again. And start posting again. The thing to remember is: do you realize that thousands of people all over the world are joining the internet and reading these articles everyday?, JUST LIKE YOU are now!! So, can you afford $6.00 and see if it really works?? I think so... People have said, "what if the plan is played out and no one sends you the cash? So what! What are

the chances of that happening when there are tons of new honest users and new honest people who are joining the internet and newsgroups everyday and are willing to give it a try? Estimates are at 20,000 to 50,000 new users, every day, with thousands of those joining the actual internet. Remember, play FAIRLY and HONESTLY and this will really work.

1215. Re: 5/8 WAVE BASIC QUESTION.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 22:47:47 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41eee4ed$1_2@127.0.0.1>
Source record: 83254

stryped@hotmail.com wrote:
> Is that the same as a 1/4 ground plane vs 5/8 ground plane?

Yep.

> It is just I have seen 5/8 antennas advertised with gain.

They have a slight amount of gain IAOI they have a good ground plane.
The additional gain of a well designed 5/8WL vertical is, IMO, only
important for HF CW DX and QRP digital work.

> On another topic, Would it be bad to use RG6 for the antenna and radio?

"Bad" is relative. RG6 is 75 ohms. When I was in high school, RG6 &
RG11 were very popular. If a center-fed dipole has a feedpoint
impedance of 73 ohms, then 75 ohm coax results in a very low SWR
on the feedline. The mismatch, is this case, is at the source
and is not anything to worry about. Of course, your SWR meter,
calibrated for 50 ohms, will not display the correct SWR on the
75 ohm coax. In the '50's, if our transmitter's pi-net output
would "load", our system was working just fine. Most of us didn't
even own an SWR meter back then.
--
73, Cecil http://www.qsl.net/w5dxp

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1216. Re: Pvc ok for boom

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 22:50:55 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41eee5aa_2@127.0.0.1>
Source record: 83255

Dennis Kaylor wrote:
> ... and you can always slide wooden dowel inside the PVC to keep it from bowing

I learned not to do that with fiberglass pipe. Moisture
made the wooden dowel swell and split the fiberglass pipe.
--
73, Cecil http://www.qsl.net/w5dxp

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1217. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-19 22:59:23 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41eee7a5$1_2@127.0.0.1>
Source record: 83256

Mike Coslo wrote:
> I'm the nutter that bought and used a cheap electric chainsaw to
> bury my radials.

There's an edger tool that looks like a hoe but the hoe is
in the same plane as the handle, like a conventional hoe had
been straightened out. It's in between a hoe and a shovel.
One stands on it, wiggles it side-to-side, and has a grove
to put a wire into.
--
73, Cecil http://www.qsl.net/w5dxp

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1218. Re: PHOTOS - inside Ameritron AL-80B 1KW amp

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 00:36:37 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10utv58lsn01h7f@news.supernews.com>
Source record: 83257

Not on - M Y - AL-80B...it exhausts on the right side when viewed from the front. Maybe they made a design change but I was at Ameritron just today (in Starkville,MS) and all the AL-80B's there are the same as mine..that is when viewed from the front in the western hemisphere they exhaust on the right. In the year of our lord..2005AD.

You are too much....

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"aRKay" <REMOVEarkay@qsl.net> wrote in message
news:REMOVEarkay-35B7D1.11053319012005@newssvr12-ext.news.prodigy.com...
> Left or Right depends on how you are viewing the AMP. From the
> front (looking at the meters) it exits on the left side.
>
>
> In article <10us2okd8f9t0ec@news.supernews.com>,
> "Charlie" <charlie@earthlink.com> wrote:
>
>> Hi Dick,
>> It does exhaust out the right side as it draws in from the left side.
>>
>> --
>>
>> Charlie
>> Ham Radio - AD5TH

1219. Re: longwire attachment question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 01:54:56 UTC
From: CW <cmagers@earthlink.net>
Message-ID: <jOydnZ7hHcFAk3LcRVn-sw@comcast.com>
Source record: 83258

You would get a lot more useful answers on rec.radio.shortwave.

"m" <m@spam.off> wrote in message
news:plyGd.3057$%K3.181694@weber.videotron.net...
> thanks for the input!
>
> the antenna I ve started in a 60 ft. 14g. copper wire, up in the trees
> away from the house. I,d like to feed this into the house with rg58. my
> radio tunes continuosly from 3 to 30 K, but I have also been mucking
> around with some crystal sets which are more limited.
>
> I,ve read that the antenna impedance is likely to be around 450 ohms,
> which would be fine staight to the antenna connection on the receiver I
> guess, but I would like to use the coax to protect the signal from all
> nasty stuff my house generates (and to protect the house from the
> potentially nasty stuff my antenna might!). So I would like the signal
> to go from 450-ish to 50 and back to around 500...
>
> Thanks again...and dont worry about me not having fun...;)
> Mike

1220. Re: 5/8 WAVE BASIC QUESTION.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 02:26:57 UTC
From: k9sqg@aol.com
Message-ID: <20050119212657.10954.00000131@mb-m28.aol.com>
Source record: 83259

Depends on what band the antenna is for.

1221. Re: my wife dumped me and this is my suicide note

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 07:06:26 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10uum3gqbr1bn6e@corp.supernews.com>
Source record: 83260

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:rritu058fiub6sh1ehcpnl3fhh5i7b3gm2@4ax.com...
> On 19 Jan 2005 13:01:38 -0800, vando_correo@yahoo.com wrote:
>>my dear friends, i found this ....
> J * U * M * P !!!
>
> Don't wait, don't hesitate - just
> J * U * M * P !!!

Can I have your ham gear?

1222. new tower final report

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 07:11:39 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10uumda11k2h6dc@corp.supernews.com>
Source record: 83261

Well folks, I finally did it.
After 42 years I finished my 8th grade dream: Tower on a hill with a beam.

The 4-element SteppIR on the 48 foot Trylon on the 70 foot hill in the
sticks; Everything works as advertised;
one call pile-up busting, "30 over" from Maui, and the Spiderweb Net begins
15 minutes earlier for me now.

73
H.
NQ5H

1223. Re: 5/8 WAVE BASIC QUESTION.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 07:33:01 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <N8JHd.19745$by5.18457@newssvr19.news.prodigy.com>
Source record: 83262

K9SQG wrote:

> Depends on what band the antenna is for.

Why?
- 'Doc

1224. Re: 5/8 WAVE BASIC QUESTION.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 13:19:30 UTC
From: stryped@hotmail.com
Message-ID: <1106227170.544350.191830@f14g2000cwb.googlegroups.com>
Source record: 83263

Cecil Moore wrote:
> stryped@hotmail.com wrote:
> > Is that the same as a 1/4 ground plane vs 5/8 ground plane?
>
> Yep.
>
> > It is just I have seen 5/8 antennas advertised with gain.
>
> They have a slight amount of gain IAOI they have a good ground plane.
> The additional gain of a well designed 5/8WL vertical is, IMO, only
> important for HF CW DX and QRP digital work.
>
> > On another topic, Would it be bad to use RG6 for the antenna and
radio?
>
> "Bad" is relative. RG6 is 75 ohms. When I was in high school, RG6 &
> RG11 were very popular. If a center-fed dipole has a feedpoint
> impedance of 73 ohms, then 75 ohm coax results in a very low SWR
> on the feedline. The mismatch, is this case, is at the source
> and is not anything to worry about. Of course, your SWR meter,
> calibrated for 50 ohms, will not display the correct SWR on the
> 75 ohm coax. In the '50's, if our transmitter's pi-net output
> would "load", our system was working just fine. Most of us didn't
> even own an SWR meter back then.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
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If my swr meter wont work with 75 ohm cable, should I use rg58 thsn if
I cant find rg8?

1225. Re: Minimum distance above roof

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 14:12:29 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <h%OHd.3948$2e7.2465@newssvr12.news.prodigy.com>
Source record: 83264

How do you get 22dB down for one wavelength and 6 more for each doubling?
tnx

--

73
Hank WD5JFR
"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:29994-41EDE396-516@storefull-3254.bay.webtv.net...
> Bill. W6WRT wrote:
> "If the roof is made of non-conductor material such as wood or
> composition shingle, the antenna will not "see" it and the height above
> ground is the important thing."
>
> Yes, at least one of the important things. Antenna elevation is
> important to lower the elevation angle of propagation. It`s also
> possible there are noise generators within the house which make
> reception more difficult when a conductive roof isn`t present to shield
> the roof mounted antenna from noise. A small separation can make a large
> difference in noise source "signal" strength. A one wavelength
> separation can lower noise source received level by 22 dB. Then 6 dB
> more every time the distance doubles after the initial 22 dB loss. It`s
> best to have receiving antennas located well away from noise sources.
>
> Best regards, Richard Harrison, KB5WZI
>

1226. Re: Minimum distance above roof

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 15:14:41 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <BVPHd.3810$8Z1.997@newssvr14.news.prodigy.com>
Source record: 83265

Its called the "Inverse Square Law", - you double the distance, you get
1/4 th the power - Double again, get 1/16 the power- ad nausium -Jim NN7K

Henry Kolesnik wrote:
> How do you get 22dB down for one wavelength and 6 more for each doubling?
> tnx
>

1227. Re: 5/8 WAVE BASIC QUESTION.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 15:43:08 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41efd218$1_1@127.0.0.1>
Source record: 83266

stryped@hotmail.com wrote:
> If my swr meter wont work with 75 ohm cable, should I use rg58 thsn if
> I cant find rg8?

You could probably recalibrate your 50 ohm SWR meter to
75 ohms. Or if all you are using it for is to make your
transmitter happy, leave it calibrated for 50 ohms. In
the latter case, you are not measuring SWR. When a 50
ohm SWR meter indicates 1:1, it is looking into 50 ohms
which is what the transmitter wants to see.
--
73, Cecil http://www.qsl.net/w5dxp

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1228. Re: 5/8 WAVE BASIC QUESTION.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 16:31:37 UTC
From: stryped@hotmail.com
Message-ID: <1106238696.973672.238270@c13g2000cwb.googlegroups.com>
Source record: 83267

Cecil Moore wrote:
> stryped@hotmail.com wrote:
> > If my swr meter wont work with 75 ohm cable, should I use rg58 thsn
if
> > I cant find rg8?
>
> You could probably recalibrate your 50 ohm SWR meter to
> 75 ohms. Or if all you are using it for is to make your
> transmitter happy, leave it calibrated for 50 ohms. In
> the latter case, you are not measuring SWR. When a 50
> ohm SWR meter indicates 1:1, it is looking into 50 ohms
> which is what the transmitter wants to see.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
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By the way, I bought a 2 meter/220/440 mhz swr/watt meter that reads
radiated/reflective power. Is this a good meter to set swr? Are these
hard to use?

I found some rg8/u and it is kind of expensive but the concensous seems
to be to use that if I want accuracy.

1229. Re: 5/8 WAVE BASIC QUESTION.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 17:05:59 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41efe57e$1_2@127.0.0.1>
Source record: 83268

stryped@hotmail.com wrote:
> By the way, I bought a 2 meter/220/440 mhz swr/watt meter that reads
> radiated/reflective power. Is this a good meter to set swr? Are these
> hard to use?

Easy to use, not so easy to understand.

> I found some rg8/u and it is kind of expensive but the concensous seems
> to be to use that if I want accuracy.

Exactly what are your concerns? accuracy? losses?
--
73, Cecil http://www.qsl.net/w5dxp

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1230. Re: Pvc ok for boom

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 18:38:21 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <uda5c2-36t.ln1@p400bob.lse.com.au>
Source record: 83269

Re the grey vs orange/white stuff (In VK at least)

The grey electrical conduit has graphite (I think) added and therefore
has some conductivity.

What I am getting at is that with a design using (say) white material
there will be slight dimension differences when using the grey stuff.
Apparently it isnt good to use it for a colinear etc design where the
radiating elemnt is inside the pipe.

Cheers Bob VK2YQA

stryped@hotmail.com wrote:
> Will sch 40 pvc be ok for a 440 mhz boom? Or will it eventially warp in
> the sun? (We have brutal summers sometimes).
>

1231. Re: 5/8 WAVE BASIC QUESTION.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 19:16:20 UTC
From: richardharrison@webtv.net
Message-ID: <26459-41F00384-301@storefull-3254.bay.webtv.net>
Source record: 83172

Stryped wrote:
"---I bought a 2 meter/220/440 mhz, swr/wattmeter that reads radiated/reflected power."

When you have forward power but no reflected power, you have a matched load. SWR with a matched load is 1:1. For other power ratios, there are charts, slide rules and a formula to convert a power ratio to an equivalent SWR.

SWR is one measure of the reflection coefficient. If you have a directional wattmeter, you don`t need an SWR meter.

Best regards, Richard Harrison, KB5WZI

1232. ANother coax question and update!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 19:28:11 UTC
From: stryped@hotmail.com
Message-ID: <1106249291.594860.134700@z14g2000cwz.googlegroups.com>
Source record: 83270

Well, I just got rg 8 cable about 20 feet for free! The thing about it it has two pl259 connectors on it. I need to have one end free so i can wire up the slim jim or j pole I build this weekend. I really do not eant to cut the cable as I would like to use it when I put the permanent station up. See any way around this?

Can I use copper house wire 12/ 2 or so to connect to the points on the j pole then bring them to a so connector Then screw the rg8 pl connector into that? Will this through off the swr? What ohms is 12/2 wire?

He also gave me a short cable with two pl 259 connectors to connect between my radio and the swr meter. It was a guy at a motorola dealer. This cable is pretty thin and not rg8 but he said it was 50 ohms.
I plan on hooking the 20 feet from the swr to the antenna.

1233. Re: Burying radials with a meat cleaver?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 19:29:35 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41f0052a.613085812@news.galilei.com>
Source record: 83271

Hi Bob

I had made a stand up tool that would cut the groove, bury the wire,
and close the hole back up, just by pushing it across the ground.

The cutting blade looked like a giant sized pizza cutter, behind it
was like a very narrow pulley that rolled the wire from it's spool
into the ground, and behind that were two wheels spaced about 1/2 inch
apart. If your familiar with how a plow or corn planter looks, it
looked just about like that, only I used two wheelbarrow handles to
make the manhandled part of the unit.

But it didn't work!

The reasons it didn't work were simple.
Sod density and moisture in the ground dictated how many concrete
blocks had to be stacked on top of the unit to provide enough weight
to cut through to the required depth.
With that many concrete blocks stacked up, you were not going to move
it easily. No problem, add two more wheels for stability and a towbar
to hook it to the riding lawn mower.
Tree and bush roots were the next problem. It would jump over them,
leaving the wire way to shallow in those areas.
Pulling it by the lawn mower meant you couldn't get close to the
fences or obstructions at the end of the run.

Solution:
Back to the meat cleaver and mallet!
Cheap to buy, easy to rig, and very fast.
But mainly, with NO mess to clean up afterwards.

TTUL
Gary

1234. Re: Minimum distance above roof

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 19:34:28 UTC
From: richardharrison@webtv.net
Message-ID: <26460-41F007C4-107@storefull-3254.bay.webtv.net>
Source record: 83175

Henry Kolesnik wrote:
"How do you get 22 dB down for one wavelength and 6 more for each doubling?"

Measure it. That relationship is convenient to remember.

Best regards, Richard Harrison, KB5WZI

1235. Re: ANother coax question and update!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 19:45:37 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41f00ae9$1_1@127.0.0.1>
Source record: 83173

stryped@hotmail.com wrote:
> Well, I just got rg 8 cable about 20 feet for free! The thing about it
> it has two pl259 connectors on it. I need to have one end free so i can
> wire up the slim jim or j pole I build this weekend. I really do not
> want to cut the cable as I would like to use it when I put the
> permanent station up. See any way around this?

Lots of J-Pole plans show a coax socket soldered directly
to the J-Pole stub.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1236. Re: Rg6

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 19:46:14 UTC
From: KC1DI <elbc2@pivot.net>
Message-ID: <41f00b0c$1_1@127.0.0.1>
Source record: 83174

stryped@hotmail.com wrote:
> Is RG 6u acceptable for about 30 feet for 2 meter/440?
>
I use 100' of RG6 to feed my home brew 2m beam worked great.
73 Dave kc1di

1237. Re: Minimum distance above roof

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 20:22:16 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <YpUHd.7178$8u5.4705@bgtnsc04-news.ops.worldnet.att.net>
Source record: 83177

Richard,

It should be a fun experiment.

The ideal power transfer for isotropic radiators in free space at one wavelength separation is given by 1 / ((4 * pi)^2) = 0.00633 or -22 dB.

The specific number, 22 dB, comes with some specific conditions.

Such as:

* Isotropic radiators, i.e., no gain.

* Free space, no modification of fields by the earth or a roof.

* The antennas are in the far-field regions of each other. This usually means the antennas are small compared to the wavelength. (Automatic for the isotropic radiator.)

22 dB may be an convenient number to remember, but it is essentially meaningless for the question at hand.

73,
Gene
W4SZ

Richard Harrison wrote:
> Henry Kolesnik wrote:
> "How do you get 22 dB down for one wavelength and 6 more for each
> doubling?"
>
> Measure it. That relationship is convenient to remember.
>
> Best regards, Richard Harrison, KB5WZI
>

1238. Re: ANother coax question and update!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 20:22:38 UTC
From: dplatt@radagast.org
Message-ID: <10v04oef7thmf29@corp.supernews.com>
Source record: 83176

>Well, I just got rg 8 cable about 20 feet for free! The thing about it
>it has two pl259 connectors on it. I need to have one end free so i can
>wire up the slim jim or j pole I build this weekend. I really do not
>eant to cut the cable as I would like to use it when I put the
>permanent station up. See any way around this?
>
>Can I use copper house wire 12/ 2 or so to connect to the points on the
>j pole then bring them to a so connector Then screw the rg8 pl
>connector into that?

Sure. One fairly common J-pole design uses an SO-239 socket which is mounted directly on one of the copper pipes at the feedpoint (use a brass screw or bolt, and then some plumber's solder). This creates the ground connection. Then, just run a short piece of copper wire from the center pin of the SO-239, across the space between the pipes, and solder it to the other pipe - this creates the "hot" side of the feed. The feedline with its PL-259 plug is screwed into the socket, and ends up sticking out to the side.

See http://www.tcars.org/elmer/jpole.html for one such design, complete with a parts and materials list, and look at http://www.alpharubicon.com/elect/jpolejaden.htm for another. One design screws the SO-239 directly to the pipe, the other makes a mounting bracket. Do whichever you prefer - when properly adjusted and tuned the two designs should have performance so close to identical that you cannot tell the difference.

> Will this through off the swr? What ohms is 12/2
>wire?

No matter what attachment method you use with a standard copper-pipe J-pole, you must "match" it by adjusting the positions at which the hot and grounded side of the coax are connected to the copper pipes. As a rule of thumb, moving the attachment points upwards along the pipe causes the feedline to "see" a higher impedance. You adjust the position until your connection is at a point where the impedance is 50 ohms, and you end up with an SWR of 1:1 or close to it.

The easiest way to get good results is to use a set of published plans in which the original designer has found the correct matching point, and then reproduce the antenna as exactly as you can.

>He also gave me a short cable with two pl 259 connectors to connect
>between my radio and the swr meter. It was a guy at a motorola dealer.
>This cable is pretty thin and not rg8 but he said it was 50 ohms.
>I plan on hooking the 20 feet from the swr to the antenna.

Probably RG-58, and it should be fine for a short run to the SWR/power meter.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1239. Re: ANother coax question and update!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 21:19:27 UTC
From: stryped@hotmail.com
Message-ID: <1106255967.169228.193910@c13g2000cwb.googlegroups.com>
Source record: 83178

Dave Platt wrote:
> >Well, I just got rg 8 cable about 20 feet for free! The thing about
it
> >it has two pl259 connectors on it. I need to have one end free so i
can
> >wire up the slim jim or j pole I build this weekend. I really do not
> >eant to cut the cable as I would like to use it when I put the
> >permanent station up. See any way around this?
> >
> >Can I use copper house wire 12/ 2 or so to connect to the points on
the
> >j pole then bring them to a so connector Then screw the rg8 pl
> >connector into that?
>
> Sure. One fairly common J-pole design uses an SO-239 socket which is
> mounted directly on one of the copper pipes at the feedpoint (use a
> brass screw or bolt, and then some plumber's solder). This creates
> the ground connection. Then, just run a short piece of copper wire
> from the center pin of the SO-239, across the space between the
pipes,
> and solder it to the other pipe - this creates the "hot" side of the
> feed. The feedline with its PL-259 plug is screwed into the socket,
> and ends up sticking out to the side.
>
> See http://www.tcars.org/elmer/jpole.html for one such design,
> complete with a parts and materials list, and look at
> http://www.alpharubicon.com/elect/jpolejaden.htm for another. One
> design screws the SO-239 directly to the pipe, the other makes a
> mounting bracket. Do whichever you prefer - when properly adjusted
> and tuned the two designs should have performance so close to
> identical that you cannot tell the difference.
>
> > Will this through off the swr? What ohms is
12/2
> >wire?
>
> No matter what attachment method you use with a standard copper-pipe
> J-pole, you must "match" it by adjusting the positions at which the
> hot and grounded side of the coax are connected to the copper pipes.
> As a rule of thumb, moving the attachment points upwards along the
> pipe causes the feedline to "see" a higher impedance. You adjust the
> position until your connection is at a point where the impedance is
50
> ohms, and you end up with an SWR of 1:1 or close to it.

>
> The easiest way to get good results is to use a set of published
plans
> in which the original designer has found the correct matching point,
> and then reproduce the antenna as exactly as you can.
>
> >He also gave me a short cable with two pl 259 connectors to connect
> >between my radio and the swr meter. It was a guy at a motorola
dealer.
> >This cable is pretty thin and not rg8 but he said it was 50 ohms.
> >I plan on hooking the 20 feet from the swr to the antenna.
>
> Probably RG-58, and it should be fine for a short run to the
SWR/power
> meter.
>
> --
> Dave Platt <dplatt@radagast.org>
AE6EO
> Hosting the Jade Warrior home page:
http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

What if you are using a design plan exactly with the same diameter
material but with different material, say conduit instead of copper?

If you direct connect an so connector. How do you adjust both sides? I
mean once the ground is in place it is hard to adjust the "hot" side
unless you bend the wire alot.

1240. Re: ANother coax question and update!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 21:37:55 UTC
From: dplatt@radagast.org
Message-ID: <10v095jkjstk5ab@corp.supernews.com>
Source record: 83179

>What if you are using a design plan exactly with the same diameter
>material but with different material, say conduit instead of copper?

I would expect that the tuning would not change appreciably. The antenna's losses might be higher, but likely not enough to be noticeable.

>If you direct connect an so connector. How do you adjust both sides? I
>mean once the ground is in place it is hard to adjust the "hot" side
>unless you bend the wire alot.

You experiment a lot.

Maybe you build a bunch of antennas with different attachment points, and measure them out. Or, maybe you cut one copper-pipe J-pole, don't actually solder the pipes together yet (just depend on a friction fit while tuning), drill a spiral pattern of holes or a line of holes in the pipe to which you can try screwing the SO-239, and try a bunch of positions until you find one which works best. You then rebuild the antenna with a new piece of pipe which is drilled for the socket in only one place.

Or, you build a mounting-and-grounding bracket arrangement which allows easy tuning... as is shown very clearly in one of the two sets of plans I referred you to in the post you're replying to.

Like I said, the easiest way to get a working antenna is to exactly reproduce a known-working example. If you want to vary the design, you'll need to experiment, cut-and-try, and be willing to make mistakes and learn from them.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

1241. Re: ANother coax question and update!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 22:01:07 UTC
From: stryped@hotmail.com
Message-ID: <1106258467.772605.137110@f14g2000cwb.googlegroups.com>
Source record: 83180

Dave Platt wrote:
> >What if you are using a design plan exactly with the same diameter
> >material but with different material, say conduit instead of copper?
>
> I would expect that the tuning would not change appreciably. The
> antenna's losses might be higher, but likely not enough to be
> noticeable.
>
> >If you direct connect an so connector. How do you adjust both sides?
I
> >mean once the ground is in place it is hard to adjust the "hot" side
> >unless you bend the wire alot.
>
> You experiment a lot.
>
> Maybe you build a bunch of antennas with different attachment points,
> and measure them out. Or, maybe you cut one copper-pipe J-pole,
> don't actually solder the pipes together yet (just depend on a
> friction fit while tuning), drill a spiral pattern of holes or a line
> of holes in the pipe to which you can try screwing the SO-239, and
try
> a bunch of positions until you find one which works best. You then
> rebuild the antenna with a new piece of pipe which is drilled for the
> socket in only one place.
>
> Or, you build a mounting-and-grounding bracket arrangement which
> allows easy tuning... as is shown very clearly in one of the two sets
> of plans I referred you to in the post you're replying to.
>
> Like I said, the easiest way to get a working antenna is to exactly
> reproduce a known-working example. If you want to vary the design,
> you'll need to experiment, cut-and-try, and be willing to make
> mistakes and learn from them.
>
> --
> Dave Platt <dplatt@radagast.org>
AE6EO
> Hosting the Jade Warrior home page:
http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

It is just I have some conduit and I can weld it. I thought is would be
interesting. I was thinking of building one of those "slim jims' but

think the mounting might prove to be a problem.

I am wanting to build a j pole, an arrow antenna type open stub, and maybe a ground plane just to see if there is any difference in them using for simplex and repeater operation. I eventually want to build a yagi for 440 and compare it to the dual band open stub j pole like the arrow.

I am just so confused over this j pole. So many people have different opnions. One says it should never be grounded or touch a metal mast others say it does not matter. SOme say it should use a choke of some type others say it does not matter. It is confusing. What do you think on that? I guess my uneducated opinion is it should be insulated and a few turns of coax used as a choke but this is just that the people on that side of the argument seem to be more convincing and some have doen models on nec but I really do not know.

1242. Re: Minimum distance above roof

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 22:14:09 UTC
From: richardharrison@webtv.net
Message-ID: <22871-41F02D31-317@storefull-3256.bay.webtv.net>
Source record: 83182

Gene Fuller wrote:
"The specific number, 22 dB comes with some specific conditions."

Yes, but when you are calculating the decline in field due to distance from the source, 22 dB is convenient as the reduction within the first wavelength. Every time the distance doubles after the first wavelength, the volts per meter are halved. The power per square meter is thus quartered (decreases by 6 dB).

Best regards, Richard Harrison, KB5WZI

1243. My 4 1/2 inch antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 22:29:37 UTC
From: Steveo <steveoparks@yahoo.com>
Message-ID: <1106260177.762938.289020@z14g2000cwz.googlegroups.com>
Source record: 83181
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,alt.personals.gay

PEOPLE SAY I'M A KEYCLOWN BUT I'M NOT. I AM A PROUD MEMBER (i said member,hehehehehe) OF THE MEDINA CB CLUB. WE GET TOGETHET THE FIRST TUESDAY OF THE MONTH FOR A GAY GANG BANG. ANY"BODY" INTERESTED JUST LET ME KNOW.

LOVE YOU GUYS!!!!
STEVEO

1244. Re: ANother coax question and update!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 23:00:43 UTC
From: dplatt@radagast.org
Message-ID: <10v0e0r4onj6269@corp.supernews.com>
Source record: 83183

>It is just I have some conduit and I can weld it. I thought is would be
>interesting.

Sure. No reason not to do this. You may find that there are, or are
not significant differences from a copper-pipe J-pole. The
finding-out is part of what's interesting, no?

> I was thinking of building one of those "slim jims' but
>think the mounting might prove to be a problem.

As others have pointed out, a classic J-pole and a Slim Jim are the
same basic sort of antenna. The Slim Jim simply has a double-section
radiator, shorted at the top. The behavior and performance of the two
will be very similar.

See http://www.cebik.com/jp1.html for a lengthy discussion of such
J-pole variants.

>I am just so confused over this j pole. So many people have different
>opnions. One says it should never be grounded or touch a metal mast
>others say it does not matter. SOme say it should use a choke of some
>type others say it does not matter. It is confusing. What do you think
>on that?

Here's my take on it. At www.cebik.com you can find out a bunch of
other info and discussion.

The classic copper-pipe J-pole is neither a fully-balanced design nor
a fully-nonbalanced design. The impedances "seen" by the two sides of
the feedline are similar, but not identical, and thus there are going
to be somewhat-different currents flowing on the two sides of the
matching arm.

Now, some people feel that a J-pole gives the best and most consistent
performance overall if you force it to act as much like a balanced
antennas as possible... you force the currents on the two sides of the
matching stub to be as equal as you can, and you eliminate the
pathways which would allow RF current to flow down to ground through
other paths (that is, through a grounded mast, and along the outside
of the feedline).

To implement this approach, you insulate the J-pole (or Slim Jim) from
ground, and you use some sort of balun or choke on the feedline to cut
off the outside-of-the-feedline radiation. Some people loop the coax
a few times to create a choke, some people run the coax down the
inside of the copper pipe, some people stick a few ferrite beads on
the outside of the coax, and some people use a half-wavelength 4:1

coaxial balun.

This approach, carefully implemented, *may* give you a J-pole or Slim Jim whose radiation pattern closely approximates that of a classic half-wave vertical dipole. You're keeping RF currents from flowing in any places which could cause radiation which disturbs the pattern. A J-pole or Slim Jim of this sort would tend to be insensitive to small variations in the length of the feedline, because the feedline is choked off and is presenting a high impedance.

So, this is the right and best approach? Not necessarily.

The opposite approach can also work very well... you just build a J-pole, stick it on a metal mast, run the feedline down to your transmitter without choking, and get on the air. There are many, many such J-poles in operation today, with very satisfied owners.

Such J-poles *may* end up with a nontrivial amount of RF flowing down the mast, or down the outside of the feedline. This may disturb the antenna's radiation pattern somewhat (making it less than ideally omnidirectional), or may cause the SWR seen by the transmitter to change somewhat if the feedline length is varied or if the mast is touched (both of these can change the outside-of-the-feedline RF impedance and currents).

However, these can very easily be small and insignificant factors in many installations. Radiation from the feedline and the mast might actually help an antenna's coverage more than it hurts, in certain circumstances... it might "bend" the antenna's pattern into a direction where the slight additional gain is helpful, at the expense of a gain loss in another direction where there doesn't happen to be anyone that the owner doesn't want to talk to. A shift in SWR due to mast or feedline RF-current effects can often be "tuned out" of the system just by moving the feedline attachment points a fraction of an inch... in a base-station application such an adjustment, once made, would probably not need to be re-done unless you start changing cables or moving the mast around.

So... an insulated-and-forcibly-balanced J-pole may well be a more theoretically-perfect antenna in some sense, but a grounded J-pole with no attention paid to balancing or choking could quite easily work just as well in any given installation.

My own copper-pipe J-pole uses a hybrid approach (well, that's the polite term... "it's schizophrenic" is equally valid). It's grounded to the mast, but the feedline is well choked (it runs inside the copper pipe and through a couple of ferrite beads therein, and there's a four-turn choke loop just outside the end of the pipe). Why did I do it this way? Why not?! It works fine, it's been working fine for close to three years, and if an insulated-and-perfectly-balanced version gave me a dB or two better gain uniformity I would very probably never notice the improvement.

Just BUILD SOMETHING, guy. Don't wait around until you figure out the
One True Way To Do It Right. There isn't one... or, rather, there are
at least a thousand.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1245. Re: My 4 1/2 inch antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 23:03:37 UTC
From: Psychiatrist to keyclowns <keyklonzrnutjobs@yahoo.com>
Message-ID: <1106262217.587488.80420@f14g2000cwb.googlegroups.com>
Source record: 83184
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,alt.personals.gay

yeah, mopey is the "wife of the party"

1246. Re: My 4 1/2 inch antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 23:05:05 UTC
From: Psychiatrist to keyclowns <keyklonzrnutjobs@yahoo.com>
Message-ID: <1106262305.145421.324420@c13g2000cwb.googlegroups.com>
Source record: 83185
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,alt.personals.gay

with a little wand like that it would be more laike a gang snap than a gang bang...heheheh

1247. Lucent GPS antenna voltage?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-20 23:43:50 UTC
From: Hank <n1ltv@yahoo.com>
Message-ID: <1106264630.908976.286850@z14g2000cwz.googlegroups.com>
Source record: 83186

Does anyone know how much voltage these various Lucent
GPS antennas typically use that are surplus from cell
phone sites? Or other brands in case there's some
standardization.

Hank
N1LTV

1248. Re: My 4 1/2 inch antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 01:00:03 UTC
From: bbnn <jl@fnn.gfd>
Message-ID: <cspk2m04cs@enews2.newsguy.com>
Source record: 83188
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,alt.personals.gay

Psychiatrist to keyclowns wrote:

>with a little wand like that it would be more laike a gang snap than a
>gang bang...heheheh
>
>
>
as if your dick is any bigger. the average length is 5" from the PDR
medical book.

1249. Wanted Information on 1958 Hy-gain Tribander

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 01:09:31 UTC
From: Larry Louie <y4562@comcast.net>
Message-ID: <1q-dnXSLuPVyy23cRVn-sQ@comcast.com>
Source record: 83187

Looking for any information on this early Hy-gain antenna with the large black traps.

Need the coax feed and matching configuration to the driven element and any antenna assembly information.

Any help would be greatly appreciated.

Larry

1250. Re: new tower final report

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 01:59:39 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <8Oqdnd0f1sCU_23cRVn-gw@adelphia.com>
Source record: 83189

H. Adam Stevens, NQ5H wrote:

> Well folks, I finally did it.
> After 42 years I finished my 8th grade dream: Tower on a hill with a beam.
>
> The 4-element SteppIR on the 48 foot Trylon on the 70 foot hill in the
> sticks; Everything works as advertised;
> one call pile-up busting, "30 over" from Maui, and the Spiderweb Net begins
> 15 minutes earlier for me now.

Awesome! May it give you years of fun!

- Mike KB3EIA -

1251. Re: 5/8 WAVE BASIC QUESTION.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 02:55:16 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <J6_Hd.72002$zy6.7663@bignews5.bellsouth.net>
Source record: 83190

<stryped@hotmail.com> wrote in message
news:1106143766.184393.226900@c13g2000cwb.googlegroups.com...
> WHAT IS THE "COIL" USED TO MATCH A 5/8 WAVE VERTICLE? i MEAN WHAT IS IT
> MADE FROM AND WHERE DO YOU GET THEM?
>

Lots of good answers. - so I'll add another 1.5 cents worth.
The coil is at the bottom normally with enough windings (coils) to add the right amount of inductance that will help to make a 50-ohm source happy.

MADE FROM COPPER - usually.
YOU MAKEM' - if you want to have fun.

Arrl website has an antenna handbook - and several volumes of 'The antenna Compendium" that can give you many hours of fun winding coils, building antennas, making up matching sections - and all that good stuff.

One tool I found helpful in playing around with antennas and transmission line is an MFG 259 Antenna Analyzer. - and there are others out there, too.

1252. Re: Coax Switch To Switch One Antenna Lead Between Several HF Transceivers ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 03:07:16 UTC
From: RB <rbig@bellsouth.nospam.net>
Message-ID: <ei_Hd.72006$zy6.39366@bignews5.bellsouth.net>
Source record: 83191

A real problem with that setup is that you can very easily be transmitting into the switch setting which has no antenna on it. Ask me how I know this......

1253. Re: My 4 1/2 inch antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 04:29:31 UTC
From: moparholic <moparholic@hotmail-nospam.com>
Message-ID: <41f085f7$1@news.usenetzone.com>
Source record: 83192
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

"bbnn" <jl@fnn.gfd> wrote in message news:cspk2m04cs@enews2.newsguy.com...
> Psychiatrist to keyclowns wrote:
>
>>with a little wand like that it would be more laike a gang snap than a
>>gang bang...heheheh
>>
>>
> as if your dick is any bigger. the average length is 5" from the PDR
> medical book.
Tell me about your cock.

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1254. Re: Wanted Information on 1958 Hy-gain Tribander

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 04:44:50 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <41f08bb2_2@news1.prserv.net>
Source record: 83193

Well, I bought one of them in 1959, and in the original configuration IIRC, it had 3 gamma matches, one for each band.
When HyGain supplied the replacement blue potted traps because all the black jobbies filled up with water, they changed
to a direct feed with a "Beta match" which is a hairpin of aluminum wire to mostly provide DC continuity between the
terminals. They recommend a 6 or 8 turn coil in the coax to act as a current mode Balun. I do not have the element
dimensions for the old style traps or the gamma matches. I've looked for it several times recently, and it eludes my
finding it.

BTW, mine has been in continuous use since 1960 with the blue traps. The center insulators on the driven element
failed, as most of HyGain's plastic tended to do, so I redesigned them to use some industrial grade fiberglass, and all
is well.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Larry Louie" <y4562@comcast.net> wrote in message
news:1q-dnXSLuPVyy23cRVn-sQ@comcast.com...
> Looking for any information on this early Hy-gain antenna with the large
> black traps.
>
> Need the coax feed and matching configuration to the driven element and any
> antenna assembly information.
>
>
> Any help would be greatly appreciated.
>
> Larry
>
>

1255. Re: My 4 1/2 inch antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 04:51:31 UTC
From: Psychiatrist to keyclowns <keyklonzrnutjobs@yahoo.com>
Message-ID: <1106283091.917979.132170@c13g2000cwb.googlegroups.com>
Source record: 83194
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,alt.personals.gay

bbnn wrote:
> Psychiatrist to keyclowns wrote:
>
> >with a little wand like that it would be more laike a gang snap than
a
> >gang bang...heheheh
> >
> >
> >
> as if your dick is any bigger. the average length is 5" from the PDR
> medical book.

Leave it to a keyclown to know that statistic..heheh

1256. Re: Coax Switch To Switch One Antenna Lead Between Several HF Transceivers ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 06:14:31 UTC
From: Gary
Message-ID: <6871v0l0ld4qjq877dgvjnvojg8hmje2ns@4ax.com>
Source record: 83195

On Thu, 20 Jan 2005 21:07:16 -0600, "RB" <rbig@bellsouth.nospam.net>
wrote:

>A real problem with that setup is that you can very easily be transmitting
>into the switch setting which has no antenna on it. Ask me how I know
>this......

I get the idea, or I suppose if you're as absent minded as I am and
the unused inputs are grounded you could be transmitting into a dead
short. I think for me I'll just stick wih switching coax between the
two rigs, it sounds less expwnisive that way.

Thanks for the input.

73 Gary K8IQ

1257. Why a capacitor for a shunt fed antenna (Mobile)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 12:11:39 UTC
From: michael.manning@denewc.ang.af.mil
Message-ID: <1106309499.808681.76340@z14g2000cwz.googlegroups.com>
Source record: 83196

What is the reason a capacitor is added to a shunt fed antenna. Most importantly why don't we just use an antenna tuner? Is there really a big difference...Thank you
Mike

REF: Hamstick 10,20,40 meter

1258. Re: Why a capacitor for a shunt fed antenna (Mobile)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 12:49:55 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35cc9iF4m12viU1@individual.net>
Source record: 83197

Capacitors are added to match the feeder to the antenna.

What you describe as an, "antenna tuner" actually matches the
TX to the feeder.

(Slightly more than that, in reality, because what is on the feeder
at the TX end depends on what is connected to the feeder at the
antenna end. However, one thing that the device know traditionally
as the antenna tuner doesn't do, is to tune the antenna!)

<michael.manning@denewc.ang.af.mil> wrote in message
news:1106309499.808681.76340@z14g2000cwz.googlegroups.com...
> What is the reason a capacitor is added to a shunt fed antenna. Most
> importantly why don't we just use an antenna tuner? Is there really a
> big difference...Thank you
> Mike
>
> REF: Hamstick 10,20,40 meter
>

1259. Re: ANother coax question and update!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 13:20:14 UTC
From: stryped@hotmail.com
Message-ID: <1106313614.945252.16930@z14g2000cwz.googlegroups.com>
Source record: 83198

Dave Platt wrote:
> >It is just I have some conduit and I can weld it. I thought is would
be
> >interesting.
>
> Sure. No reason not to do this. You may find that there are, or are
> not significant differences from a copper-pipe J-pole. The
> finding-out is part of what's interesting, no?
>
> > I was thinking of building one of those "slim jims' but
> >think the mounting might prove to be a problem.
>
> As others have pointed out, a classic J-pole and a Slim Jim are the
> same basic sort of antenna. The Slim Jim simply has a double-section
> radiator, shorted at the top. The behavior and performance of the
two
> will be very similar.
>
> See http://www.cebik.com/jp1.html for a lengthy discussion of such
> J-pole variants.
>
> >I am just so confused over this j pole. So many people have
different
> >opnions. One says it should never be grounded or touch a metal mast
> >others say it does not matter. SOme say it should use a choke of
some
> >type others say it does not matter. It is confusing. What do you
think
> >on that?
>
> Here's my take on it. At www.cebik.com you can find out a bunch of
> other info and discussion.
>
> The classic copper-pipe J-pole is neither a fully-balanced design nor
> a fully-nonbalanced design. The impedances "seen" by the two sides
of
> the feedline are similar, but not identical, and thus there are going
> to be somewhat-different currents flowing on the two sides of the
> matching arm.
>
> Now, some people feel that a J-pole gives the best and most
consistent
> performance overall if you force it to act as much like a balanced
> antennas as possible... you force the currents on the two sides of

the
> matching stub to be as equal as you can, and you eliminate the
> pathways which would allow RF current to flow down to ground through
> other paths (that is, through a grounded mast, and along the outside
> of the feedline).
>
> To implement this approach, you insulate the J-pole (or Slim Jim)
from
> ground, and you use some sort of balun or choke on the feedline to
cut
> off the outside-of-the-feedline radiation. Some people loop the coax
> a few times to create a choke, some people run the coax down the
> inside of the copper pipe, some people stick a few ferrite beads on
> the outside of the coax, and some people use a half-wavelength 4:1
> coaxial balun.
>
> This approach, carefully implemented, *may* give you a J-pole or Slim
> Jim whose radiation pattern closely approximates that of a classic
> half-wave vertical dipole. You're keeping RF currents from flowing
in
> any places which could cause radiation which disturbs the pattern. A
> J-pole or Slim Jim of this sort would tend to be insensitive to small
> variations in the length of the feedline, because the feedline is
> choked off and is presenting a high impedance.
>
> So, this is the right and best approach? Not necessarily.
>
> The opposite approach can also work very well... you just build a
> J-pole, stick it on a metal mast, run the feedline down to your
> transmitter without choking, and get on the air. There are many,
many
> such J-poles in operation today, with very satisfied owners.
>
> Such J-poles *may* end up with a nontrivial amount of RF flowing down
> the mast, or down the outside of the feedline. This may disturb the
> antenna's radiation pattern somewhat (making it less than ideally
> omnidirectional), or may cause the SWR seen by the transmitter to
> change somewhat if the feedline length is varied or if the mast is
> touched (both of these can change the outside-of-the-feedline RF
> impedance and currents).
>
> However, these can very easily be small and insignificant factors in
> many installations. Radiation from the feedline and the mast might
> actually help an antenna's coverage more than it hurts, in certain
> circumstances... it might "bend" the antenna's pattern into a
> direction where the slight additional gain is helpful, at the expense
> of a gain loss in another direction where there doesn't happen to be
> anyone that the owner doesn't want to talk to. A shift in SWR due
> to mast or feedline RF-current effects can often be "tuned out" of
the

> system just by moving the feedline attachment points a fraction of an
> inch... in a base-station application such an adjustment, once made,
> would probably not need to be re-done unless you start changing
cables
> or moving the mast around.
>
> So... an insulated-and-forcibly-balanced J-pole may well be a more
> theoretically-perfect antenna in some sense, but a grounded J-pole
> with no attention paid to balancing or choking could quite easily
work
> just as well in any given installation.
>
> My own copper-pipe J-pole uses a hybrid approach (well, that's the
> polite term... "it's schizophrenic" is equally valid). It's grounded
> to the mast, but the feedline is well choked (it runs inside the
> copper pipe and through a couple of ferrite beads therein, and
there's
> a four-turn choke loop just outside the end of the pipe). Why did I
> do it this way? Why not?! It works fine, it's been working fine for
> close to three years, and if an insulated-and-perfectly-balanced
> version gave me a dB or two better gain uniformity I would very
> probably never notice the improvement.
>
> Just BUILD SOMETHING, guy. Don't wait around until you figure out
the
> One True Way To Do It Right. There isn't one... or, rather, there
are
> at least a thousand.
>
> --
> Dave Platt <dplatt@radagast.org>
AE6EO
> Hosting the Jade Warrior home page:
http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

If I build a j out of conduit and make it more like a "U" cutting the
long and short and crossbar at 45 degree angles so they can be welded
togther, how would I measire the length to cut each piece? Can I mount
the cross bar to the mast since I wont have a bottom "leg"?

1260. Alternate material j pole construction question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 13:33:37 UTC
From: stryped@hotmail.com
Message-ID: <1106314417.579450.69570@z14g2000cwz.googlegroups.com>
Source record: 83199

I am experimenting making a j pole out of 1/2 inch conduit. What I am thinking of doing is making it like a "u" in that each piece, the radiator, stub and shorting bar are cut at 45 degree angles and welded togther. I have the dimensions using the 1/2 inch copper. How do i measure each pieces "length"? I mean in the copper plan they use t fittings and measure the radiator length starting incide the t fitting where it is lower than the shorting bar.

My ides was to just measure the end of the angled piece where I cut it to the top, but not sure if this is right. What do you think?

Also, since an antenna constructed this way will not have an "extended leg" to mount to a mast, would it be acceptable to mount the shorted horizontal section to the mast? Will this cause problems?
Any help is appreciated. I hope to work on this tomorrow.

1261. Experience with Resonant Feedline Dipoles requested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 13:58:37 UTC
From: TerraDactyl@shadowstorm.com
Message-ID: <41f1084d.30737538@127.0.0.1>
Source record: 83200

I've attempted to build several Resonant Feedline Dipoles for 10 meters, and so far they seem to be flaky at best. The first one I made out of about 25 feet of RG-8M coax and it came up with about a 1.5:1 SWR, but the rest had high SWRs. I may have used a ferrite core for the RF choke instead of the coiled coax on the first one, but I don't remember for sure. I tried to make another one out of some RG-8 foam with coiled coax for the choke, and it never would tune up. On two other occasions I tried making RFDs with RG-58 and coiled coax chokes, and the SWR was 1.8 on one of them and out of sight with the second one. Has anyone else managed to consistently make RFD dipoles with low SWRs, and if so what type of coax and choke were you using?

Thanks

-TD

1262. Re: ANother coax question and update!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 15:24:40 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41f11f3a$1_1@127.0.0.1>
Source record: 83201

Dave Platt wrote:
> Just BUILD SOMETHING, guy. Don't wait around until you figure out the
> One True Way To Do It Right.

That's my excuse for procrastinating. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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1263. Re: Why a capacitor for a shunt fed antenna (Mobile)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 15:39:12 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41f122a2$1_1@127.0.0.1>
Source record: 83202

michael.manning@denewc.ang.af.mil wrote:

> What is the reason a capacitor is added to a shunt fed antenna. Most
> importantly why don't we just use an antenna tuner? Is there really a
> big difference...Thank you

Caps are cheaper than antenna tuners? One disadvantage
of shunt caps is that their reactance goes down as
frequency in increased thus requiring a separate cap
per band. I prefer a shunt coil whose reactance increases
with frequency so it can be left in place. It gives the
proper amount of parallel inductive reactance on 75m,
twice as much reactance on 40m, 4x on 20m, and 8x on 10m
thus having less effect as frequency is increased.

One other way to accomplish the above matching to 50 ohms
is to use a transformer, either a conventional one or a
transmission line transformer (UNUN).
--
73, Cecil http://www.qsl.net/w5dxp

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1264. Re: ANother coax question and update!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 15:43:32 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35cmf3F4jl7v4U1@individual.net>
Source record: 83203

"Never put off till tomorrow what you can put off till
the day after"

"Procrastination is the thief of time", misquoted as....

"Constipation is the thief of time, diarrhoea waits for no man!"

Which leads me to..... "In a recent survey to determine whether
pet owners were at all worried by the use of canned food
causing an increase in the prevalence of constipation amongst
their pets, 8 out of 10 owners said that their cats couldn't
give a shit."

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41f11f3a$1_1@127.0.0.1...
> Dave Platt wrote:
> > Just BUILD SOMETHING, guy. Don't wait around until you figure out the
> > One True Way To Do It Right.
> That's my excuse for procrastinating. :-)

1265. Re: Why a capacitor for a shunt fed antenna (Mobile)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 15:50:09 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41f12534$1_1@127.0.0.1>
Source record: 83204

Airy R.Bean wrote:
> However, one thing that the device know traditionally
> as the antenna tuner doesn't do, is to tune the antenna!)

However, an antenna tuner at the source makes the
transmission line into a tuned feeder. It tunes the
antenna *system* to achieve a Z0-match that re-directs
all the reflected energy back toward the antenna.

Given a 1/2WL resonant dipole, 1/2WL of ladder-line
is a tuned feeder. 3/8WL of ladder-line plus 1/4WL
provided by the antenna tuner results in a tuned
feeder system.
--
73, Cecil http://www.qsl.net/w5dxp

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1266. Re: Why a capacitor for a shunt fed antenna (Mobile)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 16:04:06 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35cnlkF4ktbaaU1@individual.net>
Source record: 83205

Except in the case where the feed point impedance of the
antenna is resistive and an exact match (rare, possibly
unlikely!) to the surge impedance of the feeder.

ie, for the concept of a tuned feeder, there has to be a
standing wave on it.

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41f12534$1_1@127.0.0.1...
> Airy R.Bean wrote:
> > However, one thing that the device know traditionally
> > as the antenna tuner doesn't do, is to tune the antenna!)
>
> However, an antenna tuner at the source makes the
> transmission line into a tuned feeder.

1267. Re: Why a capacitor for a shunt fed antenna (Mobile)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 16:42:12 UTC
From: richardharrison@webtv.net
Message-ID: <8095-41F130E4-386@storefull-3252.bay.webtv.net>
Source record: 83206

Michael Mannung wrote:
"What is the reason a capacitor is added to a shunt fed antenna?"

Shunt feeding a radiatir has advantages. It eliminates the base insulator. Shunt feed acts as a dingle-turn loop. Field of the loop magnetically induces voltage into the radiator. Attachment point on the radiator is picked to nearly match the resistive part of the radiator impedance to the Zo of the transmission line at the connection point. There is always an inductive reactance at this point which can be tuned out by using a variable capacitor connected in series with the shunt feed connection.

The capacitor is simple to adjust, cheap, and nearly lossless as compared with a coil.

Best regards, Richard Harrison, KB5WZI

1268. Re: ANother coax question and update!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 17:05:40 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <EDaId.5757$J6.3970@trnddc02>
Source record: 83207

I've noticed that Planners dont do and Doers dont plan

"Airy R.Bean" <Me@privacy.net> wrote in message
news:35cmf3F4jl7v4U1@individual.net...
> "Never put off till tomorrow what you can put off till
> the day after"
>
> "Procrastination is the thief of time", misquoted as....
>
> "Constipation is the thief of time, diarrhoea waits for no man!"
>
> Which leads me to..... "In a recent survey to determine whether
> pet owners were at all worried by the use of canned food
> causing an increase in the prevalence of constipation amongst
> their pets, 8 out of 10 owners said that their cats couldn't
> give a shit."
>
> "Cecil Moore" <w5dxp@hotmail.com> wrote in message
> news:41f11f3a$1_1@127.0.0.1...
>> Dave Platt wrote:
>> > Just BUILD SOMETHING, guy. Don't wait around until you figure out the
>> > One True Way To Do It Right.
>> That's my excuse for procrastinating. :-)
>
>

1269. Re: Alternate material j pole construction question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 17:16:31 UTC
From: Eskay <sieb_k@yahoo.ca>
Message-ID: <13k1xrvtgz3wk.19wxyvmtrz541$.dlg@40tude.net>
Source record: 83208

On 21 Jan 2005 05:33:37 -0800, stryped@hotmail.com wrote:

> I am experimenting making a j pole out of 1/2 inch conduit. What I am
> thinking of doing is making it like a "u" in that each piece, the
> radiator, stub and shorting bar are cut at 45 degree angles and welded
> togther. I have the dimensions using the 1/2 inch copper. How do i
> measure each pieces "length"? I mean in the copper plan they use t
> fittings and measure the radiator length starting incide the t fitting
> where it is lower than the shorting bar.
>
> My ides was to just measure the end of the angled piece where I cut it
> to the top, but not sure if this is right. What do you think?
>
> Also, since an antenna constructed this way will not have an "extended
> leg" to mount to a mast, would it be acceptable to mount the shorted
> horizontal section to the mast? Will this cause problems?
> Any help is appreciated. I hope to work on this tomorrow.

I am assuming that you are talking about using EMT conduit.
It will rust pretty quickly and the welds will rust even sooner.
Why not use 1/2 inch copper plumping pipe?
73 de Eskay

1270. Re: Alternate material j pole construction question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 17:25:16 UTC
From: stryped@hotmail.com
Message-ID: <1106328316.783042.218080@f14g2000cwb.googlegroups.com>
Source record: 83209

Eskay wrote:
> On 21 Jan 2005 05:33:37 -0800, stryped@hotmail.com wrote:
>
> > I am experimenting making a j pole out of 1/2 inch conduit. What I
am
> > thinking of doing is making it like a "u" in that each piece, the
> > radiator, stub and shorting bar are cut at 45 degree angles and
welded
> > togther. I have the dimensions using the 1/2 inch copper. How do i
> > measure each pieces "length"? I mean in the copper plan they use t
> > fittings and measure the radiator length starting incide the t
fitting
> > where it is lower than the shorting bar.
> >
> > My ides was to just measure the end of the angled piece where I cut
it
> > to the top, but not sure if this is right. What do you think?
> >
> > Also, since an antenna constructed this way will not have an
"extended
> > leg" to mount to a mast, would it be acceptable to mount the
shorted
> > horizontal section to the mast? Will this cause problems?
> > Any help is appreciated. I hope to work on this tomorrow.
>
> I am assuming that you are talking about using EMT conduit.
> It will rust pretty quickly and the welds will rust even sooner.
> Why not use 1/2 inch copper plumping pipe?
> 73 de Eskay

Yes EMT conduit. I will paint it to keep it from rusting.

I have emt at my house and I can weld it. I dont have enough copper and
I have never soldered copper plus I would have to buy a bunch of
fittings.

1271. Re: Alternate material j pole construction question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 17:32:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <i3e2v0djfsmflkbgurfcim5ghn9tl59dpn@4ax.com>
Source record: 83210

On 21 Jan 2005 05:33:37 -0800, stryped@hotmail.com wrote:

>I hope to work on this tomorrow.

That is all very nice and well, but the tenor of your questions also suggest that you, being unlicensed, are about to embark upon unlawful radio transmissions.

This will not pass unnoticed in your community. If you interfere with any service, there are many hams technically equipped to strip any notion of anonymity (an illusion even here) from your transmissions - just like in the movies.

As I pointed out in a past post, there are several radio clubs in your area. You should join one before they join you.

1272. Re: Alternate material j pole construction question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 17:41:17 UTC
From: stryped@hotmail.com
Message-ID: <1106329277.966494.286350@f14g2000cwb.googlegroups.com>
Source record: 83211

Richard Clark wrote:
> On 21 Jan 2005 05:33:37 -0800, stryped@hotmail.com wrote:
>
> >I hope to work on this tomorrow.
>
> That is all very nice and well, but the tenor of your questions also
> suggest that you, being unlicensed, are about to embark upon unlawful
> radio transmissions.
>
> This will not pass unnoticed in your community. If you interfere
with
> any service, there are many hams technically equipped to strip any
> notion of anonymity (an illusion even here) from your transmissions -
> just like in the movies.
>
> As I pointed out in a past post, there are several radio clubs in
your
> area. You should join one before they join you.

I do have my license. Why do you think I dont?
It is KG4GER if you dont believe me.

1273. Re: Alternate material j pole construction question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 17:59:11 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41f14371$1_2@127.0.0.1>
Source record: 83212

stryped@hotmail.com wrote:
> I do have my license. Why do you think I dont?
> It is KG4GER if you dont believe me.

Hey Don, with a QRZ.com birth date of "01 Nov 0001",
you must have known Jesus. :-)

Why don't you start with the Arrow Antenna design?
It's actually a Zepp design where the driven element
is 1/4WL and the parallel "grounded" element is 3/4WL.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1274. Balun Use/Need

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 18:06:42 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <35culkF4gtpqjU1@individual.net>
Source record: 83213

There is a general belief that a balun should be used where coax connects to the feedpoint of a 1/2-wave dipole (for example), to avoid RF current on the outer surface of the coax outer conductor -- which can affect antenna input match, radiation pattern etc.

But does even a perfect balun fully remove these effects? The outside of the outer conductor of the coax feedline still will be coupled into the received and/or radiated fields, even when there is no current flowing into the coax outer conductor via a metallic connection directly with the dipole itself.

As an illustration of this, consider the effect of a 1/2-wave dipole suspended near, and parallel to another 1/2-wave dipole. Only one dipole is driven. For simplicity of concept, let's say the active RF device (either a tx or rx) is a physically small unit built in to the center insulator of the driven dipole, e.g., no feedline. Standard equations, and NEC-2 analysis show that considerable interaction exists between the two dipoles. The input match of the driven dipole changes, and the radiation pattern of the simple dipole is strongly affected. Yet the only coupling between these two dipoles is by radiation.

So how important is the balun in the total RF system?

RF

1275. Re: Balun Use/Need

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 18:12:29 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <hCbId.3040$cZ1.725@newsread2.news.atl.earthlink.net>
Source record: 83214

>
> So how important is the balun in the total RF system?
>

For simple dipoles it makes lots of money and helps out with the
unemployment.

1276. Re: Alternate material j pole construction question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 18:18:47 UTC
From: richardharrison@webtv.net
Message-ID: <12353-41F14787-379@storefull-3258.bay.webtv.net>
Source record: 83216

Stryped wrote:
"I am making a J-pole out of 1/2 inch conduit."

There ia a 144 MHz Super-J in the "ARRL Antenna Book". It`s on page 16-24 of my 19th edition. Individual piece drawings and measurements are presented for novice builders.

The "Antenna Book" Maritime Antenna is "Super" because it is a collinear using (2) 1/2-wave sections, in phase, and end to end. For a simple J-pole, eliminate one 1/2-wave section and the 1/4-wave phase-inverting stub.

Stainless steel is used fotr the "Super J-pole", but rustable steel can be used if deesired.

Best regards, Richard Harrison, KB5WZI

1277. Re: Balun Use/Need

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 18:26:05 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41f149bf$1_1@127.0.0.1>
Source record: 83215

Richard Fry wrote:

> There is a general belief that a balun should be used where coax
> connects to the feedpoint of a 1/2-wave dipole (for example), to avoid
> RF current on the outer surface of the coax outer conductor -- which can
> affect antenna input match, radiation pattern etc.
>
> But does even a perfect balun fully remove these effects?

There are two sources for common-mode current. One is
conduction. The other is induction. Since common-mode
currents are somewhat unpredictable, the best way to
ascertain if there is a problem is to measure the
current. A toroidal pickup slipped over the coax will
give one a relative reading and is super simple to
implement.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1278. Re: Alternate material j pole construction question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 18:48:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dfi2v01h6568e7vp93k747feqcmmomahr8@4ax.com>
Source record: 83217

On 21 Jan 2005 09:41:17 -0800, stryped@hotmail.com wrote:

>I do have my license. Why do you think I dont?

Hi Don,

From any of a number of your questions, but that is immaterial.

>It is KG4GER if you dont believe me.

It was more a ruse to get you out of the closet. A sign of good
manners and Ham etiquette is to sign occasionally - e.g.

73's
Richard Clark, KB7QHC

1279. Re: Alternate material j pole construction question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 19:11:04 UTC
From: stryped@hotmail.com
Message-ID: <1106334664.635641.18080@f14g2000cwb.googlegroups.com>
Source record: 83218

Cecil Moore wrote:
> stryped@hotmail.com wrote:
> > I do have my license. Why do you think I dont?
> > It is KG4GER if you dont believe me.
>
> Hey Don, with a QRZ.com birth date of "01 Nov 0001",
> you must have known Jesus. :-)
>
> Why don't you start with the Arrow Antenna design?
> It's actually a Zepp design where the driven element
> is 1/4WL and the parallel "grounded" element is 3/4WL.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> -----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
News==-----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World!
>100,000 Newsgroups
> ---= East/West-Coast Server Farms - Total Privacy via Encryption =---

I actually plan to, but will have to order aluminum to do it. I plan on
making both and comparing them.

1280. Re: Balun Use/Need

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 19:11:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fnj2v0h8e4e76i0pupng1j4s8ccq7p73ta@4ax.com>
Source record: 83123

On Fri, 21 Jan 2005 12:06:42 -0600, "Richard Fry" <rfry@adams.net>
wrote:

>The outside of
>the outer conductor of the coax feedline still will be coupled into the
>received and/or radiated fields,

Hi OM,

What you fail to bring into this is the "degree" of coupling. The
transmission line being orthogonal is in the plane of the dipole's
null - hence zero conduction. It only supports conduction through
either direct connection (which the BalUn/Choke breaks) or loss of
symmetry (not falling in the plane of the dipole's null or the
environment distorting that electrical plane - an unbalanced dipole).

>As an illustration of this, consider the effect of a 1/2-wave dipole
>suspended near, and parallel to another 1/2-wave dipole. Only one dipole is
>driven.

This, again, reveals the nature of "degree" of coupling. That is, in
your scenario the second dipole MUST be parallel AND broadside. If it
were parallel and online, the coupling would be considerably (10 - 15
dB) less.

>So how important is the balun in the total RF system?

What is the "degree" of coupling?

73's
Richard Clark, KB7QHC

1281. Re: Alternate material j pole construction question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 19:11:49 UTC
From: stryped@hotmail.com
Message-ID: <1106334709.100976.298220@c13g2000cwb.googlegroups.com>
Source record: 83219

Ok.

Don
KG4GER

1282. Re: Experience with Resonant Feedline Dipoles requested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 19:12:39 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <fuk2v097u280bmbkmu93jp526bba2497ei@4ax.com>
Source record: 83221

On Fri, 21 Jan 2005 13:58:37 GMT, TerraDactyl@shadowstorm.com (Terra Dactyl) wrote:

>
> I've attempted to build several Resonant Feedline Dipoles for 10
>meters, and so far they seem to be flaky at best. The first one I
>made out of about 25 feet of RG-8M coax and it came up with about a
>1.5:1 SWR, but the rest had high SWRs. I may have used a ferrite core
>for the RF choke instead of the coiled coax on the first one, but I
>don't remember for sure. I tried to make another one out of some RG-8
>foam with coiled coax for the choke, and it never would tune up. On
>two other occasions I tried making RFDs with RG-58 and coiled coax
>chokes, and the SWR was 1.8 on one of them and out of sight with the
>second one. Has anyone else managed to consistently make RFD dipoles
>with low SWRs, and if so what type of coax and choke were you using?
>
>Thanks
>
>-TD
>

In this article http://www.io.com/~n5fc/rfd.htm there were similar problems. Maybe there are better antennas to try.

bob
k5qwg

1283. Re: Alternate material j pole construction question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 19:13:50 UTC
From: stryped@hotmail.com
Message-ID: <1106334830.579229.29870@f14g2000cwb.googlegroups.com>
Source record: 83220

I would like to see that stainless stell version. What size tubing does
it use?

What is a "super" j pole?

I would like that book but am a little strapped right now. (One reason
I am using conduit). We just had our second child born January 2!
Maybe I can get it at the Library?

1284. Re: Alternate material j pole construction question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 19:14:42 UTC
From: stryped@hotmail.com
Message-ID: <1106334882.677846.245090@z14g2000cwz.googlegroups.com>
Source record: 83122

Do you think my construction would be ok? WIll supporting the antenna
by the crossbar cause any problem?

1285. Re: Balun Use/Need

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 19:28:30 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <vBwVpFWefV8BFAaz@ifwtech.co.uk>
Source record: 83124

Cecil Moore wrote:
>Richard Fry wrote:
>
>> There is a general belief that a balun should be used where coax
>>connects to the feedpoint of a 1/2-wave dipole (for example), to avoid
>>RF current on the outer surface of the coax outer conductor -- which
>>can affect antenna input match, radiation pattern etc.
>> But does even a perfect balun fully remove these effects?

No, it doesn't, for the reasons that Richard gave, and Cecil summarizes below.

The reasons why these currents can appear is because the antenna, the feedline layout and/or the environment is asymmetrical - and often it's all three.

How much unwanted feedline current you have will depend on the physical layout, how long the feedline is in wavelengths, and where and how it may be grounded at the shack end. That's what makes it unpredictable, as Cecil says below; so whether or not you need a balun will depend entirely on your particular situation.

>
>There are two sources for common-mode current. One is
>conduction. The other is induction.

The 'conduction' component of the current is launched onto the feedline where it connects to the antenna, and a good choke balun at the feedpoint can effectively knock it out. The balun at the feedpoint doesn't have to be perfect; only good enough to make sure that the conduction current doesn't dominate any more.

That leaves the 'induction' component of the current, which is due to asymmetrical electromagnetic coupling between the antenna and the feedline. Unless the feedline is much closer to one side of the antenna than the other, this induction component will generally be much smaller than the conduction component was (before you mostly removed it with a balun at the feedpoint).

If the remaining induction current is a problem, you may need to use additional chokes at various places along the feedline. Depending on the feedline length and the grounding arrangements, there will be current maxima and minima at various places along the feedline. The most effective place to put a choke is obviously at a maximum, where the current is trying to be large; the least effective place is at a minimum, where it's low anyhow.

The last traces of feedline current are very hard to kill completely. It's rather like trying to squeeze the air out of a long balloon - choke the current in one place, and a new maximum will try to pop up somewhere else. Even so, a few chokes in the right places - and always put the first one at the feedpoint - will almost definitely put you in control of the situation.

But how do you know how much current you've got, and where the current maxima are?

>Since common-mode
>currents are somewhat unpredictable, the best way to
>ascertain if there is a problem is to measure the
>current. A toroidal pickup slipped over the coax will
>give one a relative reading and is super simple to
>implement.

Here is a whole page about clip-on current meters, which have the advantage that you don't have to disconnect the cable to feed it through a toroid:
http://www.ifwtech.co.uk/g3sek/clip-on/clip-on.htm

The clip-on gadget is a bit more trouble to build, but you'll be very glad you did! With one of these, you can actually *see* how much RF current you've got, and where it is. Without it, you might as well be investigating RFI problems with your eyes shut.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1286. Re: Balun Use/Need

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 19:35:47 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <nQcId.13440$Os6.11109@trnddc08>
Source record: 83125

"Richard Fry" <rfry@adams.net> wrote in message
news:35culkF4gtpqjU1@individual.net...
> There is a general belief that a balun should be used where coax connects
> to the feedpoint of a 1/2-wave dipole (for example), to avoid RF current
> on the outer surface of the coax outer conductor -- which can affect
> antenna input match, radiation pattern etc.
>
> But does even a perfect balun fully remove these effects? The outside of
> the outer conductor of the coax feedline still will be coupled into the
> received and/or radiated fields, even when there is no current flowing
> into the coax outer conductor via a metallic connection directly with the
> dipole itself.
>
> As an illustration of this, consider the effect of a 1/2-wave dipole
> suspended near, and parallel to another 1/2-wave dipole. Only one dipole
> is
> driven. For simplicity of concept, let's say the active RF device (either
> a tx or rx) is a physically small unit built in to the center insulator of
> the
> driven dipole, e.g., no feedline. Standard equations, and NEC-2 analysis
> show that considerable interaction exists between the two dipoles. The
> input match of the driven dipole changes, and the radiation pattern of the
> simple dipole is strongly affected. Yet the only coupling between these
> two dipoles is by radiation.
>
> So how important is the balun in the total RF system?
>
> RF

Richard

I'd sure like to see radiation pattern from testing or modeling you do on
this "dipole pattern". I have been wondering about how the feed line can
be disassociated from effecting the dipole's radiation pattern.
I finally decided to make my feed for a 137MHz dipole by using two 50 ohm
coax cables to form a 100 ohm balanced line. That alowed me to locate the
balun at a place where its effectiveness is not important.

Jerry
>

1287. Basic Question: How does an antenna tuner work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 20:10:03 UTC
From: Paul Hardwick <ask4@myemailaddress.com>
Message-ID: <vkdId.187589$48.46411@fe1.news.blueyonder.co.uk>
Source record: 83126

...its not as easy as that though. See, I know that it filters out the desired frequency, but I was wondering HOW its does it.

I understand that as the RF waves hit the antenna, they cause free electrons on the antenna to go up and down, and this electrical current (as movement of electrons causes) is then rectified and amplified (talking simply now), and pumped out to the speaker. For this example, I think it would be best to stick with a really simple radio, operating with an Amplitude Modulation.

I imagine the free electrons on the antenna to be very much like a bouy bouncing around on the sea - going up and down. If there was only one continuous sinusoidal wave hitting that electron, then it'll be going up and down quite simply. But then the voice and music we hear is modulated into that sine wave, so the electron is going up and down, plus "wibbling" about because of the modulated speech. Taking the bouy example again, I imagine a tuner very much like a telescope looking at the bouy, and the telescope bouncing up and down at the same rate. What I should see looking through the telescope is the bouy bouncing up and down slightly according the music and voice that has been modulated into it - the carrier wave has been cancelled out because the telescope and bouy are moving up and down at the same frequency.

This sounds all right, but if I then continue to take this analogy further, the bouy (or electron) is moving up and down to MANY frequencies. So even if I am bouncing up and down at the desired frequency, the chances of me seeing the bouy in the right place because of all the other frequency waves are probably nil.

Also, how does the tuner stay in phase with that broadcast, when there are no synchronisation going on?

To round up, the question is this: how can the tuner only select those electrons that are ONLY vibrating at the required frequency, when logic states that the electron must be bouncing around at the combined, additive effect of all RF waves hitting it!

Anyone care to have a go and answer?

Cheers.

Paul.

1288. Re: Balun Use/Need

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 20:50:05 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <35d880F4k38vsU1@individual.net>
Source record: 83127

"Richard Clark" <kb7qhc@comcast.net> wrote
>The transmission line being orthogonal is in the plane of the
> dipole's null - hence zero conduction.

But the nulls of a dipole are off its ends. The t-line connects to the dipole center, where relative field normal to the longitudinal axis of the dipole is at a maximum.

RF

1289. Make Money For Surfing The Net

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 20:52:59 UTC
From: Make-Money <onlyonesmelly@hotmail.com>
Message-ID: <1106340779.802221.83200@c13g2000cwb.googlegroups.com>
Source record: 83128

How does it work? Very easy!!
Step 1. Join the Program

Step 2. Install the TickerBar□ onto your PC

Step 3. Build your downline

Step 4. Cash Out!

How easy is it to build your downline?

Levels 6 levels
each with 10 in downline Total Users
1 10 total
2 110 total
3 1010 total
4 10010 total
5 100010 total
6 1000010 total

TOTAL VESTED USERS: 1,000,010 = $100,000 per month!

Get paid $1 per month for 10 vested downline users
Get paid $10 per month for 100 vested downline users
Get paid $100 per month for 1000 vested downline users
Get paid $1000 per month for 10000 vested downline users
Get paid $10000 per month for 100000 vested downline users
Get paid $100000 per month for 1000000 vested downline users

What's more, you also get paid $0.01 for every hour your computer is
connected to the internet. Yes, we know that's not much, but it's
enough to pay for some electricity. Your downline is where you can
earn!

Join one of the hottest program on the internet! This is the best way
to make cash while surfing the net. Introduce your friends and make
even more money. Join now.
http://greenhorse.com/join_now.ghc?r=56980650

1290. Re: Balun Use/Need

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 21:10:15 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <35d9doF4kq8m9U1@individual.net>
Source record: 83129

"Jerry Martes" <j.jmartes@verizon.net> wrote
> Richard
> I'd sure like to see radiation pattern from testing or modeling you do
> on this "dipole pattern".

Sure - I'll send it to your email adr as a GIF file.

1291. Re: Basic Question: How does an antenna tuner work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 21:49:38 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41f17788.16834486@news.crosslink.net>
Source record: 83130

On Fri, 21 Jan 2005 20:10:03 GMT, "Paul Hardwick"
<ask4@myemailaddress.com> wrote:

>...its not as easy as that though. See, I know that it filters out the
>desired frequency, but I was wondering HOW its does it.
>
>I understand that as the RF waves hit the antenna, they cause free electrons
>on the antenna to go up and down, and this electrical current (as movement
>of electrons causes) is then rectified and amplified (talking simply now),
>and pumped out to the speaker. For this example, I think it would be best
>to stick with a really simple radio, operating with an Amplitude Modulation.
>
>I imagine the free electrons on the antenna to be very much like a bouy
>bouncing around on the sea - going up and down. If there was only one
>continuous sinusoidal wave hitting that electron, then it'll be going up and
>down quite simply. But then the voice and music we hear is modulated into
>that sine wave, so the electron is going up and down, plus "wibbling" about
>because of the modulated speech. Taking the bouy example again, I imagine a
>tuner very much like a telescope looking at the bouy, and the telescope
>bouncing up and down at the same rate. What I should see looking through
>the telescope is the bouy bouncing up and down slightly according the music
>and voice that has been modulated into it - the carrier wave has been
>cancelled out because the telescope and bouy are moving up and down at the
>same frequency.
>
>This sounds all right, but if I then continue to take this analogy further,
>the bouy (or electron) is moving up and down to MANY frequencies. So even
>if I am bouncing up and down at the desired frequency, the chances of me
>seeing the bouy in the right place because of all the other frequency waves
>are probably nil.
>
>Also, how does the tuner stay in phase with that broadcast, when there are
>no synchronisation going on?
>
>To round up, the question is this: how can the tuner only select those
>electrons that are ONLY vibrating at the required frequency, when logic
>states that the electron must be bouncing around at the combined, additive
>effect of all RF waves hitting it!
>
>Anyone care to have a go and answer?
>
>Cheers.
>
>Paul.

Dear Paul,

It's elementary. Look up the Superposition Theorem. You will find that
in a linear system it is possible to single out any one (or more) of
the existing effects and treat it (them) individually. In other words,
if you restrict the bandwidth of the system so as to study the effects
of only one signal, then that is the only one you will see.
Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1292. Re: Why a capacitor for a shunt fed antenna (Mobile)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 22:28:52 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <cc03v01ttnhj5m37lkphhr3tjqpnlvef00@4ax.com>
Source record: 83131

On Fri, 21 Jan 2005 16:04:06 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

|Except in the case where the feed point impedance of the
|antenna is resistive and an exact match (rare, possibly
|unlikely!) to the surge impedance of the feeder.

Mutually exclusive.

1293. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 23:02:59 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41f187fc.5013950@news.iol.ie>
Source record: 83132
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

W9DMK<nobody@crosslink.net> (Robert Lay) wrote:

: >: I think you meant that it's inversely proportional to the gap between
: >: the plates.
: >:
: >
: >its still proportional....
: >
:
: That doesn't qualify as worthy of a response.

a relative bearing is a bearing.

inverse proportional is a proportion.

a is a subset of b

get the idea ?

1294. Re: Balun Use/Need

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 23:32:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <li13v0t7thtummfdg1r5uoq7kbubo35sem@4ax.com>
Source record: 83133

On Fri, 21 Jan 2005 14:50:05 -0600, "Richard Fry" <rfry@adams.net>
wrote:

>"Richard Clark" <kb7qhc@comcast.net> wrote
>>The transmission line being orthogonal is in the plane of the
>> dipole's null - hence zero conduction.
>_____________
>
>But the nulls of a dipole are off its ends. The t-line connects to the
>dipole center, where relative field normal to the longitudinal axis of the
>dipole is at a maximum.

Hi OM,

It takes only a moment to visualize a dipole, frozen in time, where each arm supports the opposite charge. The continuum of forces between the two, in three-space, shows a distinct plane of response where a net-zero force is exhibited. This reference plane, a virtual ground, falls between the poles and is orthogonal.

A common artifice of erecting vertically polarized antennas above dipoles bears this out. The two are invisible to each other. It also allows for the use of towers to support beams, but also explains why guy wires which violate balance (do not fall within the plane) must be broken up as conductors. The towers have a smaller degree of coupling than do the guy wires that support them.

Even folded dipoles in commercial installations make use of this reference plane by providing a mounting point (180 degrees from the feed) to the support structure. No regard needs to be made for "shorting" out the loop at this point.

The null you speak of is exhibited in the far field - the utility of BalUn/Chokes are in the near field. The transmission line may lie within the reference plane, but its metallic connection to one of the poles necessarily violates the electrical balance. The BalUn/Choke isolates this connection.

73's
Richard Clark, KB7QHC

1295. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 23:42:21 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41f1933d.23927095@news.crosslink.net>
Source record: 83134
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Fri, 21 Jan 2005 23:02:59 GMT,
zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net (ZZZPK)
wrote:

>W9DMK<nobody@crosslink.net> (Robert Lay) wrote:
>
>: >: I think you meant that it's inversely proportional to the gap between
>: >: the plates.
>: >:
>: >
>: >its still proportional....
>: >
>:
>: That doesn't qualify as worthy of a response.
>
>
>a relative bearing is a bearing.
>
>inverse proportional is a proportion.
>
>
>
>a is a subset of b
>
>get the idea ?
>
Nonsense! Have you learned nothing?

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1296. Re: Make Money For Surfing The Net

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-21 23:43:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ti43v0pdbpolpdbgv5rndi8tpos96k1von@4ax.com>
Source record: 83135

On 21 Jan 2005 12:52:59 -0800, "Make-Money"
<onlyonesmelly@hotmail.com> wrote:

>How does it work?
Hmmmm All the simplicity of an old MTV favorite:

get Money for nuthin' and your chicks for free!

Oh well. I don't recognize your Band's name, so you will probably
have to play a 1000 Honkey-tonks and spend your nights in 200 more
Motels before you become this overnight success.

...write when you find work.

1297. any fl hamfests?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 00:38:59 UTC
From: ml <m@di.net>
Message-ID: <m-81A590.19385521012005@news.verizon.net>
Source record: 83136

Just wondering does anyone know of any hamfests in FL for the rest of this month and early feb??

1298. Re: My 4 1/2 inch antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 02:24:41 UTC
From: bbnn <jl@fnn.gfd>
Message-ID: <cssdda01mfq@enews1.newsguy.com>
Source record: 83137
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,alt.personals.gay

Psychiatrist to keyclowns wrote:

>bbnn wrote:
>
>
>>Psychiatrist to keyclowns wrote:
>>
>>
>>
>>>with a little wand like that it would be more laike a gang snap than
>>>
>>>
>a
>
>
>>>gang bang...heheheh
>>>
>>>
>>>
>>>
>>>
>>as if your dick is any bigger. the average length is 5" from the PDR
>>medical book.
>>
>>
>
>Leave it to a keyclown to know that statistic..heheh
>
>
>
at least i don't suck on them like you .. hehehehe

1299. Eimac 3-500Z Data Sheets available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 04:01:18 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10v3jt4m41c6i41@news.supernews.com>
Source record: 83138
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

View individual data sheets and save the ones you want or download a single zip file that contains all 8 sheets. Tech specs, application notes, and a dual 3-500Z amp schematic are included.

1. http://www.ad5th.com/3-500Z.html

--

Charlie
Ham Radio - AD5TH
www.ad5th.com

1300. ATAS-100 problems with tuning all bands

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 04:13:30 UTC
From: kernelkole <kernel@medianox.net>
Message-ID: <1106367210.413504.281260@f14g2000cwb.googlegroups.com>
Source record: 83139

I just got an ATAS 100 for my FT100D. Without getting the thing
properly grounded (another thread...), I am only able to tune to 10
meters using the autotuing function. Does anyone know if grounding
will make it possible to tune the other bands?

thanks

1301. ATAS-100 can't tune manually

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 04:15:03 UTC
From: kernelkole <kernel@medianox.net>
Message-ID: <1106367303.731692.287860@f14g2000cwb.googlegroups.com>
Source record: 83140

I'm not able to get the manual tuning function to work at all on the
ATAS-100. Does anyone know why?

Thanks,
kc0olm

1302. 2nd storey grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 04:20:18 UTC
From: kernelkole <kernel@medianox.net>
Message-ID: <1106367618.605459.308130@f14g2000cwb.googlegroups.com>
Source record: 83141

Of the solutions presented in the ARRL Antenna Book for 2nd storey grounding...ha, ha! There are no solutions!

But that doesn't help me.

I live in an apartment - a set of rooms in a 100+ year old building, so you'd THINK they'd have copper/metal plumbing; but, no. It's been pvc'd. So no cold water pipe.

The ARRL cautions, and I concur, against dropping a long bit o' wire from the window to the ground - many issues, including having the ground wire function as a resonator, or, RF burns from touching th radio. Don't want those.

There's the MFJ "artificial" ground, but I don't see how that would work with the ATAS 100 I have - like having an antenna tuner for an antenna tuner.

Any thoughts?

thanks,
kc0olm

1303. Re: 2nd storey grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 06:46:31 UTC
From: nm5k@wt.net
Message-ID: <1106376391.935984.197670@c13g2000cwb.googlegroups.com>
Source record: 83142

kernelkole wrote:
> Of the solutions presented in the ARRL Antenna Book for 2nd storey
> grounding...ha, ha! There are no solutions!
>
> But that doesn't help me.
>
> I live in an apartment - a set of rooms in a 100+ year old building,
so
> you'd THINK they'd have copper/metal plumbing; but, no. It's been
> pvc'd. So no cold water pipe.
>
> The ARRL cautions, and I concur, against dropping a long bit o' wire
> from the window to the ground - many issues, including having the
> ground wire function as a resonator, or, RF burns from touching th
> radio. Don't want those.
>
> There's the MFJ "artificial" ground, but I don't see how that would
> work with the ATAS 100 I have - like having an antenna tuner for an
> antenna tuner.
>
> Any thoughts?
>
> thanks,
> kc0olm

What does the ATAS 100 feed, and where is it? Just use complete
antennas.
Myself, I wouldn't worry about it. You don't need a ground in the
shack for rf purposes, as long as the antenna is not fed directly from
the
shack. IE: random wire fed from a tuner in the shack, etc..I haven't
used
an rf ground in the shack for years. I would not waste any money on an
MFJ "artificial ground". MK

1304. Re: 2nd storey grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 06:50:01 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <%FmId.28773$SK6.22775@bignews3.bellsouth.net>
Source record: 83143

http://www.k0lee.com/durango.html

I don't have either the FT100 or the ATAS100, but according to this web
page, it looks like uhf/vhf stuff.
shux, man - in an apartment, you could mount it to a radiator, or fridge or
stove or metal cabinet - or railing

but if its hf - never mind
.

1305. Re: ATAS-100 problems with tuning all bands

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 06:52:28 UTC
From: nm5k@wt.net
Message-ID: <1106376748.282927.238620@z14g2000cwz.googlegroups.com>
Source record: 83144

What antenna are you using? Are you trying to use a mobile whip
at home? Hope you have radials, or some sort of ground *under* the
antenna. Thats where the ground would need to be, if thats what
you are trying to feed. MK

1306. Re: 2nd storey grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 06:55:41 UTC
From: nm5k@wt.net
Message-ID: <1106376941.573874.250690@z14g2000cwz.googlegroups.com>
Source record: 83145

If I remember right, the ATAS is a HF auto tuner of sorts, usually used for the yaesu mobile antenna...Sounds like he's trying to feed a mobile

whip with the auto tuner, at home. But just guessing...BTW, the FT-100 is
all band...HF-VHF-UHF...Kinda the yaesu equal to a icom 706....MK

1307. Re: Balun Use/Need

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 06:57:35 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <5NmId.28803$SK6.22401@bignews3.bellsouth.net>
Source record: 83146

If the coax bites - put a balun on it.

1308. Re: ATAS-100 problems with tuning all bands

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 07:15:57 UTC
From: Dave <myself@yourself.ie>
Message-ID: <N4nId.10$Jf6.8@newsfe2-win.ntli.net>
Source record: 83147

<nm5k@wt.net> wrote in message
news:1106376748.282927.238620@z14g2000cwz.googlegroups.com...
> What antenna are you using? Are you trying to use a mobile whip
> at home? Hope you have radials, or some sort of ground *under* the
> antenna. Thats where the ground would need to be, if thats what
> you are trying to feed. MK

The Atas-100 is a mobile so I suppose he is using it mobile

1309. Re: ATAS-100 problems with tuning all bands

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 12:23:36 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <82h4v0hnrat9pgm23g6nucd575l3eaet6r@4ax.com>
Source record: 83148

On 21 Jan 2005 20:13:30 -0800, "kernelkole" <kernel@medianox.net>
wrote:

>I just got an ATAS 100 for my FT100D. Without getting the thing
>properly grounded (another thread...), I am only able to tune to 10
>meters using the autotuing function. Does anyone know if grounding
>will make it possible to tune the other bands?
>
>thanks

Is this the little mobile whip antenna Yaesu makes for 40 thru 2
meters? It needs a ground -- the kind you'd have, attached to a car.
Otherwise, in your apartment, you might try attaching some 1/4 wave
radials to the grounding point for the device, for each band you want
to work. Without a ground, half the antenna system is missing.

bob
k5qwg

1310. Re: Balun Use/Need

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 12:59:07 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <35f10tF4k2du8U1@individual.net>
Source record: 83149

"Richard Clark" <kb7qhc@comcast.net> wrote
> The null you speak of is exhibited in the far field -

The near-field boundary is located at about 2*(Ant Length)^2 / lambda, which for a 14 MHz, 1/2-wave dipole is ~32 feet away. The far-field radiation pattern shape is not well formed inside that boundary, but radiated fields are non-zero, nevertheless. A coax feedline that does not project on a radial normal to the dipole feedpoint will have current induced on its outer conductor by coupling to the dipole -- whether or not a balun is used.

RF

1311. Re: ATAS-100 problems with tuning all bands

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 14:21:07 UTC
From: ml <m@di.net>
Message-ID: <m-F3F5CE.09210322012005@news.verizon.net>
Source record: 83150

In article <1106367210.413504.281260@f14g2000cwb.googlegroups.com>,
"kernelkole" <kernel@medianox.net> wrote:

> I just got an ATAS 100 for my FT100D. Without getting the thing
> properly grounded (another thread...), I am only able to tune to 10
> meters using the autotuing function. Does anyone know if grounding
> will make it possible to tune the other bands?
>
> thanks

i have the same antenna and rig, if your using it on a car as entended
, try adding a ground wire from antenna mount base to car chassis
w/good wire and also ground radio it's fickle about grounds

if your using it off a car i find you need at least 3 radials before
it will tune and be happy but each area is different perhaps you need
more

good luck

1312. toroid question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 14:59:59 UTC
From: larry d clark <buddycl@swbell.net>
Message-ID: <PTtId.18170$wi2.10229@newssvr11.news.prodigy.com>
Source record: 83151

idle minds can come up with some strange questions
and i'm no exception. i got to wondering if you
have 2 toroids each with a permiablity of 100 and slide
them both on a piece of coax, is the effective permiablity
200? if not what is it?

larry
kd5foy

1313. 5/8, 1/4 and 1/2 wave help?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 15:32:17 UTC
From: bbnn <jl@fnn.gfd>
Message-ID: <cstrib0gmc@enews4.newsguy.com>
Source record: 83153

I need help understanding these different types of verticals.

What is the feedpoint Z of each of these?

I can't understand how a 5/8 can even work. It seems like it has to be
multiples of 1/4 wave for any antenna to work.
Why not a 7/8 wave antenna?

Why does a 5/8 wave antenna need a loading coil and a 1/4 wave antenna
doesn't?

Is there such a thing as a 1/2 wave whip ant. fed at the bottom?

Are there other sizes of whip antennas?

1314. Re: any fl hamfests?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 15:47:06 UTC
From: Spike <gator2@webmail.co.za>
Message-ID: <35fas1F4m87puU1@individual.net>
Source record: 83152

Feb 11,12,13 Central Florida Fairgrounds,
Hamcation: hamcation@oarc.org
Tel: 407 273-1406 73s W6BWY

1315. Re: Alternate material j pole construction question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 16:15:27 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41f276ed.773281171@news.galilei.com>
Source record: 83154

Hi Don

Don't let them get to you!

Both the Callbook and QRZ had me so messed up for most of my ham career that I never knew if I was coming or going.

After several invitations to join the QCWA, I was eventually turned down because of an error in the callbook, the ONLY source they use for verification.

At one time I held something like 4 or 5 callsigns, which is a major no no. The callbook had me listed under 2 different callsigns, neither of which were accurate.

One time, when I went to upgrade, the FCC obviously lost my valid callsign and refused the upgrade. Made me start over from scratch. Then after passing all the tests, one right after the other, and after my new call came, they finally found their error.
It was the retaking of all the tests so closely together that caused me to have so many callsigns appearing as valid.

The problems started with my very first callsign, it arrived with my address shown correctly but bore my Elmers name. Thus when the 1959 callbook came out it too was in error, even though the FCC corrected the problem and issued me a new certificate. For some reason, the callbook perpetuated this error in subsequent editions.
The FCC would not let me renew that callsign while I was out of the country away at school. So upon returning home from college I got a new callsign in 1972 that I never intended on changing. But the FCC lost it, that is why I had to retake all of my upgrades over again. Every callbook since has showed my Amateur Since date as being a different start date.

Speaking of the QCWA, I had sent them massive amounts of paperwork, copies of licenses and logbooks, signed affidavits from hams who new me, copies of newsletters and even school yearbooks and radio club affiliations and even copies of current logbooks showing the many errors being perpetuated concerning me.
They refused to consider any factual evidence of my being a ham, and relied solely on the erroneous callbook in their library.

So when they began inviting me to join again, I reminded them quite clearly that they turned me down flat in the past, nothing has changed, the callbooks are still in error. And I don't want to belong to a club that DON'T want me!

I also AM NOT a member of the ARRL, due to foulups they have made!
And other incidents between them and myself, which I won't bore you
with here, other than to say, they are a greedy money based
organization that looks out for themselves, NOT for the Hams they
claim to look out for.

TTUL
Gary

1316. Re: Alternate material j pole construction question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 16:21:04 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35fd1fF4m4r32U1@individual.net>
Source record: 83155

Why is semen white and urine yellow?

So that an Irishman (Polak to the Yanks) knows whether
he is cumming or going!

"Gary V. Deutschmann, Sr." <raiar@bbs.galilei.com.nospam> wrote in message
news:41f276ed.773281171@news.galilei.com...
> Both the Callbook and QRZ had me so messed up for most of my ham
> career that I never knew if I was coming or going.

1317. Re: any fl hamfests?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 16:42:51 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20050122114251.13985.00000131@mb-m19.aol.com>
Source record: 83156

Orlando Hacation Feb 12

1318. Re: Basic Question: How does an antenna tuner work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 16:57:36 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41f28761$1_1@127.0.0.1>
Source record: 83157

Paul Hardwick wrote:
> To round up, the question is this: how can the tuner only select those
> electrons that are ONLY vibrating at the required frequency, when logic
> states that the electron must be bouncing around at the combined, additive
> effect of all RF waves hitting it!

You are confusing the RF waves with the electron carriers. The easiest
way to stop confusing waves with carriers is to stand on a cliff
looking out over the ocean. (Fitzgerald's Marine Reserve, just north
of Santa Cruz, CA, is an ideal place.) There are all sorts of waves
using the same water molecule carriers. There are big waves rolling
straight in and smaller waves rolling in at an angle. The waves
rolling in reflect off the beach and roll back out to sea. Each of
these waves maintains a separate identity even though they are using
the same individual water molecules as the wave carriers.

RF waves do the same thing - share individual quantum carriers for
any number of waves. All the waves are superposed on each individual
carrier, but each wave maintains its individual identity.

Note that water waves and RF waves are different kinds of waves but
they do share the above limited characteristic concerning carriers.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1319. Re: 2nd storey grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 17:05:18 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41f28930$1_2@127.0.0.1>
Source record: 83158

kernelkole wrote:
> I live in an apartment - a set of rooms in a 100+ year old building, so
> you'd THINK they'd have copper/metal plumbing; but, no. It's been
> pvc'd. So no cold water pipe.

> There's the MFJ "artificial" ground, but I don't see how that would
> work with the ATAS 100 I have - like having an antenna tuner for an
> antenna tuner.
>
> Any thoughts?

I have always solved that particular problem with a dipole
which requires no RF ground. However, lightning protection is
an entirely different matter. I just never worried about it
and never got hit.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1320. Re: 5/8, 1/4 and 1/2 wave help?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 17:12:16 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <QPvId.15761$ru.7000@fed1read07>
Source record: 83159

First off an antenna does not have to be resonant to work. There are many designs using non resonant antennas.
An example is a random wire using a tuner.
See URL:
http://www.qsl.net/ve3mcf/elecraft_reflect/Antennas_Non-Resonant.txt

For 1/4 to 5/8 wave antennas

Going from 1/4 wave to a half wave to a 5/8 wave vertical results (in each case) in a lower angle of radiation, thus 'gain"
See URL for a pictorial of this
http://www.wingsandwheels.com/page14.htm

Another at URL:
http://web.wt.net/~nm5k/acompari.htm

Be aware of what antenna gain means
Antenna gain is somewhat a misnomer, as "Ya can't get out more than ya put in". In reality no antenna has gain, only losses due to inefficiencies So what is meant by antenna "gain"? The gain spoken of has to do with shaping the antenna radiation pattern so that more energy is radiated along a given plane as compared to a reference antenna. In effect the radiation pattern is squished into a narrower directional beam. Squeeze a round toy balloon to visualize the effect.

Several reference antennas can be used, but the ones most often used are the dipole and an isotropic antenna. When using the dipole as a reference, the subjective value of zero dB gain (dBd) is assigned (except NMEA, National Marine Electronics Association, which assigns it a subjective value of 3 dB gain). The isotropic antenna is by theory an infinitely small sphere that radiates equally in all directions. By comparing a real antenna to this standard, a figure of merit can be expressed in dB, usually stated as dBi. That is, the gain of the real antenna over the isotropic reference. Since the real antenna does not radiate equally in all directions, some plane of directivity must be specified.

Every antenna, other than an isotropic will have gain in some direction at the expense of that in others. This gain of course, comes from not radiating power in all the other directions. And the beam width is measured at the minus 3 dB points (half power points) so the antenna "hears" and "talks" well beyond the beam width specification.

A Half wave vertical will have a lower radiation angle than a 1/4 wave and presents a very high impedance feed point. The feedpoint is a voltage maximum, has high impedance, and thus must use a critical matching network

to be fed with conventional coaxial cable. Such a network is often no more than an autotransformer with about a 2000 Ohm secondary and a tap at the 50 Ohm point. In any case, since the natural impedance of the end-fed half-wave is so high, it is not influenced by the presence or absence of ground.

A 5/8-wave antenna adds 1/8-wave to the length of the 1/2 wave radiator, which shifts the voltage-current relationship by 45 degrees and creates a low-impedance antenna. This is also easier to match to coaxial cable, since the match ratio is much smaller and the network used will be more efficient. 5/8 wavelength antennas are not resonant. The purpose of such an antenna design is to raise the current maximum higher up the antenna, thereby yielding a lower angle of radiation.

Normally a matching method is used, since the characteristic impedance of such an antenna is capacitive and the resistive component is greater than 50 ohms

A tapped coil is used to feed the antenna with coax, thereby canceling the capacitance and providing an impedance transformation to 50 ohms.

http://www.qsl.net/w4sat/five8th.htm

As you extend the wavelength above 5/8 (actually 3/4 lambda as I recall) the antenna begins to exhibit split lobes with some at relatively high radiation angles. So 5/8 is about the maximum practical wavelength for a vertical antenna.

For a quarter wave antenna, the feedpoint impedance might be around 32 Ohms (various factors enter into this), but many designs use drooping radials to achieve a 50 Ohm match.

The ARRL Antenna Handbook will elaborate on these designs.

--
Hope this helps
Caveat Lector

"bbnn" <jl@fnn.gfd> wrote in message news:cstrib0gmc@enews4.newsguy.com...
>I need help understanding these different types of verticals.
>
> What is the feedpoint Z of each of these?
>
> I can't understand how a 5/8 can even work. It seems like it has to be
> multiples of 1/4 wave for any antenna to work.
> Why not a 7/8 wave antenna?
>
> Why does a 5/8 wave antenna need a loading coil and a 1/4 wave antenna
> doesn't?
>
> Is there such a thing as a 1/2 wave whip ant. fed at the bottom?
>

> Are there other sizes of whip antennas?

1321. Re: Balun Use/Need

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 17:15:17 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41f28b89_2@127.0.0.1>
Source record: 83160

Richard Fry wrote:

> "Richard Clark" <kb7qhc@comcast.net> wrote
>> The transmission line being orthogonal is in the plane of the
>> dipole's null - hence zero conduction.
>
> But the nulls of a dipole are off its ends. The t-line connects to the
> dipole center, where relative field normal to the longitudinal axis of
> the dipole is at a maximum.

The orthogonal part is the important part. The radiation "sees"
the transmission line on edge and doesn't induct (much) energy
to it. The energy transferred from the antenna to the feedline
is a function of the cosine of the angle between them. If the
feedline is hanging down vertically from a horizontal dipole,
for common-mode purposes, the feedline is vertically polarized
and the antenna is horizontally polarized. It is when you bend
the feedline at some angle other than 90 degrees to the antenna
that the cosine of that angle becomes non-zero.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1322. Re: toroid question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 17:20:46 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41f28cd0$1_2@127.0.0.1>
Source record: 83161

larry d clark wrote:
> idle minds can come up with some strange questions
> and i'm no exception. i got to wondering if you
> have 2 toroids each with a permiablity of 100 and slide
> them both on a piece of coax, is the effective permiablity
> 200? if not what is it?

The Al of two toroids of the same material changes
with physical dimensions. The permeability is still
100, but the cross section area has changed so the
Al (uH/100T) changes in the formula.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1323. Re: 5/8, 1/4 and 1/2 wave help?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 17:28:53 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41f28eb6$1_2@127.0.0.1>
Source record: 83162

bbnn wrote:
> Why not a 7/8 wave antenna?

OK for a horizontal antenna. Causes unwanted high-angle
radiation in a vertical.

> Why does a 5/8 wave antenna need a loading coil and a 1/4 wave antenna
> doesn't?

A 1/4WL vertical with a ground plane is resonant. A 5/8WL
vertical is not resonant and requires some sort of matching.

> Is there such a thing as a 1/2 wave whip ant. fed at the bottom?

J-Pole is a good example. The bottom 1/4WL of a J-Pole is
the matching section.

> Are there other sizes of whip antennas?

Any length of vertical whip up through 5/8WL will work well
if you can deliver the RF energy into the antenna. For
practical matching purposes, whips without internal loading
are usually limited to about 3/16 wavelength. I've used a
13 ft. whip, resonant on 17m, on 20m with an autotuner and
it worked well. On 40m, it was a good S-unit down from my
homemade bugcatcher.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1324. OK, now THIS is wierd.....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 17:53:07 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <8qwId.288$PB.70@okepread01>
Source record: 83163

My HF rig was damaged earlier this month. I replaced
it (Yaesu FT-840) with a new FT-857D and all is working
fine but I'm getting wierd results from my antennas.

I have 2 HF antennas - a coax fed 160/80 trap dipole (uses
3-1/2" dia coax traps) and a shortened Van Gorden
"All Bander".

On all three bands with the new rig I'm getting about 1/3rd
more bandwidth between the 2:1 SWR points. The SWR
meter hasn't changed and the feedlines and antennas are the
same - only the transciever has changed. Power is as before
- 100 watts.

What could be causing this? The only thing I could think of
is that my old rig was "dirty" and the harmonics were adding
to the SWR.

--
73's es gd dx de Ken KG0WX
Grid EM17ip, Flying Pigs #1055,
List Owner, Yahoo! E-groups:
VX-2R & FT-857

1325. Re: Balun Use/Need

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 18:03:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <p835v0l6urfjdn89tgev4i8nd9dv77siu3@4ax.com>
Source record: 83164

On Sat, 22 Jan 2005 06:59:07 -0600, "Richard Fry" <rfry@adams.net>
wrote:

> A coax feedline that does not project on a
>radial normal to the dipole feedpoint will have current induced on its outer
>conductor by coupling to the dipole -- whether or not a balun is used.

Hi OM,

This is arguable at best, and suitable newsgroup fodder for endless
speculation on the contributions of superposition and the combination
of direct and induced currents.

The classic study of Engineering reveals one principal:
The well defined problem contains its own solution.

The omission of the BalUn/Choke is not revealed as a solution to your
complaint above. It has already been disclosed by others on how the
further application of choking can resolve this crafted failure.
Their discussion and my own comprise a general solution that responds
to the necessary correlative:
What is the degree of coupling?

73's
Richard Clark, KB7QHC

1326. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 18:18:17 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41f2989b.74815130@news.iol.ie>
Source record: 83165
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

W9DMK<nobody@crosslink.net> (Robert Lay) wrote:

: Bob, W9DMK, Dahlgren, VA
: Replace "nobody" with my callsign for e-mail
: http://www.qsl.net/w9dmk
: http://zaffora/f2o.org/W9DMK/W9dmk.html

if i didnt know any better i'd swear
you have relations living in KENT,ENGLAND

1327. Re: 5/8, 1/4 and 1/2 wave help?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 20:13:45 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <csuc5p$n0a$1@titan.btinternet.com>
Source record: 83166

> I need help understanding these different types of verticals.
>
> What is the feedpoint Z of each of these?
==========

Feedpoint impedance is expressed in terms of R + jX. Both numbers are functions of frequency or wavelength. For a simple wire vertical less than 3/8 waves, with sufficient ballpark accuracy -

R = Square(24 * Height / Wavelength) ohms,

X = - 550 / Tangent(Angle) ohms, where -

Angle = 360 * Height / Wavelength) degrees.

==========
> I can't understand how a 5/8 can even work. It seems like it has to be
> multiples of 1/4 wave for any antenna to work.
> Why not a 7/8 wave antenna?
==========
Indeed, why not?

Any antenna WORKS quite satisfactorily REGARDLESS of how long it is. After all it is only a length of wire. Why should it work better merely because it is some special fraction of a wavelength?
>
==========
> Why does a 5/8 wave antenna need a loading coil and a 1/4 wave antenna
> doesn't?
==========

A 5/8ths antenna doesn't need a loading coil. It will work just as it is. But a loading coil is useful to tune-out the reactance of the input impedance and so provide a better match to a transmission line.

To assist in EXACT matching of a 1/4-wavelength antenna to a 50-ohm line a loading coil plus capacitor is needed. But you can nearly always do without either. With a 36-ohm line, if you can find one, there's a near-enough perfect match. But then you have to match to 50-ohms at the transmitter end so you get nowhere.

==========

> Is there such a thing as a 1/2 wave whip ant. fed at the bottom?
==========

Yes. There is. Why not? It's quite a normal thing to do. The matching and especially ground losses are exceptionally small.

==========

> Are there other sizes of whip antennas?

==========

Yes, any size you like. As long as you can find room in your back yard. They will ALL work quite efficiently. Unless, of course, they are extremely short in terms of the free-space wavelength. Say less than 1/100th wavelengths.

Very short antennas result in losses in the matching or tuning arrangements needed to match to the usual 50-ohm transmitter. Antennas are themselves inherently very high efficiency devices.

For values of R + jX, and other information such as loading components, download free programs from the following website. For clues, look under each program name in the list for a brief one-line description of a program's purpose.

Values of R + jX are usually of secondary importance. They are educational in that they provide information about antenna behaviour. They are practical only if it is the intention to design impedance matching networks or to check the operating range of commercial tuners.

You could try program ENDFEED first. Just put the horizontal length of an Inverted-L equal to zero and you are left with a vertical. But there are several other programs dealing with verticals directly and which values of R + jX appear in the output data alongside values of L and C of the tuning network.

Apart from the necessary nuts and bolts, you could dispense with half of the ARRL Handbooks! All for free! ;o)

As for radiation patterns of verticals, from zero up to a height of about 0.6 wavelengths, for amateur practical purposes they are all the same. Omni-directional. And in the vertical plane a couple of very broad adjacent hemispheres with a vertical null.

Reg, G4FGQ

.....

Regards from Reg, G4FGQ

For Free Radio Design Software go to

http://www.btinternet.com/~g4fgq.regp

.....

1328. Re: toroid question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 20:17:28 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <csuccnndl1@titan.btinternet.com>
Source record: 83167

```
>
> idle minds can come up with some strange questions
> and i'm no exception. i got to wondering if you
> have 2 toroids each with a permiablity of 100 and slide
> them both on a piece of coax, is the effective permiablity
> 200? if not what is it?
>
=========================

How is it possible to change the permittivity of core material just by
sliding it over a length of anything?
```

1329. Re: 2nd storey grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 20:58:45 UTC
From: bob <bobh@iag.net>
Message-ID: <98zId.5851$rp1.1298@newsread3.news.atl.earthlink.net>
Source record: 83168

For an RF ground, the connection from transmitter/antenna tuner to a good ground should be a half wafelength long at the operating frequency. For more frequencies, add more half wave wires. But dont coil the wires. hi the height is less than about 0.1 wavelength, a straight wire connection is ok
Of course the usual rules for ground and connections apply.
w4mb

1330. Re: Balun Use/Need

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 21:07:09 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <35ftjvF4m7fmnU1@individual.net>
Source record: 83169

"Richard Clark" <kb7qhc@comcast.net> wrote
> On Sat, 22 Jan 2005 06:59:07 -0600, "Richard Fry" <rfry@adams.net>
> wrote:
>
>> A coax feedline that does not project on a
>>radial normal to the dipole feedpoint will have current induced on its
>>outer
>>conductor by coupling to the dipole -- whether or not a balun is used.

> ...Their discussion and my own comprise a general solution that
>responds to the necessary correlative:
> What is the degree of coupling?

I will email you* a NEC study showing two surface patterns from a 1/2-wave dipole; one with no feedline, and one having a conductor approaching within 2" of the center of the dipole and not attached to it, and not perpendicular to the longitudinal axis of the dipole.

The second pattern simulates a dipole fed by a sloping coax cable connected to the dipole feedpoint through a balun -- a fairly typical scenario for the coax feedline.

You can judge the affect for yourself.

*and any others wanting to see it

RF

1331. Re: Eimac 3-500Z Data Sheets available - FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 21:14:38 UTC
From: Ottar <ok_nothere@online.no>
Message-ID: <41f2c244@news.broadpark.no>
Source record: 83170
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Charlie wrote:

>
> View individual data sheets and save the ones you want or download a
> single zip file that contains all 8 sheets. Tech specs, application notes,
> and a dual 3-500Z amp schematic are included.
>
> 1. http://www.ad5th.com/3-500Z.html
>
>
>

To cut&paste try http://www.kvindesland.no/la9iha/pa/3-500z.html

73 de ottar, la9iha

1332. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 22:33:32 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41f2d491.4844636@news.crosslink.net>
Source record: 83171
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Sat, 22 Jan 2005 18:18:17 GMT,
zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net (ZZZPK)
wrote:

>if i didnt know any better i'd swear
>you have relations living in KENT,ENGLAND
>

How so?

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1333. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 22:42:39 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <35g370F4lkqa9U1@individual.net>
Source record: 83072
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"W9DMK (Robert Lay)" <nobody@crosslink.net> wrote in message
news:41f2d491.4844636@news.crosslink.net...
> On Sat, 22 Jan 2005 18:18:17 GMT,
> zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net (ZZZPK)
> wrote:
>
>>if i didnt know any better i'd swear
>>you have relations living in KENT,ENGLAND
>>
>
>
> How so?
>
Don't worry about it Bob, "zzzpk" has a problem with people who prove him
wrong. Welcome to the club ;-)

Has he advised you on web design yet?

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

1334. Re: 2nd storey grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 22:53:27 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41f2d6cc.5414766@news.crosslink.net>
Source record: 83073

On 21 Jan 2005 20:20:18 -0800, "kernelkole" <kernel@medianox.net>
wrote:

>Of the solutions presented in the ARRL Antenna Book for 2nd storey
>grounding...ha, ha! There are no solutions!
>
>But that doesn't help me.
>
>I live in an apartment - a set of rooms in a 100+ year old building, so
>you'd THINK they'd have copper/metal plumbing; but, no. It's been
>pvc'd. So no cold water pipe.
>
>The ARRL cautions, and I concur, against dropping a long bit o' wire
>from the window to the ground - many issues, including having the
>ground wire function as a resonator, or, RF burns from touching th
>radio. Don't want those.
>
>There's the MFJ "artificial" ground, but I don't see how that would
>work with the ATAS 100 I have - like having an antenna tuner for an
>antenna tuner.

The only aspect of this that has not yet been presented adequately is
the artificial ground. I neither subscribe to nor recommend this, but
you should at least be aware of how it is intended to work.

The "artificial ground" has one end connected to your shack ground (in
your case the chassis of the transmitter or tuner will do nicely.

The other terminal of the "artificial ground" connects to a length of
wire that is just sufficient to connect to an earth rod driven into
the soil beneath the shack. The "artificial tuner" internals consist
of a series resonant circuit - a capacitor and a multiple tapped
inductor and an RF current detector. The "artificial ground" is tuned
for a maximum of RF current when your rig is transmitting. The
artificial ground with its length of wire from the rig chassis to the
earth rod makes up a series resonant circuit that is electrically an
integer multiple of a half wave. That presents the lowest possible RF
impedance between the chassis and the earth rod (as indicated by the
maximum of RF current in the artificial ground).

The effect of this will be to make the chassis of the rig "cool". It
will have no effect on the antenna tuner, but it will reduce the flow
of RF current through other devices in the shack via power cords.

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail

http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1335. Re: OK, now THIS is wierd.....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 23:01:35 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41f2da6b.6341999@news.crosslink.net>
Source record: 83074

On Sat, 22 Jan 2005 11:53:07 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>My HF rig was damaged earlier this month. I replaced
>it (Yaesu FT-840) with a new FT-857D and all is working
>fine but I'm getting wierd results from my antennas.
>
>I have 2 HF antennas - a coax fed 160/80 trap dipole (uses
>3-1/2" dia coax traps) and a shortened Van Gorden
>"All Bander".
>
>On all three bands with the new rig I'm getting about 1/3rd
>more bandwidth between the 2:1 SWR points. The SWR
>meter hasn't changed and the feedlines and antennas are the
>same - only the transciever has changed. Power is as before
>- 100 watts.
>
>What could be causing this? The only thing I could think of
>is that my old rig was "dirty" and the harmonics were adding
>to the SWR.

Dear Ken,

Are you saying that you have a separate SWR meter, external to the rig
and that you are using this instead of the rig's internal SWR meter?
Is their no internal autotuner or outboard manual tuner involved?

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1336. Re: OK, now THIS is wierd.....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 23:07:18 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <G0BId.304$PB.52@okepread01>
Source record: 83075

"W9DMK (Robert Lay)" <nobody@crosslink.net> wrote in message
news:41f2da6b.6341999@news.crosslink.net...
> On Sat, 22 Jan 2005 11:53:07 -0600, "Ken Bessler"
> <kg0wx@NOSPAMyahoo.com> wrote:

> Dear Ken,
>
> Are you saying that you have a separate SWR meter, external to the rig
> and that you are using this instead of the rig's internal SWR meter?
> Is their no internal autotuner or outboard manual tuner involved?
>
>
>
> Bob, W9DMK, Dahlgren, VA

I'm using a seperate SWR/Power meter. Both rigs, old and new,
had no internal tuner and used my MFJ-864. The FT-857D has
a SWR meter but it's not calibrated or even marked. So, I use a
seperate, dedicated & calibrated meter. I'm using a MFJ 941C
tuner but all my measurements have been with the tuner in bypass
mode, going direct to the antennas.

--
73's es gd dx de Ken KG0WX
Grid EM17ip, Flying Pigs #1055,
List Owner, Yahoo! E-groups:
VX-2R & FT-857

1337. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 23:09:21 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41f2dbb3.6670141@news.crosslink.net>
Source record: 83076
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Sat, 22 Jan 2005 22:42:39 -0000, "Brian Reay"
<brian.reay@(spamstopper)bigfoot.com> wrote:

>
>"W9DMK (Robert Lay)" <nobody@crosslink.net> wrote in message
>news:41f2d491.4844636@news.crosslink.net...
>> On Sat, 22 Jan 2005 18:18:17 GMT,
>> zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net (ZZZPK)
>> wrote:
>>
>>>if i didnt know any better i'd swear
>>>you have relations living in KENT,ENGLAND
>>>
>>
>>
>> How so?
>>
> Don't worry about it Bob, "zzzpk" has a problem with people who prove him
>wrong. Welcome to the club ;-)
>
>Has he advised you on web design yet?

Dear Brian,

I was getting curious, because most people with the surname "Lay" do
come from England, but my family came from Germany, near Heidelberg,
in 1849.

Insofar as Web design, I would rather have nothing to do with the Web,
at all, but it's the only way to distribute my free software. I let my
grandson (Nick Zaffora) design my Web page. He's a college student and
really enjoys that sort of thing.

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1338. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 23:17:09 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <35g57lF4ll5cmU1@individual.net>
Source record: 83077
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"W9DMK (Robert Lay)" <nobody@crosslink.net> wrote in message
news:41f2dbb3.6670141@news.crosslink.net...
> Dear Brian,
>
> I was getting curious, because most people with the surname "Lay" do
> come from England, but my family came from Germany, near Heidelberg,
> in 1849.

Heidelberg is a really nice place. I've not been there in a few years but
hope to return before too long.
>
> Insofar as Web design, I would rather have nothing to do with the Web,
> at all, but it's the only way to distribute my free software. I let my
> grandson (Nick Zaffora) design my Web page. He's a college student and
> really enjoys that sort of thing.
>

My eldest enjoys webdesign and did a website as part of her Baden Powell
badge in guides.

I've looked at some of the material on your website- useful stuff. I liked
the paper on maximum power transfer.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

1339. Re: OK, now THIS is wierd.....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 23:18:53 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41f2de17.7282010@news.crosslink.net>
Source record: 83078

On Sat, 22 Jan 2005 17:07:18 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>"W9DMK (Robert Lay)" <nobody@crosslink.net> wrote in message
>news:41f2da6b.6341999@news.crosslink.net...
>> On Sat, 22 Jan 2005 11:53:07 -0600, "Ken Bessler"
>> <kg0wx@NOSPAMyahoo.com> wrote:
>
>> Dear Ken,
>>
>> Are you saying that you have a separate SWR meter, external to the rig
>> and that you are using this instead of the rig's internal SWR meter?
>> Is their no internal autotuner or outboard manual tuner involved?
>>
>>
>>
>> Bob, W9DMK, Dahlgren, VA
>
>I'm using a seperate SWR/Power meter. Both rigs, old and new,
>had no internal tuner and used my MFJ-864. The FT-857D has
>a SWR meter but it's not calibrated or even marked. So, I use a
>seperate, dedicated & calibrated meter. I'm using a MFJ 941C
>tuner but all my measurements have been with the tuner in bypass
>mode, going direct to the antennas.

Dear Ken,

Then I'm going to suggest that which was my first thought - something
has probably been damaged by lightning, and it will probably require
that you take everything down and examine it inch by inch to find what
has happened. Be especially observent over the entire length of coax
for any sign of a burn.

I have had several strikes over the years that have caused varying
amounts of damage. Often, it is just a small burn through from the
inner conductor to the shield that leaves a lump of charred dielectric
at the point where it left the feed line and found some shorter path
to ground.

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1340. Re: BEST automatic antenna tuner = ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 23:23:48 UTC
From: jgboyles@aol.com
Message-ID: <20050122182348.13671.00000115@mb-m23.aol.com>
Source record: 83079

>Which is the best amateur-band automatic antenna tuner made, for use
>with a 160-meter inverted V with open wire feeders, to cover 160
>through 6 meters?

That's a good question C.J.. I doubt that you will find anyone here that has gotten their hands on all the automatic antenna tuners offered for sale, and done extensive testing on a 160 meter inverted vee on 160 to 6 meters.

>Also, is there much perceptible difference in performance, loss,
>signal strength, etc. between the best of the best and the ones that
>are only average in quality, assuming that both will properly tune the
>antenna?

Once again, who would have actual experience that could report on this? Seems like QST compared some auto tuners a while back, and there are product reviews by users on qsl.net. These are not all inclusive.
I have several automatic and manual tuners, both commercial and homebrew that I use in a variety of applications. The ones that work the best on an antenna like you describe are the manual ones with the roller inductors and HV variable caps. They will match a larger impedance range and handle power. The auto tuners are rated for 100 watts, (except for the HB one) and have a more limited matching range. I would make my decision based on the power handling capability of the tuner.
Another thing, Ham antenna tuners generally don't perform well above 15 meters, with a large antenna like you have. (stray L and C in the tuner). The radiation pattern is like a squashed spider. Be better off using a simple (and small) dipole on 17, 12, 10 and 6m.
73 Gary N4AST

1341. Re: 2nd storey grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 23:48:42 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <1BBId.30984$SK6.23713@bignews3.bellsouth.net>
Source record: 83080

<nm5k@wt.net> wrote in message
news:1106376941.573874.250690@z14g2000cwz.googlegroups.com...
> If I remember right, the ATAS is a HF auto tuner of sorts, usually used
> for the yaesu mobile antenna...Sounds like he's trying to feed a mobile
>
> whip with the auto tuner, at home. But just guessing...BTW, the FT-100
> is
> all band...HF-VHF-UHF...Kinda the yaesu equal to a icom 706....MK
>

Okay - thanks for the info -
He just needs to move in with his downstairs neighbor.

1342. Re: OK, now THIS is wierd.....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-22 23:49:33 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <kEBId.309$PB.126@okepread01>
Source record: 83081

"W9DMK (Robert Lay)" <nobody@crosslink.net> wrote in message
news:41f2de17.7282010@news.crosslink.net...
> On Sat, 22 Jan 2005 17:07:18 -0600, "Ken Bessler"
> <kg0wx@NOSPAMyahoo.com> wrote:
>
>>"W9DMK (Robert Lay)" <nobody@crosslink.net> wrote in message
>>news:41f2da6b.6341999@news.crosslink.net...

> Dear Ken,
>
> Then I'm going to suggest that which was my first thought - something
> has probably been damaged by lightning, and it will probably require
> that you take everything down and examine it inch by inch to find what
> has happened. Be especially observent over the entire length of coax
> for any sign of a burn.
>
> I have had several strikes over the years that have caused varying
> amounts of damage. Often, it is just a small burn through from the
> inner conductor to the shield that leaves a lump of charred dielectric
> at the point where it left the feed line and found some shorter path
> to ground.
>
>
> Bob, W9DMK, Dahlgren, VA

Thanks, Bob but lightning was not in the area or even in the state.
My HF rig was physically damaged by a falling branch sweeping
past the window where some of my coax lines went out.

The coax cables I'm using were not affected nor were the antennas.
The ice storm had already broken the support ropes and those
antennas were on the ground when the branches came down.

I deliberatly incorporate a physical weak spot in the support ropes
so that the antenna will survive in case of a snag.

The 2:1 SWR range on 40m was 303 kc before. Now it's 465 kc.

--
73's es gd dx de Ken KG0WX
Grid EM17ip, Flying Pigs #1055,
List Owner, Yahoo! E-groups:
VX-2R & FT-857

1343. Re: ATAS-100 can't tune manually

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 00:06:05 UTC
From: ml <m@di.net>
Message-ID: <m-A33F8C.19060022012005@news.verizon.net>
Source record: 83082

In article <1106367303.731692.287860@f14g2000cwb.googlegroups.com>,
"kernelkole" <kernel@medianox.net> wrote:

> I'm not able to get the manual tuning function to work at all on the
> ATAS-100. Does anyone know why?
>
> Thanks,
> kc0olm

well it would help if you give more info on your set up

are you using this mobile or base?

do you have the radio chases grounded to earth ground?

if base do you have ant radials? for each band u wish to use?

if mobile is the antenna base grounded to the car chases both at point
of attachment and a extra wire from the base to a chasess ground by
antenna base

it could be the antenna dosn't work or radio can't say for certain

is the antenna plugged directly into the radio?? if your going thur
anything like a tuner or filter etc etc , and if that blocks dc it
won't work

are you following the manual tuning directions exactly it's a bit
tricky at times

did you program the radio to use the ats100?

maybe some of these tips and info might help

let us know

good luck

1344. Re: OK, now THIS is wierd.....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 00:25:36 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41f2ecd3.11054435@news.crosslink.net>
Source record: 83083

On Sat, 22 Jan 2005 17:49:33 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>"W9DMK (Robert Lay)" <nobody@crosslink.net> wrote in message
>news:41f2de17.7282010@news.crosslink.net...
>> On Sat, 22 Jan 2005 17:07:18 -0600, "Ken Bessler"
>> <kg0wx@NOSPAMyahoo.com> wrote:
>>
>>>"W9DMK (Robert Lay)" <nobody@crosslink.net> wrote in message
>>>news:41f2da6b.6341999@news.crosslink.net...
>
>> Dear Ken,
>>
>> Then I'm going to suggest that which was my first thought - something
>> has probably been damaged by lightning, and it will probably require
>> that you take everything down and examine it inch by inch to find what
>> has happened. Be especially observent over the entire length of coax
>> for any sign of a burn.
>>
>> I have had several strikes over the years that have caused varying
>> amounts of damage. Often, it is just a small burn through from the
>> inner conductor to the shield that leaves a lump of charred dielectric
>> at the point where it left the feed line and found some shorter path
>> to ground.
>>
>>
>> Bob, W9DMK, Dahlgren, VA
>
>Thanks, Bob but lightning was not in the area or even in the state.
>My HF rig was physically damaged by a falling branch sweeping
>past the window where some of my coax lines went out.
>
>The coax cables I'm using were not affected nor were the antennas.
>The ice storm had already broken the support ropes and those
>antennas were on the ground when the branches came down.
>
>I deliberatly incorporate a physical weak spot in the support ropes
>so that the antenna will survive in case of a snag.
>
>The 2:1 SWR range on 40m was 303 kc before. Now it's 465 kc.

Dear Ken,

If I may be permitted another guess. When you check the bandwidth on
the higher bands, you probably do not see as much of an increase from

the original characterstics. If so, then there is another mechanism that may have come into play. It does not take much of a droop on the ends of a lower frequency antenna, center supported antenna to give an effect of greater bandwidth. For example, I believe that you will generally find that an inverted vee antenna has a wider bandwidth than one that is near flat across the top (given that the center of each is at same height above ground. If your antennas are center supported and have a lower altitude at the ends than originally, that might account for it. Unfortunately, your description of your antennas sounds more like they are not center supported. As a general rule, as you surely know, anything that increases the losses in an antenna will manifest itself as greater bandwidth. That is the aspect that makes you really want to find the cause, because it means something is eating your watts.

With that I'm out of ideas.
Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1345. Re: ATAS-100 can't tune manually

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 01:01:49 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <1ICId.4868$8Z1.3928@newssvr14.news.prodigy.com>
Source record: 83084

Hate to be the bearer of bad tydeings, but the ATAS is a 40 meter-thru 450 MHz Screwdriver antenna-- PERIOD! It is NOT an antenna tuner, that function is in the rig that you use, or, as a company (haven't seen them advertize for some time) manufacturered a box that would supply voltage to your coax , to run the motor in the ATAS, allowing it to tune. Think the voltages (don't quote me!), were something like +12 volts to the center of coax to extend, and +8 volts (max) to retract the beast to tune it. this voltage in normally supplied by your Yaesu rig, but as stated, was company made a box supplying these voltages to the antenna for other rigs. Yaesu rigs that support these have a menu function for them- and control the SWR monitoring for this antenna. For any other rig, you will need to supply the appropriate voltages, while monitoring the swr, while tuneing it-and this antenna is now up to the ATAS 120, version, I believe- as info, Jim NN7K

ml wrote:
> In article <1106367303.731692.287860@f14g2000cwb.googlegroups.com>,
> "kernelkole" <kernel@medianox.net> wrote:
>
>
>>I'm not able to get the manual tuning function to work at all on the
>>ATAS-100. Does anyone know why?
>>
>>Thanks,
>>kc0olm
>
>
> well it would help if you give more info on your set up
>
> are you using this mobile or base?
>
> do you have the radio chases grounded to earth ground?
>
> if base do you have ant radials? for each band u wish to use?
>
> if mobile is the antenna base grounded to the car chases both at point
> of attachment and a extra wire from the base to a chasess ground by
> antenna base
>
>
> it could be the antenna dosn't work or radio can't say for certain
>
> is the antenna plugged directly into the radio?? if your going thur
> anything like a tuner or filter etc etc , and if that blocks dc it

> won't work
>
> are you following the manual tuning directions exactly it's a bit
> tricky at times
>
> did you program the radio to use the ats100?
>
> maybe some of these tips and info might help
>
>
> let us know
>
> good luck

1346. Re: OK, now THIS is wierd.....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 01:10:56 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <AQCId.312$PB.170@okepread01>
Source record: 83085

"W9DMK (Robert Lay)" <nobody@crosslink.net> wrote in message
> Dear Ken,
>
> If I may be permitted another guess. When you check the bandwidth on
> the higher bands, you probably do not see as much of an increase from
> the original characterstics. If so, then there is another mechanism
> that may have come into play. It does not take much of a droop on the
> ends of a lower frequency antenna, center supported antenna to give an
> effect of greater bandwidth. For example, I believe that you will
> generally find that an inverted vee antenna has a wider bandwidth than
> one that is near flat across the top (given that the center of each is
> at same height above ground. If your antennas are center supported and
> have a lower altitude at the ends than originally, that might account
> for it. Unfortunately, your description of your antennas sounds more
> like they are not center supported. As a general rule, as you surely
> know, anything that increases the losses in an antenna will manifest
> itself as greater bandwidth. That is the aspect that makes you really
> want to find the cause, because it means something is eating your
> watts.
>
> With that I'm out of ideas.
> Bob, W9DMK, Dahlgren, VA

Thanks for the ideas, Bob!

The antenna was never used on bands other than 40m before. Now,
it's my main antenna for use above 7mc. The only changes are the
addition of the tuner.

I know it's *not* the tuner because I've tested it with the tuner physically
out of line.

There are 2 other miniscule changes. Before the storm, I had trimmed
out the ends with 18g insulated speaker wire. Each leg had a butt splice
then about 2' of the stuff. Now the extra wire is standard 14g stranded
bare copper, soldered in place.

The feedline had 1 minor change, too. From the tuner I had 20' of rg58
going into a 9 turn, 5-1/4" dia air coil then 50' of 450 ohm ladder line.

The coil was wound on a CD-rom package with the turns held together
with superglue. The form was removed after the glue set up. Neat.

During the repairs, 1 turn of the coil broke loose and straightned out on
the side connected to the 20' of rg58 going indoors. The coil is 1 piece
still, just 1 turn less on the coax side.

The antenna is basically a flat dipole, supported by a wooden roof in the middle and rope at the ends. The ends droop maybe 2-3 feet.

I suppose the replacement of the end wire with heavier wire could help b/w but I wouldn't think that much.

I just checked my 160/80m dipole, where nothing changed so I don't think it's the radio or the tuner......

Thanks for scratching your brain for me!

--
73's es gd dx de Ken KG0WX
Grid EM17ip, Flying Pigs #1055,
List Owner, Yahoo! E-groups:
VX-2R & FT-857

1347. Alpha Delta DX-A Help

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 01:11:33 UTC
From: Steve <inawb@comcast.net>
Message-ID: <8KmdnRWnAtZUZG_cRVn-1g@comcast.com>
Source record: 83086

Any one install or are using a Alfa Delta DX-A antenna.

Did you have to tune it?
Was it wide banded?
How was it on 160 Meters?

Thanks for any input.

Steve

1348. Re: OK, now THIS is wierd.....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 02:43:54 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41f30e3c.19607484@news.crosslink.net>
Source record: 83087

On Sat, 22 Jan 2005 19:10:56 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>"W9DMK (Robert Lay)" <nobody@crosslink.net> wrote in message
>> Dear Ken,
>>
>> If I may be permitted another guess. When you check the bandwidth on
>> the higher bands, you probably do not see as much of an increase from
>> the original characterstics. If so, then there is another mechanism
>> that may have come into play. It does not take much of a droop on the
>> ends of a lower frequency antenna, center supported antenna to give an
>> effect of greater bandwidth. For example, I believe that you will
>> generally find that an inverted vee antenna has a wider bandwidth than
>> one that is near flat across the top (given that the center of each is
>> at same height above ground. If your antennas are center supported and
>> have a lower altitude at the ends than originally, that might account
>> for it. Unfortunately, your description of your antennas sounds more
>> like they are not center supported. As a general rule, as you surely
>> know, anything that increases the losses in an antenna will manifest
>> itself as greater bandwidth. That is the aspect that makes you really
>> want to find the cause, because it means something is eating your
>> watts.
>>
>> With that I'm out of ideas.
>> Bob, W9DMK, Dahlgren, VA
>
>Thanks for the ideas, Bob!
>
>The antenna was never used on bands other than 40m before. Now,
>it's my main antenna for use above 7mc. The only changes are the
>addition of the tuner.
>
>I know it's *not* the tuner because I've tested it with the tuner physically
>out of line.
>
>There are 2 other miniscule changes. Before the storm, I had trimmed
>out the ends with 18g insulated speaker wire. Each leg had a butt splice
>then about 2' of the stuff. Now the extra wire is standard 14g stranded
>bare copper, soldered in place.
>
>The feedline had 1 minor change, too. From the tuner I had 20' of rg58
>going into a 9 turn, 5-1/4" dia air coil then 50' of 450 ohm ladder line.
>
>The coil was wound on a CD-rom package with the turns held together

>with superglue. The form was removed after the glue set up. Neat.
>
>During the repairs, 1 turn of the coil broke loose and straightned out on
>the side connected to the 20' of rg58 going indoors. The coil is 1 piece
>still, just 1 turn less on the coax side.
>
>The antenna is basically a flat dipole, supported by a wooden roof in
>the middle and rope at the ends. The ends droop maybe 2-3 feet.
>
>I suppose the replacement of the end wire with heavier wire could help
>b/w but I wouldn't think that much.
>
>I just checked my 160/80m dipole, where nothing changed so I don't
>think it's the radio or the tuner......
>
>Thanks for scratching your brain for me!

Dear Ken,

Those things that you mention would not cause a change in bandwidth,
in my opinion.

Last suggestion:

If there were significant amounts of RF current on the outer surface
of the coax portion of the feed line, and if that has changes due to
the other changes, then there could possibly be unpredictable effects
on the SWR meter. They are not supposed to be sensitive to such
things, but in my shack any RF currents running around in the station
ground has always caused erroneous readings in the SWR meters. As a
last ditch experiment, I would try earthing the outer shield of the
coax to a good ground frame just before the coax comes into the shack.

Good Luck!

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1349. Re: Lucent GPS antenna voltage?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 02:58:23 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <LOCdnUpQT-tOj27cRVn-3A@comcast.com>
Source record: 83088

"Hank" <n1ltv@yahoo.com> wrote in message
news:1106264630.908976.286850@z14g2000cwz.googlegroups.com...
> Does anyone know how much voltage these various Lucent
> GPS antennas typically use that are surplus from cell
> phone sites? Or other brands in case there's some
> standardization.
>
> Hank
> N1LTV
>

The original standard was 5 volt supplied by the GPS receiver,
HOWEVER this was changed to 3.3 volt with newer GPS model receivers.

NEWER antennas can handle both voltages (pre-amp inside).
IF you are looking at surplus antennas, unless they are proprietary to a
specific receiver, are likely 5 volt models.

gb

1350. Re: Why a capacitor for a shunt fed antenna (Mobile)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 07:06:52 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <csviec$69f$1@hercules.btinternet.com>
Source record: 83089

> What you describe as an, "antenna tuner" actually matches the
> TX to the feeder.
>
==========

A misleading statement.

The TX design impedance is fixed, usually at 50 ohms.

So the antenna tuner matches the variable feeder input impedance to the TX design impedance.

But no doubt you will manage to squirm your way out of it. ;o)

Reg

1351. Re: Why a capacitor for a shunt fed antenna (Mobile)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 07:47:51 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <csvkr6$91u$1@hercules.btinternet.com>
Source record: 83090

Airy, you'll be telling us next the SWR meter reads the SWR on the
eedline - whereas it does nothing of the kind.

The confusingly, so-called SWR meter is merely a useful TLI. which Indicates
whether or not the Transmitter is correctly Loaded with its design
resistance. Usually but not necessarily 50 ohms.

It is realised this means re-editing all the handbooks which have appeared
during the last 50 years or so.

Reg.

1352. Re: Alternate material j pole construction question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 12:36:11 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41f399f9.847788640@news.galilei.com>
Source record: 83091

Good One Airy!

But I WAS serious about the continuous callbook screw ups.

TTUL
Gary

1353. Re: any fl hamfests?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 12:51:45 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <B5NId.11158$zr4.3395@tornado.tampabay.rr.com>
Source record: 83092

the Orlando Hamcation is the 11 12 13
here is their site
http://www.hamcation.com/
might also want to look on the ARRLs site for a list of other florida
hamfests this is the time of year we have them down here

ml wrote:

> Just wondering does anyone know of any hamfests in FL for the rest of
> this month and early feb??

1354. Re: Coax Switch To Switch One Antenna Lead Between Several HF Transceivers ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 14:02:47 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <41f3b157_2@news1.prserv.net>
Source record: 83093

In that case what you need is a transfer switch, which someone makes, but I don't have a catalog number at hand. You
know, two inputs, two outputs, and you put the dummy load on the other output. What one should use for tuning up rigs
which need tuning anyway.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Gary" <gdn50@@@@usol.com> wrote in message
news:6871v0l0ld4qjq877dgvjnvojg8hmje2ns@4ax.com...
> On Thu, 20 Jan 2005 21:07:16 -0600, "RB" <rbig@bellsouth.nospam.net>
> wrote:
>
> >A real problem with that setup is that you can very easily be transmitting
> >into the switch setting which has no antenna on it. Ask me how I know
> >this......
>
> I get the idea, or I suppose if you're as absent minded as I am and
> the unused inputs are grounded you could be transmitting into a dead
> short. I think for me I'll just stick wih switching coax between the
> two rigs, it sounds less expwnisive that way.
>
> Thanks for the input.
>
> 73 Gary K8IQ
>

1355. Re: "Maxwell's Equations"?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 15:03:33 UTC
From: see sea oh ecks at you aitch see dot comm <spammers@bugger.off.invalid>
Message-ID: <ct0ec5$ik8$1@gabriel.uhc.com>
Source record: 83094
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

In uk.radio.amateur Brian Reay <brian.reay@(spamstopper)bigfoot.com> wrote:
> Don't worry about it Bob, "zzzpk" has a problem with people who prove him
> wrong. Welcome to the club ;-)

But he's not wrong at all. It is indeed a ratio - C is proportional to 1/d
so why the argument?
--
Chris Cox, N0UK/G4JEC NIC Handle: CC345

1356. Re: "Maxwell's Equations"?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 15:11:00 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <35ht3jF4i9pc3U1@individual.net>
Source record: 83095
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"see sea oh ecks at you aitch see dot comm" <spammers@bugger.off.invalid>
wrote in message news:ct0ec5$ik8$1@gabriel.uhc.com...
> In uk.radio.amateur Brian Reay <brian.reay@(spamstopper)bigfoot.com>
wrote:
> > Don't worry about it Bob, "zzzpk" has a problem with people who prove
him
> > wrong. Welcome to the club ;-)
>
> But he's not wrong at all. It is indeed a ratio - C is proportional to
1/d
> so why the argument?

Because the would be stated as:

C is INVERSELY proportional to d

An other example, from the RF field, is the 'inverse square law'. If your
interpretation were correct it would be the "square law".

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

1357. Re: best low-temp solder?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 17:17:15 UTC
From: mjb@posie.local.dom
Message-ID: <ct0m6r$4cj$1@posie.local.dom>
Source record: 83100
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics.repair,sci.engr.joining.misc

In article <1106162742.854880.91740@f14g2000cwb.googlegroups.com>,
JeffM <jeffm_@email.com> wrote:
>>tindium. It melted well below the boiling point of water.
>>(No, it wasn't Wood's metal.)
>> Jim (RST Engineering)

>I haven't seen it yet, but I've heard stories about guys
>who make spoons of such stuff.

... and there's no truth in the rumour that Uri Geller buys them in
bulk :)

--
---------------------------------------+-----------------------------------
Mike Brown: mjb[at]pootle.demon.co.uk | http://www.pootle.demon.co.uk/

1358. Re: "Maxwell's Equations"?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 19:50:57 UTC
From: see sea oh ecks at you aitch see dot comm <spammers@bugger.off.invalid>
Message-ID: <ct0v71nqa1@gabriel.uhc.com>
Source record: 83096
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

In uk.radio.amateur Brian Reay <brian.reay@(spamstopper)bigfoot.com> wrote:
>
> Because the would be stated as:
>
> C is INVERSELY proportional to d
>
> An other example, from the RF field, is the 'inverse square law'. If your
> interpretation were correct it would be the "square law".

Not at all. As you (correctly) say, the name in the 'inverse square law'.
It too is a proportional ratio - in that case P in proportional to 1/(d^2).

N'est pas?

--
Chris Cox, N0UK/G4JEC NIC Handle: CC345
UnitedHealth Technologies, MN013-N300, UNIX Solutions Group
6150 Trenton Lane North, Plymouth, MN 55440 1-763-744-1723
email: <fakehamfiltrationccox@uhc.com> "Remove the spam filtre"
If at first you don't succeed, skydiving is not for you.

1359. Re: Make Money For Surfing The Net

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 19:58:17 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <41f401b2.116561085@News.Individual.NET>
Source record: 83098

On Fri, 21 Jan 2005 15:43:02 -0800, Richard Clark <kb7qhc@comcast.net>
wrote:

>>How does it work?
>Hmmmm All the simplicity of an old MTV favorite:
>
> get Money for nuthin' and your chicks for free!

That is a line from the excellent band called Dire Straits.. !

Peter, G3PHO

1360. Re: "Maxwell's Equations"?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 19:58:32 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <35iduuF48o75aU1@individual.net>
Source record: 83097
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"see sea oh ecks at you aitch see dot comm" <spammers@bugger.off.invalid>
wrote in message news:ct0v71nqa1@gabriel.uhc.com...
> In uk.radio.amateur Brian Reay <brian.reay@(spamstopper)bigfoot.com>
wrote:
> >
> > Because the would be stated as:
> >
> > C is INVERSELY proportional to d
> >
> > An other example, from the RF field, is the 'inverse square law'. If
your
> > interpretation were correct it would be the "square law".
>
> Not at all. As you (correctly) say, the name in the 'inverse square law'.
> It too is a proportional ratio - in that case P in proportional to
1/(d^2).
>

Ok, you do it your way. I'll stick to the convention I've learned and, other
that you and zzpk, I've always found others use.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

1361. Re: "Maxwell's Equations"?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 20:21:13 UTC
From: Angus McCoatup <nospamta@ntlworld.com>
Message-ID: <35if9pF4l41hvU1@individual.net>
Source record: 83099
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

I prefer Nescafe :O)

1362. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 23:36:25 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41f43469.91456337@news.iol.ie>
Source record: 83101
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote:

: Don't worry about it Bob, "zzzpk" has a problem with people who prove him
: wrong. Welcome to the club ;-)

said m3osn....bwahhhhh

:
: Has he advised you on web design yet?

yeh...Brian...i'm the one who had to correct you on the use of the ALT
tag!

1363. Re: "Maxwell's Equations"?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 23:36:26 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41f434b8.91535372@news.iol.ie>
Source record: 83102
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"see sea oh ecks at you aitch see dot comm" <spammers@bugger.off.invalid>
wrote:

: In uk.radio.amateur Brian Reay <brian.reay@(spamstopper)bigfoot.com> wrote:
: > Don't worry about it Bob, "zzzpk" has a problem with people who prove him
: > wrong. Welcome to the club ;-)
:
: But he's not wrong at all. It is indeed a ratio - C is proportional to 1/d
: so why the argument?
: --
: Chris Cox, N0UK/G4JEC NIC Handle: CC345

Chris...

i'm surprised that someone wiuth a degree in maths doesnt understand set
theory !!

1364. Re: "Maxwell's Equations"?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-23 23:37:27 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41f434f5.91596392@news.iol.ie>
Source record: 83103
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote:

:
: Ok, you do it your way. I'll stick to the convention I've learned and, other
: that you and zzpk, I've always found others use.

oh so now its ok for Chris... therefore its ok for me.

so your previous posts and your comments to our american cousin have
been a waste of time

par for the course - me thinks

1365. Re: "Maxwell's Equations"?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 03:23:29 UTC
From: see sea oh ecks at you aitch see dot comm <spammers@bugger.off.invalid>
Message-ID: <ct1pnh$tp6$2@gabriel.uhc.com>
Source record: 83104
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

In uk.radio.amateur ZZZPK <zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net>
wrote:
> oh so now its ok for Chris... therefore its ok for me.
>
> so your previous posts and your comments to our american cousin have
> been a waste of time

Oi - who you callin' a Merkun?
--
Chris Cox, N0UK/G4JEC NIC Handle: CC345
UnitedHealth Technologies, MN013-N300, UNIX Solutions Group
6150 Trenton Lane North, Plymouth, MN 55440 1-763-744-1723
email: <fakehamfiltrationccox@uhc.com> "Remove the spam filtre"
If at first you don't succeed, skydiving is not for you.

1366. Painting VHF/UHF base vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 03:39:16 UTC
From: wb0gaz <wb0gaz@hotmail.com>
Message-ID: <1106537956.181026.8390@z14g2000cwz.googlegroups.com>
Source record: 83105

Preparing to install a Diamond VHF/UHF base vertical X6000A, and planning to paint it beforehand to a less visible color (here, dark green will be better than white).

Is there any issue with this (affecting RF performance)? Does the outer (fiberglass? plastic?) white jacket have any dielectric characteristic necessary for antenna operation that would be affected by paint? Any type of paint to avoid (I was planning Rust-Oleum textured dark green.) Tks,

73 Dave WB0GAZ wb0gaz@hotmail.com

1367. Re: Painting VHF/UHF base vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 04:15:17 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10v8timo54lcu05@corp.supernews.com>
Source record: 83106

NON-metalic paint only.

"wb0gaz" <wb0gaz@hotmail.com> wrote in message
news:1106537956.181026.8390@z14g2000cwz.googlegroups.com...
> Preparing to install a Diamond VHF/UHF base vertical X6000A, and
> planning to paint it beforehand to a less visible color (here, dark
> green will be better than white).
>
> Is there any issue with this (affecting RF performance)? Does the outer
> (fiberglass? plastic?) white jacket have any dielectric characteristic
> necessary for antenna operation that would be affected by paint? Any
> type of paint to avoid (I was planning Rust-Oleum textured dark green.)
> Tks,
>
> 73 Dave WB0GAZ wb0gaz@hotmail.com
>

1368. Re: Painting VHF/UHF base vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 07:01:39 UTC
From: kelly@dvol.com
Message-ID: <1106550099.287833.185870@z14g2000cwz.googlegroups.com>
Source record: 83107

wb0gaz wrote:
> Preparing to install a Diamond VHF/UHF base vertical X6000A, and
> planning to paint it beforehand to a less visible color (here, dark
> green will be better than white).
>
> Is there any issue with this (affecting RF performance)? Does the
outer
> (fiberglass? plastic?) white jacket have any dielectric
characteristic
> necessary for antenna operation that would be affected by paint? Any
> type of paint to avoid (I was planning Rust-Oleum textured dark
green.)
> Tks,

Select the primer carefully. Rustoleum paints are designed to be laid over Rustoleum primers over steel. A good primer for steel might be a lousy primer for fiberglass. I'd check with a body shop which works on Corvettes for a recommendation on good primers for fiberglass. Rustoleum enamels over just about any decent primer will work.
>
> 73 Dave WB0GAZ wb0gaz@hotmail.com

w3rv

1369. Re: Painting VHF/UHF base vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 07:42:12 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <oF1Jd.9798$CI6.4240@trnddc06>
Source record: 83108

"wb0gaz" <wb0gaz@hotmail.com> wrote in message
news:1106537956.181026.8390@z14g2000cwz.googlegroups.com...
> Preparing to install a Diamond VHF/UHF base vertical X6000A, and
> planning to paint it beforehand to a less visible color (here, dark
> green will be better than white).
>
> Is there any issue with this (affecting RF performance)? Does the outer
> (fiberglass? plastic?) white jacket have any dielectric characteristic
> necessary for antenna operation that would be affected by paint? Any
> type of paint to avoid (I was planning Rust-Oleum textured dark green.)
> Tks,
>
> 73 Dave WB0GAZ wb0gaz@hotmail.com

Dave

I have tried to get some idea of the loss of dielectric stuff at RF by "cooking it" in the microwave for a short while to see if it gets hot. That may or may not be a method you could use to get more confidance about what paint to use.

Jerry

1370. Re: Coax Switch To Switch One Antenna Lead Between Several HF Transceivers ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 09:21:43 UTC
From: nm5k@wt.net
Message-ID: <1106558503.082888.61440@z14g2000cwz.googlegroups.com>
Source record: 83109

Crazy George wrote:
> In that case what you need is a transfer switch, which someone makes,
but I don't have a catalog number at hand. You
> know, two inputs, two outputs, and you put the dummy load on the
other output. What one should use for tuning up rigs
> which need tuning anyway.

I've got a B@W that will do that. It's the B@W 594.
I've got wood board with many switches on it, side by side. Alpha delta
2 way,
B@W 6 way, B@W 3 way, and the B@W 594, which can be used to switch
between two
different rigs. I'm about a switching fool, considering my tuner also
has a
switch...:/ Also, many quite a few other stand alone
switches..."daiwa,etc,"
You can never have too many switches... MK

1371. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 09:53:35 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35jvn2F4oj8kmU2@individual.net>
Source record: 83110
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Heidel burghers were they?

"W9DMK (Robert Lay)" <nobody@crosslink.net> wrote in message
news:41f2dbb3.6670141@news.crosslink.net...
> I was getting curious, because most people with the surname "Lay" do
> come from England, but my family came from Germany, near Heidelberg,
> in 1849.

1372. Re: "Maxwell's Equations"?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 09:55:32 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35jvn3F4oj8kmU3@individual.net>
Source record: 83111
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

That's our L.I.A.R. all over - every time that he has an argument
(which happens all too frequently) he thereafter sneers at the
point of view that had been put up by his co-respondent,
without regard to whom was correct!

"see sea oh ecks at you aitch see dot comm" <spammers@bugger.off.invalid>
wrote in message news:ct0ec5$ik8$1@gabriel.uhc.com...
> In uk.radio.amateur Brian Reay <brian.reay@(spamstopper)bigfoot.com>
wrote:
> > Don't worry about it Bob, "zzzpk" has a problem with people who prove
him
> > wrong. Welcome to the club ;-)
> But he's not wrong at all. It is indeed a ratio - C is proportional to
1/d
> so why the argument?

1373. Re: Why a capacitor for a shunt fed antenna (Mobile)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 11:40:55 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35k5rvF4keg43U1@individual.net>
Source record: 83112

"variable feeder input impedance" = feeder

"TX design impedance" = TX

Why would I wish to "squirm my way" out of an
obvious agreement?

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:csviec$69f$1@hercules.btinternet.com...
> > What you describe as an, "antenna tuner" actually matches the
> > TX to the feeder.
> A misleading statement.
> The TX design impedance is fixed, usually at 50 ohms.
> So the antenna tuner matches the variable feeder input impedance to the TX
> design impedance.
> But no doubt you will manage to squirm your way out of it. ;o)

1374. Re: Why a capacitor for a shunt fed antenna (Mobile)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 11:42:07 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35k5rvF4keg43U2@individual.net>
Source record: 83113

STRAW MAN!!! STRAW MAN!!!

I did not mention "SWR" nor did I mention an "eedline"
(whatever that may be).

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:csvkr6$91u$1@hercules.btinternet.com...
> Airy, you'll be telling us next the SWR meter reads the SWR on the
> eedline - whereas it does nothing of the kind.

1375. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 12:35:53 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41f4eb3a.920553@news.crosslink.net>
Source record: 83114
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Mon, 24 Jan 2005 09:53:35 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>Heidel burghers were they?

Not exactly - they came from the town of Bammental, which is on
provincial road 15, south east of Heidelburg, in the direction of
Wiesloch. The town is on the Elsenz river.

I have spent some time around there, and it's very nice.

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1376. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 12:38:22 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35k8nsF4n3ndsU1@individual.net>
Source record: 83115
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

In the same vein, everybody has heard of Beau Nash
who was responsible for much of the architectural beauty
of the City Of Bath.

No many seem to realise, however, that Nash had
a sleeping partner, Beau Nidle.

"W9DMK (Robert Lay)" <nobody@crosslink.net> wrote in message
news:41f4eb3a.920553@news.crosslink.net...
> On Mon, 24 Jan 2005 09:53:35 -0000, "Airy R.Bean" <Me@privacy.net>
> wrote:
>
> >Heidel burghers were they?
>
> Not exactly

1377. Re: what Z range ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 12:46:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10v9rhrbl6tuf34@corp.supernews.com>
Source record: 83116

I thank you very much for the kind words.

But on more than a few occasions, I've found that I firmly believe something you have said with an air of confidence, even certainty, that is a belief only of "old wives". Therefore it's an inescapable conclusion that I am one.

Don't fret -- the title of "Reg's old wife" is one I wear with pride, if a modicum of bemusement.

Roy Lewallen, W7EL

Reg Edwards wrote:
> Dear (I really mean it) Roy,
>
> For my (unstated) benefit, you semi-seriously describe yourself as an 'old
> wife'.
>
> Now, I have NEVER described anyone as being an 'old wife'. I am too polite.
> Although, I must admit, I do occasionly infer that such people do exist.
> They are not objectionable
>
> If you think the cap fits, then wear it. (Old English proverb.) But you
> don't!
>
> But for the benefit of anyone mildly interested, who may be unfamiliar with
> the goings-on on this newsgroup, YOU are the VERY last person who I would
> remotely associate with being an 'old wife'.
>
> Just keep yourself familiar with 'arithmetic' and 'maths' will look after
> itself. ;o)
>
> History, Arithmetic and Elementary Statistics are the most neglected
> subjects in English primary schools. They are easy and simple enough and
> occupy little time. But what can be expected from ill-educated teachers? I
> suspect the same applies in the USA.
>
> I understand school teachers in the USA wear bullet-proof jackets. But, in
> general, I am restricted to the BBC and the largely US-controlled unruly
> English newspapers which concentrate on swasticas and the royal family,
> nudes, the sexual habits of film-stars, cat-walk celebraties and overpaid
> Manchester United football players. After all, everybody has a right to
> make a living of some sort!
> ----
> Just another advert from Reg, G4FGQ

>
>

1378. Swr meter in your base station

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 13:25:19 UTC
From: stryped@hotmail.com
Message-ID: <1106573119.064449.324240@z14g2000cwz.googlegroups.com>
Source record: 83117

I am just curious how many of you keep your swr meter hooked up in your base station? (I mean all the time, not just when you are tuning an antenna?)

1379. How does a "cross needle" swr work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 13:29:12 UTC
From: stryped@hotmail.com
Message-ID: <1106573352.171441.4060@f14g2000cwb.googlegroups.com>
Source record: 83118

I just bought one that measures forward and reflected power and at the bottom is the swr calculation.

Is the antenna's swr where the two needles meet?

Also the switch on it for 2 meters says "144 mhz" So I should tune my radio to this when tuning? What if I want my antenna tuned for 146 mhz.

It is an MFJ unit. Yes I did read the instructions but they left alot to be desired for a first timer.

1380. Re: Swr meter in your base station

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 13:51:14 UTC
From: Dave <noone@nowhere.com>
Message-ID: <k4CdnUdKZK3FYGncRVn-ig@crocker.com>
Source record: 83119

i leave it in place all the time unless i need it for something else.
doesn't hurt to keep an eye on swr in case something breaks in the antenna
or coax.

<stryped@hotmail.com> wrote in message
news:1106573119.064449.324240@z14g2000cwz.googlegroups.com...
> I am just curious how many of you keep your swr meter hooked up in your
> base station? (I mean all the time, not just when you are tuning an
> antenna?)
>

1381. Re: How does a "cross needle" swr work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 13:53:14 UTC
From: Dave <noone@nowhere.com>
Message-ID: <U_Odnd-3SalNYGncRVn-jg@crocker.com>
Source record: 83120

<stryped@hotmail.com> wrote in message
news:1106573352.171441.4060@f14g2000cwb.googlegroups.com...
> I just bought one that measures forward and reflected power and at the
> bottom is the swr calculation.
>
> Is the antenna's swr where the two needles meet?

yes, look behind where the needles cross and there should be a set of lines
calibrated in swr.

>
> Also the switch on it for 2 meters says "144 mhz" So I should tune my
> radio to this when tuning? What if I want my antenna tuned for 146 mhz.

no, you set your radio for whatever frequency you want to operate on and
check the swr there. they label it 144mhz just to say what band it can
handle.

>
> It is an MFJ unit. Yes I did read the instructions but they left alot
> to be desired for a first timer.
>

1382. Re: Swr meter in your base station

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 14:09:56 UTC
From: Topaz305RK <k7sam@arrl.net>
Message-ID: <hPOdnXGHyf-ZnGjcRVn-qA@vnet-inc.com>
Source record: 83121

All the time.
I want to be the first to know when something changes or goes wrong.

Sam

1383. Re: How does a "cross needle" swr work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 14:53:11 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41f50d3d$1_1@127.0.0.1>
Source record: 83022

stryped@hotmail.com wrote:
> Is the antenna's swr where the two needles meet?

That's usually the case for MFJ cross-needle stuff. The
somewhat red vertical lines on my MFJ-949E indicate SWR
where the forward and reflected needles cross.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1384. Re: How does a "cross needle" swr work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 15:56:42 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <ge6av0lh2pk9il27uca13s8bcmar14kq4s@4ax.com>
Source record: 83023

On 24 Jan 2005 05:29:12 -0800, stryped@hotmail.com wrote:

>I just bought one that measures forward and reflected power and at the
>bottom is the swr calculation.
>
>Is the antenna's swr where the two needles meet?
>
>Also the switch on it for 2 meters says "144 mhz" So I should tune my
>radio to this when tuning? What if I want my antenna tuned for 146 mhz.
>
>It is an MFJ unit. Yes I did read the instructions but they left alot
>to be desired for a first timer.

The whole idea is to tune your antenna so the Forward needle moves as
much as possible, while the Reverse needle moves as little as
possible, or not at all :-)

THe manual for your rig should tell you how much SWR it can safely
handle. A little doesn't hurt, but too much can harm the finals.

Bob
k5qwg

1385. He said He would RETURN - JESUS CHRIST - Today?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 16:04:53 UTC
From: GodBlessAmerica@mailcan.com
Message-ID: <1106582693.007077.17350@z14g2000cwz.googlegroups.com>
Source record: 83024

http://free-hoster.com/jesus http://christjesus.us
http://www.media.christiananswers.net http://www.heargoodnews.com
http://www.biblehelp.org http://www.tbn.org http://www.ifcj.org
http://www.iiw.org http://www.lwf.org http://www.jhm.org
http://www.greatcom.org http://www.biblegateway.com
http://www.blueletterbible.com

1386. Re: He said He would RETURN - JESUS CHRIST - Today?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 16:16:29 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <41f61ef6.12046151@News.Individual.NET>
Source record: 83025

On 24 Jan 2005 08:04:53 -0800, GodBlessAmerica@mailcan.com wrote:

^^^^^^^^^^^^^^^^

>http://free-hoster.com/jesus http://christjesus.us
>http://www.media.christiananswers.net http://www.heargoodnews.com
>http://www.biblehelp.org http://www.tbn.org http://www.ifcj.org
>http://www.iiw.org http://www.lwf.org http://www.jhm.org
>http://www.greatcom.org http://www.biblegateway.com
>http://www.blueletterbible.com

Please do not post this stuff on this newsgroup again !!! This is not
rec.godsquad !!

1387. Re: He said He would RETURN - JESUS CHRIST - Today?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 17:37:59 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncvacjn.24ad.bit-bucket@shell.config.com>
Source record: 83026

On Mon, 24 Jan 2005 16:16:29 GMT, Peter wrote:
> On 24 Jan 2005 08:04:53 -0800, GodBlessAmerica@mailcan.com wrote:

snip bunch of URL's
>
> Please do not post this stuff on this newsgroup again !!! This is not
> rec.godsquad !!

Just who do you think you're speaking to?
You are addressing a Write-Only spammer.
The jerk posting that everywhere is _not_ reading usenet.
He is just abusing usenet.

1388. Re: "Maxwell's Equations"? (Was: Re: In a ground plane, what dictates the number and spacing of radials?)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 18:02:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nvdav0l1l5p28f5oqh49ug803p96o4l1at@4ax.com>
Source record: 83027
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

```
On Mon, 24 Jan 2005 12:38:22 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:
>No many seem to realise, however, that Nash had
>a sleeping partner, Beau Nidle.
or that he couldn't settle down, Nash Rambler.
```

1389. Re: Painting VHF/UHF base vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-24 23:37:05 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <BEfJd.9150$rp1.8121@newsread3.news.atl.earthlink.net>
Source record: 83028

"wb0gaz" <wb0gaz@hotmail.com> wrote in message
news:1106537956.181026.8390@z14g2000cwz.googlegroups.com...
> Preparing to install a Diamond VHF/UHF base vertical X6000A, and
> planning to paint it beforehand to a less visible color (here, dark
> green will be better than white).
>
> Is there any issue with this (affecting RF performance)? Does the outer
> (fiberglass? plastic?) white jacket have any dielectric characteristic
> necessary for antenna operation that would be affected by paint? Any
> type of paint to avoid (I was planning Rust-Oleum textured dark green.)

Here is one recommendation:

Antenna Painting Instructions

The following is courtesy Celwave This is what I received when I asked
them for a recommendation of what to use in refinishing my 18 year old
PD455

Celwave receives requests for advice about refinishing weathered antenna
radomes or changing the radome color for aesthetic
reasons. We do not take a position on any manufacturer's paint. However,
Sherwin-Williams seems to make a product, which
should be compatible with radomes and not interfere with the antenna's
electrical performance. The following suggestions are
not a substitute for detailed instructions and mix ratios provided by the
paint manufacturer.

RADOME MATERIAL (Standard Color)
CELWAVE PRODUCT LINE
1. Spun Epoxy Fiberglass (Blue)
Penetrator Antennas (AxR, BxR
Series)
2. Polyester Impregnated Fiberglass (White)
Stationmaster Antennas (PDxx Omni
Series.)
3. Polyester Impregnated Fiberglass (Grey)
FR CELlite Panel Antennas (AP18, 19
Series)
4. ASA (Grey)
FR CELlite Panel Antennas (AP90
Series)
5. AES/ABS (White or Grey)
US Panel Antennas (Other APxx
Models)
6. Gel Coated Fiberglass Tubing (White)

Marine Antennas (Cel-1, 3 etc.)

Notes:

FOR RADOME
MATERIAL
USE THIS FINISH
#1, #2, #3
Primer and Top Coat
#4, #5
Primer may be required ----

(Top Coat retention may be tested with adhesive tape after
paint dries)
#6
Requires Pre-Treat (Acid Etch) to remove gloss, then Primer
and Top Coat

SHERWIN-WILLIAMS PRODUCTS:

Etch
P60G2 "Wash Primer"
Primer
D61H75 "Polane 2.8 Plus Spray Fil"
Top Coat
Polane Type "HS 2.8 Plus Polyurethane"

SURFACE PREPARATION:

Removal of surface contamination is normally accomplished by using an
alcohol solvent, ethanol, propanol, isopropanol, or
butanol. A ten percent solution of methyl ethyl ketone in water can also be
used whenever stubborn oil or grease is
encountered.

APPLICATION PROCEDURES:

Painting to be done indoors, as the uncured product is sensitive to
moisture. Apply one coat of Polane 2.8 Plus Spray Fil
D61H75 Primer. It is designed to fill and/or hide profile and surface
imperfections on metal castings, structural foam, plastic and
wood. Apply one coat of Polane HS 2.8 Plus Polyurethane Enamel Monochromatic
Intermix Color System F63 Series.

FOR FURTHER S-W PRODUCT INFORMATION CONTACT:

Ralph Stadalman - Product Finishing Representative
The Sherwin-Williams Company
Chemical Coating Facility
3165 Tucker Road Bensalem, PA 19020
Voice = (215) 638-0104
Fax = (215) 638-1008

Rev: #5 10/05/98 DLS

File: PAINT.doc

1390. Re: Painting VHF/UHF base vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 00:42:38 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <2CgJd.5599$8Z1.2812@newssvr14.news.prodigy.com>
Source record: 83029

Dave- why not use (it's NOT PAINT, per se), Fiberglass repair material available at most building suppiy companies, and also body restoreing kits for cars and boats? Have used this stuff to repair badly weather checked Green Hornet antennas, and the big advantage is that they also have color dyes available to "match" the original surfaces color ! This stuff also has the advantage that it is an epoxy base- not something that will fade, or flake off in a year or two! It also adds tensile strength if you are in a bad wx location. Biggest disadvantage is- once its on, its on (and that includes your clothes, skin, ect! Be careful applying it, and let it dry totally before trying to move/install it! as info, Jim NN7K

wb0gaz wrote:
> Preparing to install a Diamond VHF/UHF base vertical X6000A, and
> planning to paint it beforehand to a less visible color (here, dark
> green will be better than white).
>
> Is there any issue with this (affecting RF performance)? Does the outer
> (fiberglass? plastic?) white jacket have any dielectric characteristic
> necessary for antenna operation that would be affected by paint? Any
> type of paint to avoid (I was planning Rust-Oleum textured dark green.)
> Tks,
>
> 73 Dave WB0GAZ wb0gaz@hotmail.com
>

1391. Re: Lucent GPS antenna voltage?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 02:33:42 UTC
From: Hank <n1ltv@yahoo.com>
Message-ID: <1106620422.616348.87160@f14g2000cwb.googlegroups.com>
Source record: 83030

> IF you are looking at surplus antennas, unless they are
> proprietary to a specific receiver, are likely 5 volt models.

That's correct. I found out that the voltage range spec
is 5-26 volts.

1392. Re: Swr meter in your base station

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 04:36:04 UTC
From: Raymond Sirois <rsirois@stny.rr.com>
Message-ID: <u7jbv053vaf61kk5qi6qm7e9jnnp41f289@4ax.com>
Source record: 83031

On 24 Jan 2005 05:25:19 -0800, stryped@hotmail.com wrote:

>I am just curious how many of you keep your swr meter hooked up in your
>base station? (I mean all the time, not just when you are tuning an
>antenna?)

Most of us do. I know I do.

Raymond Sirois
SysOp: The Lost Chord BBS
607-733-5745
telnet://thelostchord.dns2go.com:6000

1393. Dual Rhombic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 14:38:27 UTC
From: Pierre Desjardins <pierred1@sympatico.ca>
Message-ID: <03mcv0d9vlip0llv09mfht36o53sokpfra@4ax.com>
Source record: 83032

Hi to all

I read somewhere that the dual rhombic could give a gain of almost 27 db using these dimension for 144,2 mHz:

L1- 29.5 ft, L2- 50.67 ft, X- 52.2 degrees, Y- 37.7 degrees, R1/2 660 ohms noninductive, Ht: 12.29 ft, Elevation angle: 7.5 degrees, Vertical beamwidth: 5.5 degrees and Horizontal beamwidth: 8.5 degrees.

Has anyone ever verified this? Here, using simulation with EZNEC+, I get about 15 dBi in free space and much lower on real ground. Am I missing something?

Thanks for your answers

73 de Pierre VE2PID

1394. Re: Dual Rhombic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 15:12:07 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <4jHwR4SHHm9BFAjm@ifwtech.co.uk>
Source record: 83033

Pierre Desjardins wrote:
>
>I read somewhere that the dual rhombic could give a gain of almost 27
>db using these dimension for 144,2 mHz:
>
>L1- 29.5 ft, L2- 50.67 ft, X- 52.2 degrees, Y- 37.7 degrees, R1/2 660
>ohms noninductive, Ht: 12.29 ft, Elevation angle: 7.5 degrees, Vertical
>beamwidth: 5.5 degrees and Horizontal beamwidth: 8.5 degrees.
>
>Has anyone ever verified this? Here, using simulation with EZNEC+, I
>get about 15 dBi in free space and much lower on real ground. Am I
>missing something?
>
No - it was a complete mistake.

First it was an optimistic estimate from pre-computer days. Then too
many different people each added another 6dB for ground gain.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1395. 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 16:22:59 UTC
From: stryped@hotmail.com
Message-ID: <1106670179.618538.57670@z14g2000cwz.googlegroups.com>
Source record: 83034

When looking for a power supply for my Alinco dr-590, what type of power supply would I look for? The radio says 13.8 v dc but if I get a 12 volt power supply will it put out the same wattage at the radio?

1396. Re: Dual Rhombic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 16:26:20 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <LquJd.28785$EG1.13806@attbi_s53>
Source record: 83035

> First it was an optimistic estimate from pre-computer days. Then too
> many different people each added another 6dB for ground gain.
>
LaPorte was an eternal optimist. That's French isn't it?

W4ZCB

1397. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 17:55:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <iv1dv0dm2ogmd4uk596pmnp6ns742lk8a3@4ax.com>
Source record: 83036

On 25 Jan 2005 08:22:59 -0800, stryped@hotmail.com wrote:

>When looking for a power supply for my Alinco dr-590, what type of
>power supply would I look for? The radio says 13.8 v dc but if I get a
>12 volt power supply will it put out the same wattage at the radio?

Hi Don,

Do the math. You have the same load - less voltage. The power laws
describe this simply as Eï¿½/R.

However, it is very, very, very unlikely that you have 12.0 V of
anything as this is a "nominal" voltage, and almost never an actual
voltage. The 12 V label is derived from the common application of the
Lead-Acid Edison Battery. The cells of this battery develop 2.1 V
potential, and with their common combination into batteries of either
3 cells or 6 cells, those bring the total up to 6.3 V or 12.6 V. Many
here will recognize these values as common filament voltages for
tubes. So even here, common transformers that are either 6 or 12 V
specified, actually supply more voltage under load (because they were
originally filament power transformers).

The specification for 13.8 V is derived from the automotive electrical
system that was designed (with its voltage regulator and
generator/alternator) to supply a "float" voltage that would keep the
battery topped off while simultaneously carrying the load. Hence,
mobile applications are designed for this configuration and the source
should be robust enough to support the load.

Now, it seems to me you were using a deep discharge battery, or you
were planning to do so. This is a common application in the shack, I
have two batteries in parallel held up with a 20A trickle charge
(voltage adjusted to the optimum value). The charger (actually a
precision source from Acopian) is not large enough to supply my HF
rigs under full power out (my Drake TR-7 is rated well above 100W) but
the combination of batteries and charger manage quite well. Also, I
have connectored everything so that I can strip down, transport and
reconfigure for field day operations (sans charger).

73's
Richard Clark, KB7QHC

1398. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 17:59:26 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <10vd28fc38a79ee@corp.supernews.com>
Source record: 83037

stryped@hotmail.com wrote:

> When looking for a power supply for my Alinco dr-590, what type of
> power supply would I look for? The radio says 13.8 v dc but if I get a
> 12 volt power supply will it put out the same wattage at the radio?
>
12 VDC to 13.8 VDC are nominal voltages. Very few radios are sensitive
to variation of voltage as long as the power supply can supply the amps.
The Icom 706 series seem to be sensitive to .LT. 12 VDC. I can't speak
to the Alinco.
Generally the front of any given power supply will say 12 VDC but the
specs will indicate 13.8 VDC.
No, if you provide 12 VDC you will output a lower wattage regardless of
the capacity to provide adequate amperage.

Dave WD9BDZ

1399. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 18:20:35 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <ct62ll$cj5$1@news.service.uci.edu>
Source record: 83038

stryped@hotmail.com wrote:

> When looking for a power supply for my Alinco dr-590, what type of
> power supply would I look for? The radio says 13.8 v dc but if I get a
> 12 volt power supply will it put out the same wattage at the radio?
>

Astron RS-20A, or a RS-20M if you want meters. That'll handle your 45
watt radio. It's a 12 volt power supply that is internally adjustable
up to and above 13.8 volts. Get the RS-35 if you plan on adding an HF
rig to your station. Astron is standard equipment on many radio desks.

ac6xg

1400. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 18:37:42 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10vd4fnjrs9s99b@corp.supernews.com>
Source record: 83039

"Jim Kelley" <jwkelley@uci.edu> wrote in message
news:ct62ll$cj5$1@news.service.uci.edu...
>
>
> stryped@hotmail.com wrote:
>
>> When looking for a power supply for my Alinco dr-590, what type of
>> power supply would I look for? The radio says 13.8 v dc but if I get a
>> 12 volt power supply will it put out the same wattage at the radio?
>>
>
> Astron RS-20A, or a RS-20M if you want meters. That'll handle your 45
> watt radio. It's a 12 volt power supply that is internally adjustable up
> to and above 13.8 volts. Get the RS-35 if you plan on adding an HF rig to
> your station. Astron is standard equipment on many radio desks.
>
> ac6xg

I agree with Jim about Astron. Been using 'em for decades. Simple, robust design. Zero failures.
The voltage conundrum I believe derives from the necessary voltage to charge a 12 volt battery.
Gotta overcome that old internal resistance; Turns out to be about 13.8 volts.
I don't know of a "12V" ham rig that would care about the difference.
Get outside the manufacturer's specified range (RTFB) and you may not have a warranty.
73
H., NQ5H
>

1401. Re: Dual Rhombic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 18:49:49 UTC
From: richardharrison@webtv.net
Message-ID: <10120-41F694CD-463@storefull-3257.bay.webtv.net>
Source record: 83040

W4ZCB wrote:
"LaPorte was an eternal optimist. That`s French isn`t it?"

Edmund A. Laport was Chief Engineer of RCA International Division Radio Corporaation of America, and is the author of "Radio Antenna Engineering".

On page 336 of "Radio Antenna Engineering" Ed gives the gain of a two-layer tiered rhombic as 14.7 dBd.

On page 528 of Arnold B. Bailey`s "TV and Other Receiving Antennas" is given the gain of a single-layer "horizontal" rhombic in free-space which has a dide length of about 3.7 wavelengths. It has a gain of about 14.5 dBd.

I`ve used Laport`s criteria in rhombic design and been satisfied.

Best regards, Richard Harrison, KB5WZI

1402. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 19:12:20 UTC
From: stryped@hotmail.com
Message-ID: <1106678998.660822.222390@c13g2000cwb.googlegroups.com>
Source record: 83041

Richard Clark wrote:
> On 25 Jan 2005 08:22:59 -0800, stryped@hotmail.com wrote:
>
> >When looking for a power supply for my Alinco dr-590, what type of
> >power supply would I look for? The radio says 13.8 v dc but if I get
a
> >12 volt power supply will it put out the same wattage at the radio?
>
> Hi Don,
>
> Do the math. You have the same load - less voltage. The power laws
> describe this simply as E^2/R.
>
> However, it is very, very, very unlikely that you have 12.0 V of
> anything as this is a "nominal" voltage, and almost never an actual
> voltage. The 12 V label is derived from the common application of
the
> Lead-Acid Edison Battery. The cells of this battery develop 2.1 V
> potential, and with their common combination into batteries of either
> 3 cells or 6 cells, those bring the total up to 6.3 V or 12.6 V.
Many
> here will recognize these values as common filament voltages for
> tubes. So even here, common transformers that are either 6 or 12 V
> specified, actually supply more voltage under load (because they were
> originally filament power transformers).
>
> The specification for 13.8 V is derived from the automotive
electrical
> system that was designed (with its voltage regulator and
> generator/alternator) to supply a "float" voltage that would keep the
> battery topped off while simultaneously carrying the load. Hence,
> mobile applications are designed for this configuration and the
source
> should be robust enough to support the load.
>
> Now, it seems to me you were using a deep discharge battery, or you
> were planning to do so. This is a common application in the shack, I
> have two batteries in parallel held up with a 20A trickle charge
> (voltage adjusted to the optimum value). The charger (actually a
> precision source from Acopian) is not large enough to supply my HF
> rigs under full power out (my Drake TR-7 is rated well above 100W)
but
> the combination of batteries and charger manage quite well. Also, I
> have connectored everything so that I can strip down, transport and

> reconfigure for field day operations (sans charger).
>
> 73's
> Richard Clark, KB7QHC

So you are saying it wont matter?

I was wanting to use the marine battery I have but someone else posted a negative experience with the fumes ruining part of their house and their own health. It scared me a little.

I was looking at power supplies on ebay and some of them stated 12 volts (older ones) some said 13.8. That is why I asked.
I am still a little confused on what way I need to go.

1403. I made a lot of money doing this! Nothing to lose!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 19:15:57 UTC
From: provgator@yahoo.com
Message-ID: <1106680557.610598.17120@c13g2000cwb.googlegroups.com>
Source record: 83042

I made a lot of money Try this!!! Nothing to lose
Make money quick while you are still young like me at 21!
MAKE EASY AND QUICK CASH MONEY by doing almost nothing (NO JOKE, NO SCAM, AND VERY LEGAL) Please read on! You will be very thankful you did! PLEASE READ LIFE CHANGING INFORMATION!! $6.00 to 42,000!! THIS IS AN EASY, HONEST, AND LEGAL WAY TO MAKE SOME QUICK CASH! WOW THIS REALLY WORKED! I CAN'T BELIEVE IT!! YOU WON'T EITHER! A while back, I was browsing these newsgroups, just like you are now, and came across an article similar to this that said you could make thousands of dollars within weeks with only an initial investment of $6.00 plus stamps! So I thought, "Yeah, right, this must be a scam!" But like most of us I was curious and kept reading. It said that if you send $1.00 to each of the 6 names and addresses listed in the article, you could make thousands in a very short period of time!
You then place your own name and address at the bottom of the list at #6, and post the article to at least 200 newsgroups. (There are about 32,000 of them out there and that's quite a large market pool). No catch, that was it. Even though the investment was a measly $6, I had three questions that needed to be answered before I could get involved in this sort of thing.
1. IS THIS REALLY LEGAL?? I called a lawyer first. The lawyer was a little skeptical that I would actually make any money but he said it WAS LEGAL if I wanted to try it. I told him it sounded a lot like a chain letter but the details of the system (SEE BELOW) actually made it a legitimate legal business.
2. IS IT OK WITH THE POST OFFICE OR IS IT MAIL FRAUD?.... I called them: 1-800-725-2161 and they confirmed THIS IS ABSOLUTELY LEGAL! (See Title18, h sections1302 NS 1341 of Postal Lottery Laws). This clarifies the program of collecting names and addresses for a mailing list.
3. IS IT MORAL? Well, everyone who sends me a buck has a good chance of getting A LOT of money ... a much better chance than buying a lottery ticket!!! So, having these questions answered, I invested EXACTLY $8.04... six $1.00 bills and six 34 cent postage stamps ... and boy am I glad I did!!! Within 7 days, I started getting money in the mail! I was shocked! I figured it would end soon and didn't give it another thought. But the money continued coming in. In my first week I made between $20 to $30. By the end of the second week I had a made a total of $1,000.00. In the third week I had over $10,000.00 and it was still growing. This is now my fourth week and I have made a total of just over $42,000 and it's still coming in ..... It's certainly worth $6.00 and 6 stamps!!! Also, make sure you print a copy of this article NOW, so you can get the information off of it as you need it. I promise you that if you follow the directions exactly, that you will start making more money than you thought possible by doing something so easy!

Suggestion: Read this entire message carefully! (Print it out or download it.) Follow the simple directions and watch the money come in! It's easy. It's legal. And, your investment is only $6.00 (Plus postage)
IMPORTANT: This is not a rip-off; it is not indecent; it is not illegal; and it is virtually no risk - it really works!!!! If all of the following instructions are adhered to, you will receive extraordinary dividends. PLEASE NOTE: Please follow these directions EXACTLY, and $50,000 or more can be yours in 20 to 60 days. This program remains successful because of the honesty and integrity of the participants. Please continue its success by carefully adhering to the instructions. You will now become part of the Mail Order business. In this business your product is not solid and tangible, it's a service. You are in the business of developing Mailing Lists. Many large corporations are happy to pay big bucks for quality lists. However, the money made from the mailing lists is secondary to the income which is made from people like you and me asking to be included in that list.

HERE ARE 4 EASY STEPS TO SUCCESS: --- STEP 1: Get 6 separate pieces of paper and write the following on each piece of paper "PLEASE PUT ME ON YOUR MAILING LIST." Now get 6 US $1.00 bills and place ONE inside EACH of the 6 pieces of paper so the bill will not be seen through the envelope (to prevent thievery). Next, place one paper in each of the 6 envelopes and seal them. You should now have 6 sealed envelopes, each with a piece of paper stating the above phrase, your name and address, and a $1.00 bill. What you are doing is creating a service. THIS IS ABSOLUTELY LEGAL! You are requesting a legitimate service and you are paying for it! Like most of us I was a little skeptical and a little worried about the legal aspects of it all. So I checked it out with the U.S. Post Office (1-800-725-2161) and they confirmed that it is indeed legal! Mail the 6 envelopes to the following addresses:
#1) Johnny Hart, 8412 Beech Avenue, Cincinnati, OH, 45236
#2) Peter S., 16 Lorraine Ave Bardwell, Valley NSW 2205 Australia
#3) P. Zaond, 675 Alvarado Ave. apt# 1, Davis, CA 95616
#4) Christopher Var, 17 Ponagansett Ave, Providence, RI 02909
#5) S. Cynthia, 6358 55th Ave N, St. Petersburg, FL 33709
#6) Chris Soa, 20 Matson Ave, Providence, RI 02909
NOTE: MAILING THE MONEY IS A VERY CRITICAL STEP IN THIS WHOLE PROCESS. IF PEOPLE DID NOT MAIL THE MONEY, THIS WHOLE THING WOULD NOT WORK. $6 IS NOT WORTH MESSING THIS SYSTEM UP, AND IT ONLY TAKES ABOUT 10 MINUTES OF YOUR TIME. DO THIS AND YOU WILL BE REWARDED. I AM LIVING PROOF!!
STEP 2: After you have mailed the envelopes, now take the #1 name off the list that you see above, move the other names up (6 becomes 5, 5 becomes 4, etc...) and add YOUR Name as number 6 on the list.
STEP 3: Change anything you need to, but try to keep this article as close to original as possible.
STEP 4: Now, post your amended article to at least 200 newsgroups. (I think there are close to 32,000 groups) All you need is 200, but remember, the more you post, the more money you make! This is perfectly legal! Keep a copy of these steps for yourself and, whenever you need

money, you can use it again, and again. PLEASE REMEMBER that this program remains successful because of the honesty and integrity of the participants and by their carefully adhering to every step in the directions. Look at it this way. If you are a person of integrity, the program will continue and the money that so many others have received will come your way. NOTE: You may want to retain every name and address sent to you, either on a computer or hard copy and keep the notes people send you. This VERIFIES that you are truly providing a service. (Also, it might be a good idea to wrap the $1 bill in dark paper to reduce the risk of mail theft.) So, as each post is downloaded and the directions carefully followed, six members will be reimbursed for their participation as a List Developer with one dollar each. Your name will move up the list geometrically so that when your name reaches the #1 position you will be receiving thousands of dollars in CASH!!! What an opportunity for only $6.00 ($1.00 for each of the first six people listed above) Send it now, add your own name to the list and you're in business! ===

HOW TO POST TO NEWSGROUPS --- DIRECTIONS --- ===
Step 1) You do not need to re-type this entire letter to do your own posting. Simply put your cursor at the beginning of this letter and drag your cursor to the bottom of this document, and select 'copy' from the edit menu. This will copy the entire letter into the computer's memory.
Step 2) Open a blank 'notepad' file and place your cursor at the top of the blank page. From the 'edit' menu select 'paste'. This will paste a copy of the letter into notepad so that you can add your name to the list.
Step 3) Save your new notepad file as a .txt file. If you want to do your postings in different settings, you'll always have this file to go back to.
Step 4) Use Netscape or Internet explorer and try searching for various newsgroups (on-line forums, message boards, chat sites, discussions). SUGGESTION - search, download, install 1 or several programs like "Message Board Blaster" which will find over 40,000 newsgroups for you to post this message.
Step 5) Visit these message boards and post this article as a new message by highlighting the text of this letter and selecting paste from the edit menu. Fill in the Subject, this will be the header that everyone sees as they scroll through the list of postings in a particular group, click the post message button. You're done with your first one!
Congratulations...THAT'S IT! All you have to do is jump to different newsgroups and post away, after you get the hang of it, it will take about 30 seconds for each newsgroup! **REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200** That's it! You will begin receiving money from around the world within days! You may eventually want to rent a P.O. Box due to the large amount of mail you will receive. If you wish to stay anonymous, you can invent a name to use, as long as the postman will

deliver it. **JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT**
Now the WHY part: Out of 200 postings, say I receive only 5 replies (a very low example). So then I made $5.00 with my name at #6 on the letter. Now, each of the 5 persons who just sent me $1.00 make the MINIMUM 200 postings, each with my name at #5 and only 5 persons respond to each of the original 5, that is another $25.00 for me, now those 25 each make 200 MINIMUM posts with my name at #4 and only 5 replies each, I will bring in an additional $125.00! Now, those 125 persons turn around and post the MINIMUM 200 with my name at #3 and only receive 5 replies each, I will make an additional $626.00! OK, now here is the fun part, each of those 625 persons post a MINIMUM 200 letters with my name at #2 and they each only receive 5 replies, that just made me $3,125.00!!!
Those 3,125 persons will all deliver this message to 200 newsgroups with my name at #1 and if still 5 persons per 200 newsgroups react I will receive $15,625,00! With an original investment of only $6.00! AMAZING! When your name is no longer on the list, you just take the latest posting in the newsgroups, and send out another $6.00 to names on the list, putting your name at number 6 again. And start posting again.
The thing to remember is: do you realize that thousands of people all over the world are joining the internet and reading these articles everyday? JUST LIKE YOU are now!! So, can you afford $6.00 and see if it really works?? I think so... People have said, "what if the plan is played out and no one sends you the money? So what!
What are the chances of that happening when there are tons of new honest users and new honest people who are joining the internet and newsgroups everyday and are willing to give it a try? Estimates are at 20,000 to 50,000 new users, every day, with thousands of those joining the actual internet.
Remember, play FAIRLY and HONESTLY and this will really work.] ** By the way, if you try to deceive people by posting the messages with your name in the list and not sending the money to the rest of the people already on the list, you will NOT get as much. Someone I talked to knew someone who did that and he only made about $150.00, and that's after seven or eight weeks! Then he sent the 6 $1.00 bills, people added him to their lists, and in 4-5 weeks he had over $10k. This is the fairest and most honest way I have ever seen to share the wealth of the world without costing anything but our time!!! You also may want to buy mailing and e-mail lists for future dollars. Make sure you print this article out RIGHT NOW! Also, try to keep a list of everyone that sends you money and always keep an eye on the newsgroups to make sure everyone is playing fairly. Remember, HONESTY IS THE BEST POLICY. You don't need to cheat the basic idea to make the money!! GOOD LUCK to all and please play fairly and reap the huge rewards from this, which is tons of extra CASH. Please remember to declare your extra income. Thanks once again... LEGAL? ? ? (Comments from Bob Novak who started this new version.) "People have asked me if this is really legal. Well, it is! You are using the Internet to advertise your business. What is that business? You are assembling a mailing list of people who are

interested in home-based computer and online business and methods of generating income at home. Remember, people send you a small fee to be added to your mailing list. It is legal. What will you do with your list of thousands of names?
That's up to you." So, build your mailing list, keep good accounts, declare the income and pay your taxes. By doing this you prove your business intentions. Keep an eye on the newsgroups and when the cash has stopped coming (that means your name is no longer on the list), you just take the latest posting at the newsgroups, send another $6.00 to the names stated on the list, make your corrections (put your name at #6) and start posting again.
NOTES: * 1. In some countries, the export of the country's exchange is illegal. But you can get the license to do this from the post office, explaining the above statements (that you have an online business, etc. You may have to pay an extra tax, but that's OK, the amount of the incoming money is HUGE!
And as I said, a few countries have that restriction. *2. You may want to buy mailing and e-mail lists for future dollars. (Or Database or Spreadsheet software.) *3. If you're really not sure or still think this can't be for real, please print a copy of this article and pass it along to someone who really needs the money, and see what happens. *4. You will start getting responses within 1-2 weeks, it depends. ***ALSO REMEMBER*** SEND YOUR $1 OUT TO EVERYONE ON THE LIST, EVEN IF THEY ARE NOT FROM THE U.S. WHAT ARE YOU WAITING FOR??? GOOD LUCK!!!

1404. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 19:31:45 UTC
From: Jim Kelley <jwkelley@nospam.edu>
Message-ID: <ct66r3frp1@news.service.uci.edu>
Source record: 83043

stryped@hotmail.com wrote:

> Richard Clark wrote:
>
>>On 25 Jan 2005 08:22:59 -0800, stryped@hotmail.com wrote:
>>
>>
>>>When looking for a power supply for my Alinco dr-590, what type of
>>>power supply would I look for? The radio says 13.8 v dc but if I get
>
> a
>
>>>12 volt power supply will it put out the same wattage at the radio?
>>
>>Hi Don,
>>
>>Do the math. You have the same load - less voltage. The power laws
>>describe this simply as Eï¿½/R.
>>
>>However, it is very, very, very unlikely that you have 12.0 V of
>>anything as this is a "nominal" voltage, and almost never an actual
>>voltage. The 12 V label is derived from the common application of
>
> the
>
>>Lead-Acid Edison Battery. The cells of this battery develop 2.1 V
>>potential, and with their common combination into batteries of either
>>3 cells or 6 cells, those bring the total up to 6.3 V or 12.6 V.
>
> Many
>
>>here will recognize these values as common filament voltages for
>>tubes. So even here, common transformers that are either 6 or 12 V
>>specified, actually supply more voltage under load (because they were
>>originally filament power transformers).
>>
>>The specification for 13.8 V is derived from the automotive
>
> electrical
>
>>system that was designed (with its voltage regulator and
>>generator/alternator) to supply a "float" voltage that would keep the
>>battery topped off while simultaneously carrying the load. Hence,
>>mobile applications are designed for this configuration and the

>
> source
>
>>should be robust enough to support the load.
>>
>>Now, it seems to me you were using a deep discharge battery, or you
>>were planning to do so. This is a common application in the shack, I
>>have two batteries in parallel held up with a 20A trickle charge
>>(voltage adjusted to the optimum value). The charger (actually a
>>precision source from Acopian) is not large enough to supply my HF
>>rigs under full power out (my Drake TR-7 is rated well above 100W)
>
> but
>
>>the combination of batteries and charger manage quite well. Also, I
>>have connectored everything so that I can strip down, transport and
>>reconfigure for field day operations (sans charger).
>>
>>73's
>>Richard Clark, KB7QHC
>
>
> So you are saying it wont matter?
>
> I was wanting to use the marine battery I have but someone else posted
> a negative experience with the fumes ruining part of their house and
> their own health. It scared me a little.
>
> I was looking at power supplies on ebay and some of them stated 12
> volts (older ones) some said 13.8. That is why I asked.
> I am still a little confused on what way I need to go.

Richard always writes as if he's entering a prose contest. He has some
difficulty communicating with Earthlings. :-)

ac6xg

1405. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 20:27:29 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10vdatkjo0lvr61@corp.supernews.com>
Source record: 83044

"Jim Kelley" <jwkelley@nospam.edu> wrote in message
news:ct66r3frp1@news.service.uci.edu...
snip
> Richard always writes as if he's entering a prose contest. He has some
> difficulty communicating with Earthlings. :-)
>
> ac6xg
>
Jim
That's 'cause he gets his plonk from Reg.
;^))))
73
H.

1406. Re: Dual Rhombic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 20:53:41 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <plyJd.15699$5R.563@newssvr21.news.prodigy.com>
Source record: 83050

'tis possible that it could have that kind of gain, as the reference point (compared to Dipole (dBD), Isotropic (dBI), or WET NOODLE dB(?)) was neglected in the gain statement! In fact might be even better than 27 dB (?) when compared with a wet noodle, but that has no bearing on any credible gain! That ANY antenna would have a gain of some 400 TIMES a dipole, or even an isotropic (Point source) would take up considerable acreage at 2 meters! A typical moonbounce station uses about 20 dBD gain , and these are multiple yagi antennas.
see: http://www.bigskyspaces.com/w7gj/longyagi.htm for a 19 dBD gain 2 meter yagi, and note the length! (98-1/2 feet long!)
and also look for VE7BQH - These guys have verifiable antenna gains and know their stuff! when ANY antenna claims more than 10-11 dB I gain ,be very suspicious of the claims, also, make sure to see WHAT that gain is compared (referenced) against! This is at least one of the reasons that the ARRL is loath to allow gain claims by advertizer, unless they have been verified by independant sources. Jim NN7K

Pierre Desjardins wrote:
> Hi to all
>
> I read somewhere that the dual rhombic could give a gain of almost 27
> db using these dimension for 144,2 mHz:
>
> L1- 29.5 ft, L2- 50.67 ft, X- 52.2 degrees, Y- 37.7 degrees, R1/2 660
> ohms noninductive, Ht: 12.29 ft, Elevation angle: 7.5 degrees,
> Vertical beamwidth: 5.5 degrees and Horizontal beamwidth: 8.5 degrees.
>
> Has anyone ever verified this? Here, using simulation with EZNEC+, I
> get about 15 dBi in free space and much lower on real ground. Am I
> missing something?
>
> Thanks for your answers
>
> 73 de Pierre VE2PID

1407. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 21:15:23 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <_rqdnSt-StlMK2vcRVn-qw@comcast.com>
Source record: 83051

<stryped@hotmail.com> wrote in message
news:1106678998.660822.222390@c13g2000cwb.googlegroups.com...

Richard Clark wrote:
> On 25 Jan 2005 08:22:59 -0800, stryped@hotmail.com wrote:
>
> >When looking for a power supply for my Alinco dr-590, what type of
> >power supply would I look for? The radio says 13.8 v dc but if I get
a
> >12 volt power supply will it put out the same wattage at the radio?
>
> Hi Don,
>
> Do the math. You have the same load - less voltage. The power laws
> describe this simply as E²/R.
>
> However, it is very, very, very unlikely that you have 12.0 V of
> anything as this is a "nominal" voltage, and almost never an actual
> voltage. The 12 V label is derived from the common application of
the
> Lead-Acid Edison Battery. The cells of this battery develop 2.1 V
> potential, and with their common combination into batteries of either
> 3 cells or 6 cells, those bring the total up to 6.3 V or 12.6 V.
Many
> here will recognize these values as common filament voltages for
> tubes. So even here, common transformers that are either 6 or 12 V
> specified, actually supply more voltage under load (because they were
> originally filament power transformers).
>
> The specification for 13.8 V is derived from the automotive
electrical
> system that was designed (with its voltage regulator and
> generator/alternator) to supply a "float" voltage that would keep the
> battery topped off while simultaneously carrying the load. Hence,
> mobile applications are designed for this configuration and the
source
> should be robust enough to support the load.
>
> Now, it seems to me you were using a deep discharge battery, or you
> were planning to do so. This is a common application in the shack, I
> have two batteries in parallel held up with a 20A trickle charge
> (voltage adjusted to the optimum value). The charger (actually a
> precision source from Acopian) is not large enough to supply my HF

> rigs under full power out (my Drake TR-7 is rated well above 100W)
but
> the combination of batteries and charger manage quite well. Also, I
> have connectored everything so that I can strip down, transport and
> reconfigure for field day operations (sans charger).
>
> 73's
> Richard Clark, KB7QHC

So you are saying it wont matter?

I was wanting to use the marine battery I have but someone else posted
a negative experience with the fumes ruining part of their house and
their own health. It scared me a little.

I was looking at power supplies on ebay and some of them stated 12
volts (older ones) some said 13.8. That is why I asked.
I am still a little confused on what way I need to go.

As far as I know, 100% of supplies sold for ham use are 13.8V, or
thereabouts. 12 Volts was a standard voltage for many linear ICs, along with
15 V. My Astron switching supply came set for 14.05 V. I don't see that as a
problem because all my stuff can be used in a car, and I have never seen the
car voltage drop below 14 V with the engine running.

Tam/WB2TT

1408. Lightening strike question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 21:20:31 UTC
From: stryped@hotmail.com
Message-ID: <1106688031.230876.122670@f14g2000cwb.googlegroups.com>
Source record: 83045

Would a cb antenna made out of fiberglass be less likely to get hit from lightening on a roof as compared to aluminum?

I am looking up info on grounding my ham radio for the base station. I am wanting to use a cb radio up there too but it would get very expensive buying a coaxial gas tube ground for my two antenna ham radio and my cb.

How many of you actually use these for the coax?

1409. Re: Lightening strike question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 21:23:53 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <JNyJd.19585$wi2.3243@newssvr11.news.prodigy.com>
Source record: 83046

It'll take a hit just like anything else, it has wire inside it..
Best protection is disconnect and ground it...
unlug radios

--

73
Hank WD5JFR
<stryped@hotmail.com> wrote in message
news:1106688031.230876.122670@f14g2000cwb.googlegroups.com...
> Would a cb antenna made out of fiberglass be less likely to get hit
> from lightening on a roof as compared to aluminum?
>
> I am looking up info on grounding my ham radio for the base station. I
> am wanting to use a cb radio up there too but it would get very
> expensive buying a coaxial gas tube ground for my two antenna ham radio
> and my cb.
>
> How many of you actually use these for the coax?
>

1410. Re: Why a capacitor for a shunt fed antenna (Mobile)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 21:31:40 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ct6drs$qs7$1@sparta.btinternet.com>
Source record: 83049

```
> Why would I wish to "squirm my way" out of an
> obvious agreement?
>
========================

Dunno why. But you just did it!
```

1411. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 21:32:13 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10vdemulubkc262@corp.supernews.com>
Source record: 83048

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
news:_rqdnSt-StlMK2vcRVn-qw@comcast.com...
>
> <stryped@hotmail.com> wrote in message
> news:1106678998.660822.222390@c13g2000cwb.googlegroups.com...
>
> Richard Clark wrote:
>> On 25 Jan 2005 08:22:59 -0800, stryped@hotmail.com wrote:
>>
>> >When looking for a power supply for my Alinco dr-590, what type of
>> >power supply would I look for? The radio says 13.8 v dc but if I get
> a
>> >12 volt power supply will it put out the same wattage at the radio?
>>
>> Hi Don,
>>
>> Do the math. You have the same load - less voltage. The power laws
>> describe this simply as E²/R.
>>
>> However, it is very, very, very unlikely that you have 12.0 V of
>> anything as this is a "nominal" voltage, and almost never an actual
>> voltage. The 12 V label is derived from the common application of
> the
>> Lead-Acid Edison Battery. The cells of this battery develop 2.1 V
>> potential, and with their common combination into batteries of either
>> 3 cells or 6 cells, those bring the total up to 6.3 V or 12.6 V.
> Many
>> here will recognize these values as common filament voltages for
>> tubes. So even here, common transformers that are either 6 or 12 V
>> specified, actually supply more voltage under load (because they were
>> originally filament power transformers).
>>
>> The specification for 13.8 V is derived from the automotive
> electrical
>> system that was designed (with its voltage regulator and
>> generator/alternator) to supply a "float" voltage that would keep the
>> battery topped off while simultaneously carrying the load. Hence,
>> mobile applications are designed for this configuration and the
> source
>> should be robust enough to support the load.
>>
>> Now, it seems to me you were using a deep discharge battery, or you
>> were planning to do so. This is a common application in the shack, I

>> have two batteries in parallel held up with a 20A trickle charge
>> (voltage adjusted to the optimum value). The charger (actually a
>> precision source from Acopian) is not large enough to supply my HF
>> rigs under full power out (my Drake TR-7 is rated well above 100W)
> but
>> the combination of batteries and charger manage quite well. Also, I
>> have connectored everything so that I can strip down, transport and
>> reconfigure for field day operations (sans charger).
>>
>> 73's
>> Richard Clark, KB7QHC
>
> So you are saying it wont matter?
>
> I was wanting to use the marine battery I have but someone else posted
> a negative experience with the fumes ruining part of their house and
> their own health. It scared me a little.
>
> I was looking at power supplies on ebay and some of them stated 12
> volts (older ones) some said 13.8. That is why I asked.
> I am still a little confused on what way I need to go.
>
> As far as I know, 100% of supplies sold for ham use are 13.8V, or
> thereabouts. 12 Volts was a standard voltage for many linear ICs, along
> with 15 V. My Astron switching supply came set for 14.05 V. I don't see
> that as a problem because all my stuff can be used in a car, and I have
> never seen the car voltage drop below 14 V with the engine running.
>
> Tam/WB2TT
>
Bingo
Try Sealed Lead Acid batteries, BTW.
73
H.

1412. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 21:32:55 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <cWyJd.20546$B95.16924@lakeread02>
Source record: 83047

<stryped@hotmail.com> wrote
I was wanting to use the marine battery I have but someone else posted
a negative experience with the fumes ruining part of their house and
their own health. It scared me a little.

Starting with a new battery, I have used a 12v marine deep-cell with small
float-charger to power a 25w VHF transceiver for over two years. For short
periods, this will handle 100w xmit on an HF rig that draws 20-30amp. When a
charger is connected to a battery, adequate ventilation must be provided,
and the smoking lamp is "out". There is nothing wrong with using an
emergency backup battery as part of normal (indoor) operations. It will
provide hundreds of hours of monitoring and several minutes of low-power
transmit w/o requiring a charge.

Jack Painter
Virginia Beach, Virginia

1413. Re: Lightening strike question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 21:41:09 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <V1zJd.20548$B95.12988@lakeread02>
Source record: 83052

<stryped@hotmail.com> wrote

> Would a cb antenna made out of fiberglass be less likely to get hit
> from lightening on a roof as compared to aluminum?
>
> I am looking up info on grounding my ham radio for the base station. I
> am wanting to use a cb radio up there too but it would get very
> expensive buying a coaxial gas tube ground for my two antenna ham radio
> and my cb.
>
> How many of you actually use these for the coax?
>

You are welcome to explore some cost/benefits of lightning protection here:

http://members.cox.net/pc-usa/station/ground0.htm

Disconnecting all power supplies, radios and antennas (then grounding them)
has it's pro's, up to a point, and only you can decide this based on your
individual circumstances.

Jack Painter
Virginia Beach, Virginia

1414. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 21:53:56 UTC
From: plonk <nospam@nospam.com>
Message-ID: <35ntepF4p9fd7U1@individual.net>
Source record: 83053

Get a 13.8 vdc from radio shack. or turn up your 12 to 13.2

<stryped@hotmail.com> wrote in message
news:1106670179.618538.57670@z14g2000cwz.googlegroups.com...
> When looking for a power supply for my Alinco dr-590, what type of
> power supply would I look for? The radio says 13.8 v dc but if I get a
> 12 volt power supply will it put out the same wattage at the radio?
>

1415. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 22:04:42 UTC
From: stryped@hotmail.com
Message-ID: <1106690682.375447.308440@z14g2000cwz.googlegroups.com>
Source record: 83054

Jack Painter wrote:
> <stryped@hotmail.com> wrote
> I was wanting to use the marine battery I have but someone else
posted
> a negative experience with the fumes ruining part of their house and
> their own health. It scared me a little.
>
> Starting with a new battery, I have used a 12v marine deep-cell with
small
> float-charger to power a 25w VHF transceiver for over two years. For
short
> periods, this will handle 100w xmit on an HF rig that draws 20-30amp.
When a
> charger is connected to a battery, adequate ventilation must be
provided,
> and the smoking lamp is "out". There is nothing wrong with using an
> emergency backup battery as part of normal (indoor) operations. It
will
> provide hundreds of hours of monitoring and several minutes of
low-power
> transmit w/o requiring a charge.
>
> Jack Painter
> Virginia Beach, Virginia

How do you "vent" a batter thay is constantly hooked up to a trickel
charger?

1416. Re: Dual Rhombic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 23:21:42 UTC
From: Dave <noone@nowhere.com>
Message-ID: <VrydnU5u9rISSWvcRVn-vQ@crocker.com>
Source record: 83055

"Jim - NN7K" <nn7kexk7zfg@NOSPAMsbcglobal.net> wrote in message
news:plyJd.15699$5R.563@newssvr21.news.prodigy.com...
> 'tis possible that it could have that kind of gain, as the reference
> point (compared to Dipole (dBD), Isotropic (dBI), or WET NOODLE dB(?))

THATS IT! the ultimate reference. I hereby dub that measurement the dBwn
which will from now on be used to get the best gain figures for advertising
in anything except QST.

1417. Re: Lightening strike question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 23:27:05 UTC
From: Dave VanHorn <dvanhorn@dvanhorn.org>
Message-ID: <SJGdnQAeCYMjSGvcRVn-tQ@comcast.com>
Source record: 83056

Given that it jumps through a mile of air to hit you, would a quarter inch
of fiberglass make a difference?

1418. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-25 23:34:45 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <qIAJd.20551$B95.8818@lakeread02>
Source record: 83057

<stryped@hotmail.com> wrote
>
> Jack Painter wrote:
> > <stryped@hotmail.com> wrote
> > I was wanting to use the marine battery I have but someone else
> posted
> > a negative experience with the fumes ruining part of their house and
> > their own health. It scared me a little.
> >
> > Starting with a new battery, I have used a 12v marine deep-cell with
> small
> > float-charger to power a 25w VHF transceiver for over two years. For
> short
> > periods, this will handle 100w xmit on an HF rig that draws 20-30amp.
> When a
> > charger is connected to a battery, adequate ventilation must be
> provided,
> > and the smoking lamp is "out". There is nothing wrong with using an
> > emergency backup battery as part of normal (indoor) operations. It
> will
> > provide hundreds of hours of monitoring and several minutes of
> low-power
> > transmit w/o requiring a charge.
> >
> > Jack Painter
> > Virginia Beach, Virginia
>
> How do you "vent" a batter thay is constantly hooked up to a trickel
> charger?

First, mine is not constantly connected to the charger. When it is, I have a window open and a fan circulating air in the station. Battery vents in an automotive or outdoor environment often become sealed-shut. This is not the case with a clean battery used indoors-only. A very small amount of moisture is sometimes visible on the surface of the battery around the vents following use of a powerful charger. This has never been my experience from the trickle-charger, however. Keep the battery surfaces clean, verify that the vents exist, then leave them in their normal (not loosened) condition and all is well. Not all batteries are vented and I would avoid using any charger indoors in that situation.

Jack

1419. Antenna modeling

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 00:21:57 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1106698917.049426.54910@c13g2000cwb.googlegroups.com>
Source record: 83058

My understanding of antenna modeling is that sharp corners or
connecting points should be avoided as they can create errors.
The question I ask is what constitutes a sharp angle ?
I am assuming that it is the capacitance at the connection is the
problem. If so
is the corner of a quad a problem or is a delta feed point on a dipole
a problem ?
I see many instances of quads being modeled and also " V" wire antennas
each without a correcting "gusset" at the corners. So when is an angle
termed to be sharp?
Regards
Art

1420. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 00:35:14 UTC
From: Topaz305RK <k7sam@arrl.net>
Message-ID: <9LSdnePkMdqSeGvcRVn-pg@vnet-inc.com>
Source record: 83059

Jim -

How politically correct!

In the military it is called "Getting $12,000 worth of education shoved
up your rear end a nickel at a time".

1421. Re: Antenna modeling

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 01:11:19 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41f6ee04.34012727@news.crosslink.net>
Source record: 83060

On 25 Jan 2005 16:21:57 -0800, "art" <aunwin@insightbb.com> wrote:

>My understanding of antenna modeling is that sharp corners or
>connecting points should be avoided as they can create errors.
>The question I ask is what constitutes a sharp angle ?
>I am assuming that it is the capacitance at the connection is the
>problem. If so
>is the corner of a quad a problem or is a delta feed point on a dipole
>a problem ?
>I see many instances of quads being modeled and also " V" wire antennas
>each without a correcting "gusset" at the corners. So when is an angle
>termed to be sharp?
>Regards
>Art

When it is at a current maximum. At a voltage maximum it's irrelevant.
Just my opinion.

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1422. Re: Antenna modeling

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 01:40:17 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1106703617.282484.58310@c13g2000cwb.googlegroups.com>
Source record: 83061

What leads you to that opinion?
Art

1423. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 01:50:29 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <8gtdv0h5ogqiqlg04cobs224jfutc1cnjs@4ax.com>
Source record: 83062

On 25 Jan 2005 08:22:59 -0800, stryped@hotmail.com wrote:

>When looking for a power supply for my Alinco dr-590, what type of
>power supply would I look for? The radio says 13.8 v dc but if I get a
>12 volt power supply will it put out the same wattage at the radio?

THe owner's manual of most radios will give you a range of voltages;
for example, one of my Icoms recommends 13.8 volts, plus or minus 15
percent. Check your manual, if you have it, or try to get a copy from
one of the internet places that sell such things.

bob
k5qwg

1424. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 02:01:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9isdv01jhfvscrif165p1hmkj1ufl3f8jc@4ax.com>
Source record: 83063

On 25 Jan 2005 11:12:20 -0800, stryped@hotmail.com wrote:

>So you are saying it wont matter?
>
>I was wanting to use the marine battery I have but someone else posted
>a negative experience with the fumes ruining part of their house and
>their own health. It scared me a little.

Hi Don,

Well it seems in the interim, you got good advice as to battery use in the shack, and shabby advice about writing. ;-)

For the record, my batteries are actually sealed lead-acid Hawker Energy (Gates) Cyclon BC Cell (25 AH) and not cheap - but then they are rock solid. I went this direction knowing full well most batteries die because of one cell failure - this way I can replace the dead cell. My buddy used a deep discharge battery that was over floated (probably 15V) and he rarely minded the water level (too bad too) as he boiled it down. There was some obvious corrosion near the battery (sitting open to the environment, and he's a heavy smoker) but nothing widespread (his battery sat in a plastic tray on a wooden shelf).

During normal use at field day, my batteries lasted many hours. When the rig began to sputter, I swapped one out to charge from the car. I also monitored the voltage, and rarely ran below 11.5 Volts. Even with a "quick" charge, I would always current limit it to about 5A.

73's
Richard Clark, KB7QHC

1425. Re: Antenna modeling

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 02:08:43 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bkudv0plneg91n9s5mi7m5rraotes0jjpc@4ax.com>
Source record: 83064

On 25 Jan 2005 16:21:57 -0800, "art" <aunwin@insightbb.com> wrote:
>I am assuming that it is the capacitance at the connection is the
>problem.

Hi Art,

Kinks (aka sharp bend) add inductance.

>I see many instances of quads being modeled and also " V" wire antennas
>each without a correcting "gusset" at the corners. So when is an angle
>termed to be sharp?

It is not generally an issue because the greater bulk of the antenna
swamps out this small perturbation. It is the modeler that has the
problems. Consult your user's manual that cites considerations to be
taken for wires joining at an acute angle. Follow the rules offered.

73's
Richard Clark, KB7QHC

1426. Re: Antenna modeling

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 04:16:29 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41f7194b.45091568@news.crosslink.net>
Source record: 83065

On Wed, 26 Jan 2005 01:11:19 GMT, W9DMK<nobody@crosslink.net> (Robert Lay) wrote:

>On 25 Jan 2005 16:21:57 -0800, "art" <aunwin@insightbb.com> wrote:
>
>>My understanding of antenna modeling is that sharp corners or
>>connecting points should be avoided as they can create errors.
>>The question I ask is what constitutes a sharp angle ?
>>I am assuming that it is the capacitance at the connection is the
>>problem. If so
>>is the corner of a quad a problem or is a delta feed point on a dipole
>>a problem ?
>>I see many instances of quads being modeled and also " V" wire antennas
>>each without a correcting "gusset" at the corners. So when is an angle
>>termed to be sharp?
>>Regards
>>Art
>
>When it is at a current maximum. At a voltage maximum it's irrelevant.
>Just my opinion.
>
>Bob, W9DMK, Dahlgren, VA
>Replace "nobody" with my callsign for e-mail
>http://www.qsl.net/w9dmk
>http://zaffora/f2o.org/W9DMK/W9dmk.html
>

On second thought, it's all irrelevant. The feed lines of a balance feed attach at the center of the dipole. That's a right angle bend at a current maximum. Must not be a problem - everybody does it - Hi!

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1427. Ferrite bead impedance at UHF

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 04:48:26 UTC
From: MikeN <mnewman@clear.net.nz>
Message-ID: <m88ev0ljgqotej3orkfnrtkmot3o59k9po@4ax.com>
Source record: 83066

How could one measure the effectiveness of a ferrite bead used to decouple a feedline from a driven element at 70cms, with simple equipment which could be built by a homebrewer, and what would that simple equipment be.

Thanks MikeN

1428. Re: Antenna modeling

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 05:18:27 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1106716707.547424.237100@z14g2000cwz.googlegroups.com>
Source record: 83067

lIif you look at lamina flow on any corner there is a change because
the cross sectional area changes rapidly.. My particular programm
suggests that the point of resonance changes because of this and thus
inserts a 'corrective' action.. What this action is I do not know..
In the past I have always cut corners with a conductive member so as
to cut the intersecting angle by half., but this does not appear to
be followed in demonstration articles.
After musing over this question for some time. and without further
knoweledge, I would discount any modeling results of a fractal type
antenna which is a worst case scenario.
of kinks and bends.and corresponding cross section changes.
Regards
Art

1429. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 05:32:05 UTC
From: nm5k@wt.net
Message-ID: <1106717525.443813.60060@c13g2000cwb.googlegroups.com>
Source record: 83068

I was wanting to use the marine battery I have but someone else posted
a negative experience with the fumes ruining part of their house and
their own health. It scared me a little.....

I've been using batteries in the house for 15 years or longer. Never a
problem,
and I've never noticed the fumes. You only get heavy fumes when really
heavily
charging, or when overheating, from overcharging. I use a 12/2 amp
automatic
charger to keep the battery up. It's on 24/7. The only real drawback to

batteries is the corrosion that builds up. It's no big deal really, but
it does
have to be cleaned off from time to time, and also the connectors will
need to
be cleaned from time to time. That crud is highly corrosive, and
probably would
eat/stain carpet, etc...So keep the battery on some kind of pad, if not
in a
battery case. I have an inverter for emergency 117v use...Have used it
quite a
few times when the lights go out do to powerline problems, blown
transformers,
etc..I'm still on the air, plus can use a lightbulb, watch TV, etc..MK

P.S. When using batteries, always use the proper safety
precautions...Batteries
can explode. Don't unhook, hook hot radios, chargers, to cause a spark.
Turn
them off first, hook up, and then turn back on. When I hook up my
icoms, I have
to actually unhook the cable from the back of the radio, if I don't
want a spark.
The finals are always hot on the icoms, and will draw current/make a
spark, even
with the radio off. So I'll hook it all up, and plug the cable to the
706 last.
My IC-730 is the same way. Blowing up a battery in the house could be
nasty...
But saying that, I wouldn't let that scare you...I've never had a
problem...You
can always keep it in a battery case, under a table, etc, for extra
protection.
MK

1430. Re: Ferrite bead impedance at UHF

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 05:39:50 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2p8ev05eij0kou0ahqlgplt8k96ts7r95b@4ax.com>
Source record: 83069

On Wed, 26 Jan 2005 17:48:26 +1300, MikeN <mnewman@clear.net.nz>
wrote:
>How could one measure the effectiveness of a ferrite bead used to
>decouple a feedline from a driven element at 70cms, with simple
>equipment which could be built by a homebrewer, and what would that
>simple equipment be.

Hi Mike,

One of the "best of class" questions.

A test that would work at the most fundamental level would measure the conversion of RF to heat.

Let's take one bead whose characteristic Resistance is 25 Ohms, substantially the same as the Z of a quarter wave antenna. Instead of adding this bead surrounding the transmission line of the antenna (its usual, purposeful application) we place it on the radiator at the base. This adds 25 Ohms to the 37 Ohm native Radiation Resistance, and thus the bead "should" absorb roughly half the power (what ever you throw at the antenna typically).

Of course this is all hip-shot math, but the details contain so many variables that this post would become encyclopedic if I attempted to go to that granularity. Suffice it to say that the more important discussion lies in the how and what, not the how much.

How? Measuring the heat of a bead may not be straightforward if you were to attempt this directly with a surface temperature measurement. So better, measure it in a bath of water. The experimental sophistication goes up, but conceptually remains rather simple. You now have to brush up on your understanding of the caloric bomb. Others may head for the exit to buy a "better" solution, but the caloric bomb remains one of the most accurate methods available to even the guys with money to "burn" on figuring this out.

Going further, you may discover that there's just not enough heat to gear up to with your thermometer. Well, now it becomes time with the What. Boost the ante and use a fever thermometer (after first elevating the bath temperature) but now you have to calculate how to build a bath with a small enough time constant but high enough isolation from the otherwise "cooler" environment. If this is getting a bit too much, try boosting the heat generation (wrap the radiator through the bead to raise its loss resistance by the square of turns).

This caloric method will lead to an absolute evaluation of the bead R. Finding the relative evaluation of the bead R will probably provide

more resolution. Comparisons are easier to make too. However, barring having a known sample bead to compare to, you are left to ask yourself "yes this is better, but is better good enough?"

How could you do a relative test? Take the same scenario above (the bead surrounding the radiator of a quarterwave vertical) and take Field Strength readings as you change beads. The best bead is evidenced by the poorest Field Strength. Is best enough? Well....

Is it sensitive enough? Try the same turns ratio boost described above (but it will still not resolve if that particular bead is good enough).

The list could go on, but the two above evidence: Power, Current/Voltage/Resistance. There's not much left which is not a variation on a theme (which returns us to How). I hope you note that this requires only a thermometer or FSM which qualify as simple equipment. Give me a bigger budget, and it will only increase cost to no measurable increase in accuracy. You might have the advantage of seeing the answer on a digital display - but who's to say that it is actually right, much less close?

73's
Richard Clark, KB7QHC

1431. Re: Antenna modeling

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 05:43:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gebev09vqolf8eviu4ndphjnm2bi9niduu@4ax.com>
Source record: 83070

On 25 Jan 2005 21:18:27 -0800, "art" <aunwin@insightbb.com> wrote:

>I would discount any modeling results of a fractal type
>antenna which is a worst case scenario.

Hi Art,

Worst case of what?

73's
Richard Clark, KB7QHC

1432. Re: Antenna modeling

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 06:03:21 UTC
From: "aunwin@insightbb.com"
Message-ID: <GoGJd.29245$IV5.12738@attbi_s54>
Source record: 83071

Richard, what you are angling for you will not get.
Contribute to the subject or learn from the offerings of others.
Regards
Art

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:gebev09vqolf8eviu4ndphjnm2bi9niduu@4ax.com...
> On 25 Jan 2005 21:18:27 -0800, "art" <aunwin@insightbb.com> wrote:
>
>>I would discount any modeling results of a fractal type
>>antenna which is a worst case scenario.
>
> Hi Art,
>
> Worst case of what?
>
> 73's
> Richard Clark, KB7QHC

1433. Re: Antenna modeling

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 06:14:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10vedaqggbolm64@corp.supernews.com>
Source record: 82972

Modeling of wires connected at an angle is a problem only with MININEC-based programs such as AO or ELNEC, not with NEC-2 based programs like EZNEC or most other modern programs.

The problem with wires connecting at an angle is that MININEC "cuts the corner" -- it acts like a wire extends between about the middles of the corner segments, rather than going clear to the corner as they should. The problem gets less and less as the segment length gets shorter and shorter near the junction (since the distance "cut" is less), or as the angle gets more obtuse. There's no magic threshold where the problem suddenly occurs (same reason). Its seriousness depends entirely on how serious a small length error is -- it'll just shift the resonance slightly of a single loop modeled with a moderate number of segments, but it can seriously alter the pattern of a quad because of the sensitivity of the parasitic element(s) to small wire length changes.

ELNEC had a way of correcting for this, called "segment length tapering", where it would automatically convert a wire into a series of wires with increasing segment lengths. That way you could have a very short segment at the corner, but not have to use a large number of very short segments for the whole antenna. That feature is still in EZNEC. It's no longer needed for this purpose because NEC-2 doesn't have the problem, but it's occasionally useful at other times.

You can find out more about this phenomenon in "MININEC: The Other Edge of the Sword", in Feb. 1991 _QST_.

Roy Lewallen, W7EL

art wrote:
> My understanding of antenna modeling is that sharp corners or
> connecting points should be avoided as they can create errors.
> The question I ask is what constitutes a sharp angle ?
> I am assuming that it is the capacitance at the connection is the
> problem. If so
> is the corner of a quad a problem or is a delta feed point on a dipole
> a problem ?
> I see many instances of quads being modeled and also " V" wire antennas
> each without a correcting "gusset" at the corners. So when is an angle
> termed to be sharp?
> Regards
> Art
>

1434. Re: Antenna modeling

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 06:21:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dbdev0d94gl8nl7qhectob71irqar297mm@4ax.com>
Source record: 82973

On Wed, 26 Jan 2005 06:03:21 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>Richard, what you are angling for you will not get.

Hi Art,

>>>I would discount any modeling results of a fractal type
>>>antenna which is a worst case scenario.
>> Worst case of what?
A very simple question to your very un-informed statement. If you
will not explain what you mean, you demonstrate absolutely no care to
>Contribute to the subject or learn from the offerings of others.
especially when you are simply throwing mud at a topic. Your kind of
badmouthing is not:
1 contributing to a subject;
2 learning;
3 nor an offering.

73's
Richard Clark, KB7QHC

1435. 4nec2 freeware now available for Nec-4.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 09:02:47 UTC
From: 4nec2@gmx.net
Message-ID: <ee90361b.0501260102.46a01bde@posting.google.com>
Source record: 82974

Hello...,

Just released the latest new 5.5 version of the 4nec2 freeware antenna modelling package. Now capable of running both a Nec-2 or a Nec-4 engine.

See http://www.si-list.org/swindex2.html

Note however that in order to run Nec-4 you need a license from LLNL.

73's,
Arie.

1436. Re: Why a capacitor for a shunt fed antenna (Mobile)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 09:48:18 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <35p7h5F4rf6spU1@individual.net>
Source record: 82975

.....[Pantomime mode ON].....

Oh, no! I didn't!

.....[Pantomime mode OFF].....

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:ct6drs$qs7$1@sparta.btinternet.com...
> > Why would I wish to "squirm my way" out of an
> > obvious agreement?
> Dunno why. But you just did it!

1437. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 13:32:13 UTC
From: stryped@hotmail.com
Message-ID: <1106746333.760224.80090@f14g2000cwb.googlegroups.com>
Source record: 82976

Richard Clark wrote:
> On 25 Jan 2005 11:12:20 -0800, stryped@hotmail.com wrote:
>
> >So you are saying it wont matter?
> >
> >I was wanting to use the marine battery I have but someone else
posted
> >a negative experience with the fumes ruining part of their house and
> >their own health. It scared me a little.
>
> Hi Don,
>
> Well it seems in the interim, you got good advice as to battery use
in
> the shack, and shabby advice about writing. ;-)
>
> For the record, my batteries are actually sealed lead-acid Hawker
> Energy (Gates) Cyclon BC Cell (25 AH) and not cheap - but then they
> are rock solid. I went this direction knowing full well most
> batteries die because of one cell failure - this way I can replace
the
> dead cell. My buddy used a deep discharge battery that was over
> floated (probably 15V) and he rarely minded the water level (too bad
> too) as he boiled it down. There was some obvious corrosion near the
> battery (sitting open to the environment, and he's a heavy smoker)
but
> nothing widespread (his battery sat in a plastic tray on a wooden
> shelf).
>
> During normal use at field day, my batteries lasted many hours. When
> the rig began to sputter, I swapped one out to charge from the car.
I
> also monitored the voltage, and rarely ran below 11.5 Volts. Even
> with a "quick" charge, I would always current limit it to about 5A.
>
> 73's
> Richard Clark, KB7QHC

Is it bad to leave a charger hooked up to the battery permanently. Mine
is a 12/2 with automatic operation.

1438. Yagi plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 14:01:30 UTC
From: stryped@hotmail.com
Message-ID: <1106748090.491938.30750@c13g2000cwb.googlegroups.com>
Source record: 82977

Does anyone know where I could get plans for a 440 yagi that uses a conductive boom and is designed for 50 ohms?

I have seen plans but all of them use an insulated boom or insulated elements.

If i use a conductive boom and ground it, is there no need for a coaxial lightening arrestor?

1439. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 14:10:17 UTC
From: Lou <lf08357@Yahoo.Com>
Message-ID: <nzNJd.38934$NC6.10674@newsread1.mlpsca01.us.to.verio.net>
Source record: 82978

<stryped@hotmail.com> wrote in message
news:1106746333.760224.80090@f14g2000cwb.googlegroups.com...
>
> Richard Clark wrote:
>> On 25 Jan 2005 11:12:20 -0800, stryped@hotmail.com wrote:
>>
>> >So you are saying it wont matter?
>> >
>> >I was wanting to use the marine battery I have but someone else
> posted
>> >a negative experience with the fumes ruining part of their house and
>> >their own health. It scared me a little.
>>
>> Hi Don,
>>
>> Well it seems in the interim, you got good advice as to battery use
> in
>> the shack, and shabby advice about writing. ;-)
>>
>> For the record, my batteries are actually sealed lead-acid Hawker
>> Energy (Gates) Cyclon BC Cell (25 AH) and not cheap - but then they
>> are rock solid. I went this direction knowing full well most
>> batteries die because of one cell failure - this way I can replace
> the
>> dead cell. My buddy used a deep discharge battery that was over
>> floated (probably 15V) and he rarely minded the water level (too bad
>> too) as he boiled it down. There was some obvious corrosion near the
>> battery (sitting open to the environment, and he's a heavy smoker)
> but
>> nothing widespread (his battery sat in a plastic tray on a wooden
>> shelf).
>>
>> During normal use at field day, my batteries lasted many hours. When
>> the rig began to sputter, I swapped one out to charge from the car.
> I
>> also monitored the voltage, and rarely ran below 11.5 Volts. Even
>> with a "quick" charge, I would always current limit it to about 5A.
>>
>> 73's
>> Richard Clark, KB7QHC
>
>
> Is it bad to leave a charger hooked up to the battery permanently. Mine
> is a 12/2 with automatic operation.

>

I don't know what other's opinions will be regarding this, BUT - mine is NO. I know a guy who fried a H.F. radio twice by doing that. Maybe he didn't have it connected altogether properly, but the charger fried his radio twice and it cost him a few bucks to get it fixed both times. The first time, he didn't say what caused the failure. The second time, he figured out it had to be the charger. Since he quit using the charger at the same time - once the set was repaired - again, the set has worked fine. And yes, he still uses the battery and a charger. He just disconnects the charger before using - now.

L.

1440. Re: Antenna modeling

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 14:14:23 UTC
From: "aunwin@insightbb.com"
Message-ID: <3BNJd.21951$yY6.18468@attbi_s02>
Source record: 82979

Thanks Roy,
You covered every aspect
Art
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10vedaqggbolm64@corp.supernews.com...
> Modeling of wires connected at an angle is a problem only with
> MININEC-based programs such as AO or ELNEC, not with NEC-2 based programs
> like EZNEC or most other modern programs.
>
> The problem with wires connecting at an angle is that MININEC "cuts the
> corner" -- it acts like a wire extends between about the middles of the
> corner segments, rather than going clear to the corner as they should. The
> problem gets less and less as the segment length gets shorter and shorter
> near the junction (since the distance "cut" is less), or as the angle gets
> more obtuse. There's no magic threshold where the problem suddenly occurs
> (same reason). Its seriousness depends entirely on how serious a small
> length error is -- it'll just shift the resonance slightly of a single
> loop modeled with a moderate number of segments, but it can seriously
> alter the pattern of a quad because of the sensitivity of the parasitic
> element(s) to small wire length changes.
>
> ELNEC had a way of correcting for this, called "segment length tapering",
> where it would automatically convert a wire into a series of wires with
> increasing segment lengths. That way you could have a very short segment
> at the corner, but not have to use a large number of very short segments
> for the whole antenna. That feature is still in EZNEC. It's no longer
> needed for this purpose because NEC-2 doesn't have the problem, but it's
> occasionally useful at other times.
>
> You can find out more about this phenomenon in "MININEC: The Other Edge of
> the Sword", in Feb. 1991 _QST_.
>
> Roy Lewallen, W7EL
>
> art wrote:
>> My understanding of antenna modeling is that sharp corners or
>> connecting points should be avoided as they can create errors.
>> The question I ask is what constitutes a sharp angle ?
>> I am assuming that it is the capacitance at the connection is the
>> problem. If so
>> is the corner of a quad a problem or is a delta feed point on a dipole
>> a problem ?
>> I see many instances of quads being modeled and also " V" wire antennas
>> each without a correcting "gusset" at the corners. So when is an angle

>> termed to be sharp?
>> Regards
>> Art
>>

1441. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 14:18:59 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41f7a852$1_2@127.0.0.1>
Source record: 82980

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
news:_rqdnSt-StlMK2vcRVn-qw@comcast.com...
> I was wanting to use the marine battery I have but someone else posted
> a negative experience with the fumes ruining part of their house and
> their own health. It scared me a little.

I have a marine battery charged by an Astron RS-20M and a 75w solar panel.
I monitor the battery voltage and shut off the charging system when the
battery
is charged. That decreases the possibility of battery failure.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1442. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 14:35:44 UTC
From: Dave VanHorn <dvanhorn@dvanhorn.org>
Message-ID: <yqydnWE7ceAyN2rcRVn-hg@comcast.com>
Source record: 82981

> For the record, my batteries are actually sealed lead-acid Hawker
> Energy (Gates) Cyclon BC Cell (25 AH) and not cheap - but then they
> are rock solid.

Same ones I use! :)
Floated across a switchmode 15A charger set to 13.8V.
Been in service for 6 or 7 years with no trouble.

I added an "aw shit" fuse at 60A between the middle terminals at the 6V
point, and it has a couple of hefty outputs ending in powerpoles.

1443. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 14:38:39 UTC
From: Dave VanHorn <dvanhorn@dvanhorn.org>
Message-ID: <ZqydnWmz6rbANmrcRVn-ow@comcast.com>
Source record: 82982

> Is it bad to leave a charger hooked up to the battery permanently. Mine
> is a 12/2 with automatic operation.

Only if the charger isn't set properly.

What we're doing is called "float" service, where the charger voltage is set lower than it would be for normal "recharge a dead battery" sorts of applications. You have to check your particular battery's spec, but most sit around 13.8-ish instead of the normal charger output of about 14.4.

1444. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 14:44:51 UTC
From: Dave VanHorn <dvanhorn@dvanhorn.org>
Message-ID: <maWdnRWLBpxOMWrcRVn-hg@comcast.com>
Source record: 82983

> I don't know what other's opinions will be regarding this, BUT - mine is
> NO. I know a guy who fried a H.F. radio twice by doing that. Maybe he
> didn't have it connected altogether properly, but the charger fried his
> radio twice and it cost him a few bucks to get it fixed both times. The
> first time, he didn't say what caused the failure. The second time, he
> figured out it had to be the charger. Since he quit using the charger at
> the same time - once the set was repaired - again, the set has worked
> fine. And yes, he still uses the battery and a charger. He just
> disconnects the charger before using - now.

Well, there's all sorts of junk out there called "chargers", and most are not designed to be on the battery continuously, and some don't have any output voltage regulation at all. Wouldn't surprise me at all, if he connected the radio to the "charger" without a battery in place, and got 18-25V or so applied to the radio.

For this sort of service, you want a unit with regulated output voltage, and a trim adjustment.
I use switchmode because it's way more efficient, and therefore runs with no observable heat.
There is no noise or hum into the radio, even when it's putting full output into the battery.

My Samlex charger works nicely, and will deliver 13.8V to an open circuit, or a 1 ohm load.

1445. Odd observation - nonresonant beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 15:22:55 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <ldOJd.33178$9Q3.28125@fe09.lga>
Source record: 82984

I have a new SteppIR antenna to play with and I noticed an odd response. If I set the beam for 17 or 15 meters but listen on 20 meters I seem to have a better S/N ratio on signals. If I then switch the beam to 20 meters (while continuing to listen on 20) the background noise and the signals go up but the noise goes up more than the signals.

Expressed another way, is a non-resonant antenna sometimes better for reception than a resonant antenna?

This may be a well-known effect, but it is new to me.

Bill
W2WO

1446. Re: Yagi plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 15:43:07 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <fUOJd.15123$wZ2.8421@newssvr13.news.prodigy.com>
Source record: 82985

stryped@hotmail.com wrote:

>
> If i use a conductive boom and ground it, is there no need for a
> coaxial lightening arrestor?
>
I wouldnt plan on avoiding lightning protection, just by useing a conductive boom, nor for that matter, even loop (electrically short circuit to DC) feed for ANY antenna! When lightning strikes, it is going where ever it wants to, in spite of the best grounding intentions Remember, that if lightning can travel a mile, in open air, it will go where it wants when it hits an antenna! tho the bulk of the energy will disperse to ground, there is always SOME thjat will go down the coax , even in a close strike! And whan that happens, dammage will occur, especially without protection. I remember working on a base station during a storm, haveing removed an antenna- the coax was some 1 inch from the edge of the base station, and produced a spark (Ill let you figure the voltage at that point) , and that wasnt even a direct hit-- the strike occured some 3-4 miles away! Look at it like an insurance policy- 50 to 100 bux is cheap when talking about replaceing a FT-847 (or other expensive rig). "Course the best protection would be disconnect the radio, and ground the coax. But then there is still no garentee. Jim NN7K

1447. Re: Yagi plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 15:52:34 UTC
From: stryped@hotmail.com
Message-ID: <1106754754.890244.4490@f14g2000cwb.googlegroups.com>
Source record: 82986

Jim - NN7K wrote:
> stryped@hotmail.com wrote:
>
> >
> > If i use a conductive boom and ground it, is there no need for a
> > coaxial lightening arrestor?
> >
> I wouldnt plan on avoiding lightning protection, just by useing a
> conductive boom, nor for that matter, even loop (electrically short
> circuit to DC) feed for ANY antenna! When lightning strikes, it is
> going where ever it wants to, in spite of the best grounding
intentions
> Remember, that if lightning can travel a mile, in open air, it will
> go where it wants when it hits an antenna! tho the bulk of the
energy
> will disperse to ground, there is always SOME thjat will go down the
> coax , even in a close strike! And whan that happens, dammage will
> occur, especially without protection. I remember working on a base
> station during a storm, haveing removed an antenna- the coax was some
> 1 inch from the edge of the base station, and produced a spark (Ill
> let you figure the voltage at that point) , and that wasnt even a
> direct hit-- the strike occured some 3-4 miles away! Look at it like
> an insurance policy- 50 to 100 bux is cheap when talking about
> replaceing a FT-847 (or other expensive rig). "Course the best
> protection would be disconnect the radio, and ground the coax. But
> then there is still no garentee. Jim NN7K

Is it possible to make a coaxial surge supressor? Are there still plans
that use a metal boom? What about static electricity?

1448. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 16:14:37 UTC
From: Lou <lf08357@Yahoo.Com>
Message-ID: <YnPJd.39121$NC6.13719@newsread1.mlpsca01.us.to.verio.net>
Source record: 82987

"Dave VanHorn" <dvanhorn@dvanhorn.org> wrote in message
news:maWdnRWLBpxOMWrcRVn-hg@comcast.com...
>> I don't know what other's opinions will be regarding this, BUT - mine is
>> NO. I know a guy who fried a H.F. radio twice by doing that. Maybe he
>> didn't have it connected altogether properly, but the charger fried his
>> radio twice and it cost him a few bucks to get it fixed both times. The
>> first time, he didn't say what caused the failure. The second time, he
>> figured out it had to be the charger. Since he quit using the charger at
>> the same time - once the set was repaired - again, the set has worked
>> fine. And yes, he still uses the battery and a charger. He just
>> disconnects the charger before using - now.
>
> Well, there's all sorts of junk out there called "chargers", and most are
> not designed to be on the battery continuously, and some don't have any
> output voltage regulation at all. Wouldn't surprise me at all, if he
> connected the radio to the "charger" without a battery in place, and got
> 18-25V or so applied to the radio.
>
> For this sort of service, you want a unit with regulated output voltage,
> and a trim adjustment.
> I use switchmode because it's way more efficient, and therefore runs with
> no observable heat.
> There is no noise or hum into the radio, even when it's putting full
> output into the battery.
>
> My Samlex charger works nicely, and will deliver 13.8V to an open circuit,
> or a 1 ohm load.
>
>

I didn't see the actual charger the guy used, but when the rig fried the 2nd time and he fessed up with his hook up, then I questioned the voltage. He didn't fess up the first time as he felt it was hooked up ok and there was nothing to have caused it aside from a "radio" failure. In his mind, it was a "12 volt charger" - it should have worked - must have been the radio." And all he said was - it was hooked up to a battery. Saying nothing of the charger since he felt it wasn't at fault. His charger was putting out close to 18 VDC - when I asked him to check it - via phone. So, I told him, there is your culprit. As to how well it was "supposed" to be regulated, I don't know - but, he learned a lesson that time - an expensive lesson. "I" realize - all power supplies and chargers aren't created equal - he didn't - he was just getting into Ham when that happened. He seen a diagram I guess, but it said nothing of voltages or other hazards to avoid. So, he followed it and whalah - snap, crackle, pop. At the moment, it did seem it could have

been a "radio" failure meaning a part "could" have went bad from age/use - possible former abuse - the set was used when he bought it. AND according to him, it didn't blow right away, which sort of masked the fault - aside from the concealing the charger. When it went south the 2nd time almost immediately, then there "had" to be a reason to have caused it. Once the culprit was found, the radio repaired - again, he's had good use of it since.

L.

1449. Re: Odd observation - nonresonant beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 16:53:05 UTC
From: Floyd Sense <fsense@copper.net>
Message-ID: <41f7cb40$1_1@newsfeed.slurp.net>
Source record: 82988

Bill - I have a fairly new 3 element SteppIR and that is not the case with mine. I wonder if you've done a Calibrate in Setup mode to see if that makes a difference?

K8AC

"Bill Ogden" <wogden@attglobal.net> wrote in message news:ldOJd.33178$9Q3.28125@fe09.lga...
>I have a new SteppIR antenna to play with and I noticed an odd response.
>If
> I set the beam for 17 or 15 meters but listen on 20 meters I seem to have
> a
> better S/N ratio on signals. If I then switch the beam to 20 meters
> (while
> continuing to listen on 20) the background noise and the signals go up but
> the noise goes up more than the signals.
>
> Expressed another way, is a non-resonant antenna sometimes better for
> reception than a resonant antenna?
>
> This may be a well-known effect, but it is new to me.
>
> Bill
> W2WO
>
>

1450. Re: Lightening strike question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 16:57:47 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41f7cc19.1122764500@news.galilei.com>
Source record: 82989

Every Coax that enters my house has the shield grounded to a copper plate which is in turn grounded to an 8 foot ground rod and the coax also connects to a gas bottle which is also grounded to the 8 foot ground rod.

TTUL
Gary

1451. HAVE YOU HEARD THE GOOD NEWS!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 17:36:11 UTC
From: google_groups_web@yahoo.com
Message-ID: <1106760971.556808.286190@c13g2000cwb.googlegroups.com>
Source record: 82990

Good News!

Do you know how simple it is to go to Heaven after this life has ended?

Some people believe that belonging to a local church, temple, mosque or synagogue will get them to Heaven.

Others believe that water baptism, obeying the ten commandments or just being a good person will get them to Heaven.

There are many other beliefs as well, but the good news about God's way to Heaven is found in the Holy Bible.

The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our sins(misdeeds). He was born in the land of Israel supernaturally to a virgin Jewish woman named Mary. He lived a sinless life for thirty-three years and then sacrificed His sinless blood and died on a cross to pay the death penalty for our sins. After Jesus was placed in a tomb He rose from the dead three days later as He said He would. The Holy Bible also tells us that Jesus Christ ascended into Heaven and that all who accept Him as their Lord and Saviour will live forever with Him in Heaven where there is no more death, sorrow, sickness and pain.

The Bible says, "For the wages of sin is death, but the gift of God is eternal life through Christ Jesus our Lord." (Romans 6:23)

This verse in the Bible says, "For ALL HAVE SINNED, and come short of the glory of God." (Romans 3:23)

This verse says, "But God demonstrates his own love for us in this: While we were still sinners, Christ died for us." (Romans 5:8)

In this passage the Bible clearly explains how simple it is to be saved and on your way to Heaven, "For if you confess with your mouth, "Jesus is Lord," and believe in your heart that God raised him from the dead, you WILL BE SAVED." (Romans 10:9)

You can be saved right now and on your way to Heaven if you will open your heart to Jesus and pray the following prayer:

Dear Jesus Christ, I want to be saved so that I can have a home in Heaven when I die. I agree with You that I am a sinner.
I believe You love me and want to save me. I believe that You bled and died on the cross to pay the penalty for my sins. I believe that You rose from the dead. Please forgive my sins and come into my heart and be my Lord and Saviour. Thank You Lord Jesus Christ for forgiving me and saving me through Your merciful grace. Amen.

You are now a Christian if you said the prayer and allowed God to save you. Welcome to the family of God.

Salvation is not a reward but a gift. The Bible says it this way, "For it is by GRACE you have been SAVED, through FAITH and this not from yourselves, it is the GIFT of God." (Ephesians 2:8)

Nothing in the world is more important than your eternal destiny.

The Bible says, "In Him(Jesus) we have redemption through His blood, the forgiveness of sins..." (Ephesians 1:7)

If you have not yet made a decision to be saved, please do so now before it is too late. The reason why it is so important to be saved now is because you do not know exactly when you will die. You may die prematurely in a traffic accident, terrorist attack or some other way before you get another chance to be saved.

The Bible tells us that we will spend eternity in Heaven or a place of eternal torment called Hell. It would be terrible to die and go to Hell when all you have to do is accept Jesus Christ as your personal Lord and Saviour.

Some people that have already made Jesus Christ their Lord and Saviour worry about losing their salvation. The Bible teaches Christians that we can never lose our salvation no matter what happens.

The Bible says it this way, "My dear children, I write this to you so that you will not sin. But if anybody does sin, we have one who speaks to the Father in our defense Jesus Christ, the Righteous One."

Yes my friend, Jesus Christ is able to save you and keep you saved.

Please tell your family and friends, thanks!

Have a great day!
Internet Evangelist R.L. Grossi

1. http://www.biblegateway.com << Free Online Bible
2. http://www.free-hoster.com/goodnews << Passion of the Christ
3. http://www.carm.org/cults/cultlist.htm << Beware Of Cults
4. http://www.equip.org/free/DH198.htm << About Hell
5. http://www.powertochange.com/questions/qna2.html << Is Jesus God?

1452. Re: HAVE YOU HEARD THE GOOD NEWS!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 18:01:15 UTC
From: Mike Lee <swift240@yahoo.co.uk>
Message-ID: <LVQJd.33261$2b6.20542@fe3.news.blueyonder.co.uk>
Source record: 82991

google_groups_web@yahoo.com wrote:
> Good News!
>
>
> Do you know how simple it is to go to Heaven after this life has ended?
>
>
> Some people believe that belonging to a local church, temple, mosque or
> synagogue will get them to Heaven.
>
>
> Others believe that water baptism, obeying the ten commandments or just
> being a good person will get them to Heaven.
>
>
> There are many other beliefs as well, but the good news about God's way
> to Heaven is found in the Holy Bible.
>
>
> The good news is that God came from Heaven to earth in the person of
> Jesus Christ over 2000 years ago and died for our sins(misdeeds). He
> was born in the land of Israel supernaturally to a virgin Jewish woman
> named Mary. He lived a sinless life for thirty-three years and then
> sacrificed His sinless blood and died on a cross to pay the death
> penalty for our sins. After Jesus was placed in a tomb He rose from the
> dead three days later as He said He would. The Holy Bible also tells us
> that Jesus Christ ascended into Heaven and that all who accept Him as
> their Lord and Saviour will live forever with Him in Heaven where there
> is no more death, sorrow, sickness and pain.
>
>
> The Bible says, "For the wages of sin is death, but the gift of God is
> eternal life through Christ Jesus our Lord." (Romans 6:23)
>
>
> This verse in the Bible says, "For ALL HAVE SINNED, and come short of
> the glory of God." (Romans 3:23)
>
>
> This verse says, "But God demonstrates his own love for us in this:
> While we were still sinners, Christ died for us." (Romans 5:8)
>
>
> In this passage the Bible clearly explains how simple it is to be saved

> and on your way to Heaven, "For if you confess with your mouth, "Jesus
> is Lord," and believe in your heart that God raised him from the dead,
> you WILL BE SAVED." (Romans 10:9)
>
>
> You can be saved right now and on your way to Heaven if you will open
> your heart to Jesus and pray the following prayer:
>
> Dear Jesus Christ, I want to be saved so that I can have a home in
> Heaven when I die. I agree with You that I am a sinner.
> I believe You love me and want to save me. I believe that You bled and
> died on the cross to pay the penalty for my sins. I believe that You
> rose from the dead. Please forgive my sins and come into my heart and
> be my Lord and Saviour. Thank You Lord Jesus Christ for forgiving me
> and saving me through Your merciful grace. Amen.
>
>
> You are now a Christian if you said the prayer and allowed God to save
> you. Welcome to the family of God.
>
>
> Salvation is not a reward but a gift. The Bible says it this way, "For
> it is by GRACE you have been SAVED, through FAITH and this not from
> yourselves, it is the GIFT of God." (Ephesians 2:8)
>
>
> Nothing in the world is more important than your eternal destiny.
>
>
> The Bible says, "In Him(Jesus) we have redemption through His blood,
> the forgiveness of sins..." (Ephesians 1:7)
>
>
> If you have not yet made a decision to be saved, please do so now
> before it is too late. The reason why it is so important to be saved
> now is because you do not know exactly when you will die. You may die
> prematurely in a traffic accident, terrorist attack or some other way
> before you get another chance to be saved.
>
>
> The Bible tells us that we will spend eternity in Heaven or a place of
> eternal torment called Hell. It would be terrible to die and go to Hell
> when all you have to do is accept Jesus Christ as your personal Lord
> and Saviour.
>
>
> Some people that have already made Jesus Christ their Lord and Saviour
> worry about losing their salvation. The Bible teaches Christians that
> we can never lose our salvation no matter what happens.
>

>
> The Bible says it this way, "My dear children, I write this to you so
> that you will not sin. But if anybody does sin, we have one who speaks
> to the Father in our defense Jesus Christ, the Righteous One."
>
>
> Yes my friend, Jesus Christ is able to save you and keep you saved.
>
>
> Please tell your family and friends, thanks!
>
>
> Have a great day!
> Internet Evangelist R.L. Grossi
>
>
>
>
>
> 1. http://www.biblegateway.com << Free Online Bible
> 2. http://www.free-hoster.com/goodnews << Passion of the Christ
> 3. http://www.carm.org/cults/cultlist.htm << Beware Of Cults
> 4. http://www.equip.org/free/DH198.htm << About Hell
> 5. http://www.powertochange.com/questions/qna2.html << Is Jesus God?
>
You are another for the kill file......

--
http://uk.geocities.com/swift240/mikes_page_1.html

1453. Re: HAVE YOU HEARD THE GOOD NEWS!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 18:24:12 UTC
From: Doug Adair <N8WWM@arrl.net>
Message-ID: <70ofv0pmasv4q3g5k6nfral8occ8ab70nk@4ax.com>
Source record: 82992

On Wed, 26 Jan 2005 18:01:15 GMT, Mike Lee
<swift240@yahoo.co.uk> wrote:

MAJOR SNIP
>>
>You are another for the kill file......
>
Why the fuck did you quote the whole god damn
thing motherfucker?

Usenet Zone Free Binaries Usenet Server
More than 120,000 groups
Unlimited download
http://www.usenetzone.com to open account

1454. Re: Yagi plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 18:27:59 UTC
From: richardharrison@webtv.net
Message-ID: <2370-41F7E12F-66@storefull-3251.bay.webtv.net>
Source record: 82993

Stryped wrote:
"If I use a conductive boom and ground it, is there no need for a coaxial lightning arrester?"

That is my experience, provided that the driven element is a short-circuit for lower frequencies, such as a folded dipole or a short-circuit 1/4-wave stub.

My company had countless examples in high places over the world with no damage to radios, including many solid-state models, operating 24-7.

W6SAI, Bill Orr gives plenty of examples of "plumber`s delight" Yagi-Uda antennas in the eighteenth edition of "Radio Handbook" (1970). He also warns on page 548: "Short large-diameter elements have low Q and are not practical in parasitic arrays. Orr also says: "The Yagi antenna, however, remains "the antenna to beat" for the 50-,144-, and 220-MHz amateur bands."

Best regards, Richard Harrison, KB5WZI

1455. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 18:39:20 UTC
From: Dave VanHorn <dvanhorn@dvanhorn.org>
Message-ID: <g4qdncfEjrNPfmrcRVn-vg@comcast.com>
Source record: 82994

> His charger was putting out close
> to 18 VDC - when I asked him to check it - via phone. So, I told him,
> there is your culprit.

That's what I suspected, unregulated output, without the battery in the loop
to absorb the energy.

This comes from using a "charger" as a regulated power supply.
Note that a regulated power supply makes a much better charger, than even a
"charger".

1456. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 18:40:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nenfv091ad85g6m8jbp2611shn15ruub6j@4ax.com>
Source record: 82995

On 26 Jan 2005 05:32:13 -0800, stryped@hotmail.com wrote:

>Is it bad to leave a charger hooked up to the battery permanently. Mine
>is a 12/2 with automatic operation.

Hi Don,

Well then, I must presume it is the inferior product to blame (or perhaps inferior advice). Take note that Dave has an identical installation and we both suffer no problems whatever and this is for YEARS of sustained service.

Hawker guarantees my cells for 15 Years of life and fully recommends a continuous float charge. There are probably 100 Million batteries in hospital corridors, schools, churches, theaters, public service buildings all sitting there on a float charge waiting to turn on the emergency lighting. In fact my current limiting of the quick charge is overly conservative as Hawker explicitly offers there is no restriction to inrush current from professional grade chargers.

Lou's report of his buddy's charger running at 18 V is nothing short of a death wish with a meter indicator. If you read the precautions printed on that charger's box, it also says it is dangerous to charge an automotive battery with it while the battery is still connected to the automotive electronics.

If you choose to employ cycle charging (where you disconnect the charger and run the battery down), then you need to run at a higher charge voltage which is typical of most chargers off the shelf for automotive work where you are doing a battery overnight. The higher voltage is NOT GOOD for floating - unless you have deep pockets for battery replacement. In the case of automotive batteries, their ONLY use is to start the engine. After that, they are little more than a chemical capacitor for the alternator's supply to the automotive electrical system. In the old days, better cars had a dash mounted Ammeter. The plus indication showed a slight positive indication for the alternator load (charge and ignition in the days before megawatt stereo systems); or a negative indication when you were running on battery alone (and your -well in this case, and age- generator was shot).

73's
Richard Clark, KB7QHC

1457. Re: Odd observation - nonresonant beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 18:58:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <79pfv0l9b1udeg3nsfk53vuletijqurblf@4ax.com>
Source record: 82996

On Wed, 26 Jan 2005 10:22:55 -0500, "Bill Ogden"
<wogden@attglobal.net> wrote:
> If I then switch the beam to 20 meters (while
>continuing to listen on 20) the background noise and the signals go up but
>the noise goes up more than the signals.

Hi Bill,

It seems highly unlikely there would be any alteration of S+N/N by a passive device. More likely is trusting your senses to make this kind of measurement (which is a poor standard).

Perhaps you can testify this was observed by S Meter readings. Well, even then, this is another failure in trust unless you have calibrated your S Meter against a known standard. Problem is that most S Meters are not linear against their own scale.

This is all a function of the actual ratio being distorted as the overall levels climb through the meter readings. Let's consider if you started with S3-S5 (noise-signal+noise, a presumable 6dB separation) and pushed that up through tuning to achieve S7-S8(a presumable 3dB separation) then you need to confirm your meter. Is the S3-S5 separation in fact twice the S7-S8 separation? Feel free to substitute your own readings (if in fact you based your observations on this method). The further apart the readings, the more likely you are to suffer the distortion of meter scaling inaccuracy.

73's
Richard Clark, KB7QHC

1458. Re: Yagi plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 19:31:25 UTC
From: stryped@hotmail.com
Message-ID: <1106767885.042281.149310@c13g2000cwb.googlegroups.com>
Source record: 82997

Richard Harrison wrote:
> Stryped wrote:
> "If I use a conductive boom and ground it, is there no need for a
> coaxial lightning arrester?"
>
> That is my experience, provided that the driven element is a
> short-circuit for lower frequencies, such as a folded dipole or a
> short-circuit 1/4-wave stub.
>
> My company had countless examples in high places over the world with
no
> damage to radios, including many solid-state models, operating 24-7.
>
> W6SAI, Bill Orr gives plenty of examples of "plumber`s delight"
Yagi-Uda
> antennas in the eighteenth edition of "Radio Handbook" (1970). He
also
> warns on page 548: "Short large-diameter elements have low Q and are
not
> practical in parasitic arrays. Orr also says: "The Yagi antenna,
> however, remains "the antenna to beat" for the 50-,144-, and 220-MHz
> amateur bands."
>
> Best regards, Richard Harrison, KB5WZI

What do you mean it is "short circuited for low frequencies?"

I am trying to decide whther to go with two antennas or one.

I would like to build at least one of them, but can not find plans for
one with a conductive boom.

1459. Re: Yagi plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 19:33:45 UTC
From: richardharrison@webtv.net
Message-ID: <29250-41F7F099-110@storefull-3253.bay.webtv.net>
Source record: 82998

Jim, NN7K wrote:
"When lightning strikes, it is going where ever it wants to, in spite of the best grounding intentions."

Yes, the trick is to send it to where you would rather it goes. You do this with your grounding techniques.

The coax itself is important protection against lightning. Opposition within the coax to lightning is severe. Lightning is a common-mode phenomenon. Lightning takes the easy path on the outside of the coax. All coax has a flashover potential which depends on its spacing and the dielectric of the coax. Once it flashes (not far within the coax) the voltage is clamped to the sustaining potential of the arc. This is a steady low potential with a very high conductance in the arc.

Lightning on the outside of the coax must be properly diverted to ground to avoid damage.
A few twists and turns in the coax increase its opposition to the lightning (a transient) on the outside of the coax. Such a coil is advisable between the antenna support and your operating position. Let the antenna tower carry the lightning to the earth.

Best regards, Richard Harrison, KB5WZI

1460. Re: Odd observation - nonresonant beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 19:54:11 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncvftb3.21r.bit-bucket@shell.config.com>
Source record: 82999

On Wed, 26 Jan 2005 10:22:55 -0500, Bill Ogden wrote:
> I have a new SteppIR antenna to play with and I noticed an odd response. If
> I set the beam for 17 or 15 meters but listen on 20 meters I seem to have a
> better S/N ratio on signals. If I then switch the beam to 20 meters (while
> continuing to listen on 20) the background noise and the signals go up but
> the noise goes up more than the signals.
>
> Expressed another way, is a non-resonant antenna sometimes better for
> reception than a resonant antenna?
>
> This may be a well-known effect, but it is new to me.

Not expressly addressing your circumstances: But, I sometimes will
switch to a different antenna on receive to get a better S/N ratio --
even if the sigs drop in level.

E.g., When on 15M, I might switch to the 80/40M dipoles for RCV.
Or, when on 80M, I might switch to the tri-bander for RCV.

(Then, like a klutz, I'll forget to switch back on XMIT. :-)

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

1461. Re: Yagi plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 20:22:11 UTC
From: richardharrison@webtv.net
Message-ID: <23466-41F7FBF3-104@storefull-3254.bay.webtv.net>
Source record: 83000

Stryped wrote:
"What do you mean it is a "short-circuit for low frequencies?"

A folded dipole, you might agree, is essentially a short-circuit for d-c, also for 50-60- Hz a-c. At some high frequency, the folded dipole is no longer a short-circuit, but offers considerable opposition to current at its input terminals.. Its impedance is very high at its first resonance where its overall length is 1/4-wave, and its impedance is often about 300 ohms near its second resonance where its overall length is about 1/2-wave.

At frequencies much lower than the resonant frequencies of the dipole (most of the energy contained in a lightning stroke) the opposition of the folded dipole is very low, or almost a short-circuit. This puts the voltage at both terminals of the dipole to the same value and makes the lightning applied to the transmission line a common-mode phenomenon.

Best regards, Richard Harrison, KB5WZI

1462. Tuned dipole Q:

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 21:05:39 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <DCTJd.4202$PB.3138@okepread01>
Source record: 83001

My 160/80m trap dipole can be operated without
a tuner from <1.800 to 1.930. I mainly operate in
that range (usually on 1.893) and I have a tuner for
operating above 1.930. Easy.

My question is this - is it better to resonate high and
use a tuner to go lower or do it the way I'm doing now
(resonate low and use a tuner to go higher)?

Or will it even matter enough to notice??? My guess
is (at these freqs) no......

--
73's es gd dx de Ken KGWX
Grid EM17ip, Flying Pigs #1055,
List Owner, Yahoo! E-groups:
VX-2R & FT-857

1463. Re: Tuned dipole Q:

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 21:27:31 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41f808d0.5109607@news.crosslink.net>
Source record: 83002

On Wed, 26 Jan 2005 15:05:39 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>My 160/80m trap dipole can be operated without
>a tuner from <1.800 to 1.930. I mainly operate in
>that range (usually on 1.893) and I have a tuner for
>operating above 1.930. Easy.
>
>My question is this - is it better to resonate high and
>use a tuner to go lower or do it the way I'm doing now
>(resonate low and use a tuner to go higher)?
>
>Or will it even matter enough to notice??? My guess
>is (at these freqs) no......

Dear Ken,

Your trap dipole is resonant only in the sense that you see
approximately 50 + j 0 ohms at the input to the feedline. I will
assume that it is not actually of the length of a "resonant dipole"
(about 260 ft.).

Therefore, we are talking about a "resonant" antenna/feedline
"system".

The next issue is the radiation pattern of the antenna. Regardless of
how you use it (i.e., with or without a tuner), it will have a pattern
that is a function of its configuration and operating frequency.
Whether or not a tuner is involved is not a factor.

The only real issue is efficiency. Everything else being equal, the
tuner is going to rob you of some of your power. How much will depend
on many factors - the primary ones being the actual impedance seen by
the tuner and the specific design of the tuner - especially its
inductor.

Therefore, it would appear that you are doing the best thing - namely,
to use the tuner only when you have to.

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1464. Re: Yagi plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 21:39:38 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <u6UJd.6490$8Z1.869@newssvr14.news.prodigy.com>
Source record: 83003

Richard- the point I make-and the company I worked for, until I retired on disability- has Thousands of base stations- and yet still sustains major damage every year-- they have a manual on grounding, and a 2 week program on grounding/insulateing and , in fact have so many grounds that the wonder is they dont have major problems with ground loops! That company is Union Pacific Railroad. If you can find a employee of the communications dept, you might ask to borrow a copy of it. It is interesting to read, just for information's sake. One thing that I DIDN'T point out (as it has no bearing to grounding antennas an a ham (or normal business) environment, is that because of Federal Railroad Administration rules, that in many applications (primararily involveing switching equipment), that any GROUNDING is strictly prohibited! As most signals are now either radio controlled, or soon will be (the old open wire "Code Line" is being rapidly retired), this brings new meaning to ISOLATION for the radios/antenna , via the RS-232 bus to the Coder logic-- a forest, if you will, of Opto-Couplers at each site. This also applies to "Talking hot box,dragging equiptment, weight in motion, and Automatic Car Identification eqpt! Even where phone cables cross under/over the tracks brings new meaning to arcing in a lightning storm. Had one here in the yard, that was a dead cable (cut off at both ends) when lightning struck (not even anywhere near the cable/tracks) you could see arcing between the pairs (talk about induction!) The length of that cable was about 500 feet! The protectors that U.P. recommends (and buys by the hundreds is poly-phasor , tho for my own use like the Alpha Deltas. The Alpha-Deltas use standard gas protectors as are in telephone circuits, and break down at 200, and 300 volt levels- while the polyphasor measure a wide open at the center conductors of your 2 pieces of coax The difference is the Alpha Delta is a relatively broad band device, while there are several different models (depending on freq. for the Poly-phasors. The point that I was trying to make (perhaps poorly), is :1) WHEN you sustain a DIRECT HIT, something is going to happen - and that wont be good news, except to the parts jobbers/manufacturers and 2) Even a nearby strike can leave great damage if no preventive measurs have been taking to isolate the antenna from the radio. If you open the preamp of a 150 MHz motrac, you see a neon lamp-- that was for protection of a nearby strike, but for a direct hit-- doesnt do a lot of good! as info, Jim NN7K

Richard Harrison wrote:

> Yes, the trick is to send it to where you would rather it goes. You do
> this with your grounding techniques.
>
> The coax itself is important protection against lightning. Opposition
> within the coax to lightning is severe. Lightning is a common-mode

> phenomenon. Lightning takes the easy path on the outside of the coax.
> All coax has a flashover potential which depends on its spacing and the
> dielectric of the coax. Once it flashes (not far within the coax) the
> voltage is clamped to the sustaining potential of the arc. This is a
> steady low potential with a very high conductance in the arc.
>
> Lightning on the outside of the coax must be properly diverted to ground
> to avoid damage.
> A few twists and turns in the coax increase its opposition to the
> lightning (a transient) on the outside of the coax. Such a coil is
> advisable between the antenna support and your operating position. Let
> the antenna tower carry the lightning to the earth.
>
> Best regards, Richard Harrison, KB5WZI
>

1465. Re: Make Money For Surfing The Net

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 22:00:43 UTC
From: Alan <AlanKREMOVENOSPAM@hotmail.com>
Message-ID: <1106776886.5ac94c9c6b74d011965ac19b7ae9d093@meganetnews2>
Source record: 83004

>>>How does it work?
>>Hmmmm All the simplicity of an old MTV favorite:
>>
>> get Money for nuthin' and your chicks for free!
>
> That is a line from the excellent band called Dire Straits.. !

And who can forget these lines from the same song:

"See the little faggot with the earring and the makeup
Yeah buddy that's his own hair
That little faggot got his own jet airplane
That little faggot he's a millionaire"

1466. Re: Tuned dipole Q:

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 22:35:18 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncvg6p6.1bo2.bit-bucket@shell.config.com>
Source record: 83005

On Wed, 26 Jan 2005 21:27:31 GMT, W9DMK wrote:
> On Wed, 26 Jan 2005 15:05:39 -0600, "Ken Bessler"
><kg0wx@NOSPAMyahoo.com> wrote:
>
>>My 160/80m trap dipole can be operated without
>>a tuner from <1.800 to 1.930. I mainly operate in
>>that range (usually on 1.893) and I have a tuner for
>>operating above 1.930. Easy.
>>
>>My question is this - is it better to resonate high and
>>use a tuner to go lower or do it the way I'm doing now
>>(resonate low and use a tuner to go higher)?
>>
>>Or will it even matter enough to notice??? My guess
>>is (at these freqs) no......
>
> Dear Ken,
>
> Your trap dipole is resonant only in the sense that you see
> approximately 50 + j 0 ohms at the input to the feedline. I will
> assume that it is not actually of the length of a "resonant dipole"
> (about 260 ft.).
>
> Therefore, we are talking about a "resonant" antenna/feedline
> "system".
>
> The next issue is the radiation pattern of the antenna. Regardless of
> how you use it (i.e., with or without a tuner), it will have a pattern
> that is a function of its configuration and operating frequency.
> Whether or not a tuner is involved is not a factor.
>
> The only real issue is efficiency. Everything else being equal, the
> tuner is going to rob you of some of your power. How much will depend
> on many factors - the primary ones being the actual impedance seen by
> the tuner and the specific design of the tuner - especially its
> inductor.
>
> Therefore, it would appear that you are doing the best thing - namely,
> to use the tuner only when you have to.

However, I would like to see an answer to his question:

1. Is it best to cut "high" and tune for "low" when necc.?
-or-
2. Is it best to cut "low" and tune for "high" when necc.?

-- when operating on a band (i.e., 75/80M or 160M) where a 50 to 100 kcs. shift in freq. is a large'ish percentage change in wavelength.

3. ..or, is it Mox Nix?

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

1467. Re: HAVE YOU HEARD THE GOOD NEWS!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 23:04:32 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41f82384$2_1@127.0.0.1>
Source record: 83006

<google_groups_web@yahoo.com> wrote in message
news:1106760971.556808.286190@c13g2000cwb.googlegroups.com...
> Do you know how simple it is to go to Heaven after this life has ended?

Heaven is infinite transmit power and infinite signal to noise ratio.

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1468. Re: Tuned dipole Q:

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 23:30:36 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <KGVJd.97482$zy6.18424@bignews5.bellsouth.net>
Source record: 83008

I read somewhere that as the length of each leg of the dipole approaches 5/8 wave the gain increases.
(The reason for the 5/8-wave vertical)
So - from that - I would gues you'd have a smidgen better antenna by cutting it long and tuning to match.
But for the record - I would cut it so as to use the tuner less often.

1469. Re: Odd observation - nonresonant beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 23:41:59 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <fxVJd.34757$2A.31622@fe09.lga>
Source record: 83007

My observation was based entirely on my ears --- a very subjective measurement I know. However, the effect was rather striking. It might have been due to the high noise crashes (when the beam was tuned to the "right" band) that create more subjective interference due to overloading the ear.

I have heard from others now who mention that using the "wrong" antenna sometimes appears to improve signal readability. (Of course, this could be due to polarization differences, etc, etc, that are probably not involved with the SteppIR setup.)

It is all very subjective and probably not worth a technical debate. However it would be tempting to utilize the effect if the band changes on the SteppIR were just a bit faster ---- an if I could remember to retune the antenna every time before transmitting.

Like most of us, I have noted many times that the ability to clearly copy a signal (i.e., a comfortable S/N situation) is often not correlated with S meter readings of the signal or the noise.

Bill
W2WO

1470. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-26 23:55:33 UTC
From: richardharrison@webtv.net
Message-ID: <19951-41F82DF5-26@storefull-3255.bay.webtv.net>
Source record: 83011

Stryped wrote:
"The radio says 13.8 v dc but if I get a 12 volt power supply will it put out the same voltage at the radio:"

No. All supply cables have an IR drop.

Automobiles supply a d-c voltage to charge the battery which cranks the engine and supplies the accessories when the engine is off.

SETTING THE VOLTAGE REGULATOR IS A PROBLEM. iT MUST BE SET HIGH ENOUGH TO TOP OFF THE BATTERY AND LOW ENOUGH NOT TO BOIL THE BATTERY WATER AWAY (OUTGASING).

To complicate matters, at least four different automobile battery constructions are used. All have different ideal charging voltages at the same temperature and for the same use.

Battery and charging system manufacturers disagree with each other and even with themselves.

In the 1970`s , the low-maintenance calcium-lead battery appeared. It was designed to avoid outgasing and water addition to the battery. The original battery had had antimony added to its lead plates to strengthen them for mobilr bumps and shakes.The lead-calcium battery had calcium replacing the antimony. Battery manufacturers then had a new idea. They used antimony in the positive lead plate and calcium in the negative lead plate. They called this the "hybrid battery"

Some car makers then decided to adapt the "gel-cell" to autos. This should take no water but woiuld not like being overcharged.

I`ve had satisfactory experience with calcium-lead batteries. In several crosscountry microwave systems these were used to float on the d-c power supply. The voltage of the supply was set by experiment to a voltage which would top off the batteries so that they could run the equipment for several hours when the powerline failed but not gass so much that they frequently required water. The batteries had very long useful lives and cost much less than nicads. The cells had no memory problems or polarity reversals as the nicads sometimes did.

Best regards, Richard Harrison, KB5WZI
.

1471. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 00:08:16 UTC
From: Dave VanHorn <dvanhorn@dvanhorn.org>
Message-ID: <18qdndq_0qR1rWXcRVn-vQ@comcast.com>
Source record: 83009

> More batteries have probably been destroyed by improper charging
> than any other single cause.

Could be, but these cheap Chinese batteies are gaining ground every day.
http://www.dvanhorn.org/NIMH/Index.php is some work that I've done on the subject. I have another, more spectacular failure to post when I get time to write it up properly.

This second one, and I suspect also the one shown on my page now, are NOT the result of bad charging, but bad cells.

> I gather that you know all this stuff so my ranting is really for
> the benefit of others who don't.

Well worth saying though!

Do you have any non-marketing info on the "Optima" batteries?
I'm looking to enhance my capacity here, one way or another.

1472. Re: Odd observation - nonresonant beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 00:09:34 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <1jWJd.2586$5t.2049@fed1read07>
Source record: 83010

Try turning the AGC off, turn the RF Gain way down and the AF Gain up considerably. Then advance the RF gain until the signal is just copyable in head phones. Repeat for the two antenna conditions. Make sure your audio levels are equal.

Military and Ham operators operate this way and claim a SUBJECTIVE increase in signal to noise over that of a wide open receiver. Technically this should not be true, Signal to noise ratio should not be reduced by decreasing receiver gain

But the human ear with its threshold levels, logarithmic hearing, and brain filtering may account for this.

--
Caveat Lector

"Bill Ogden" <wogden@attglobal.net> wrote in message
news:fxVJd.34757$2A.31622@fe09.lga...
> My observation was based entirely on my ears --- a very subjective
> measurement I know. However, the effect was rather striking. It might
> have
> been due to the high noise crashes (when the beam was tuned to the "right"
> band) that create more subjective interference due to overloading the ear.
>
> I have heard from others now who mention that using the "wrong" antenna
> sometimes appears to improve signal readability. (Of course, this could
> be
> due to polarization differences, etc, etc, that are probably not involved
> with the SteppIR setup.)
>
> It is all very subjective and probably not worth a technical debate.
> However it would be tempting to utilize the effect if the band changes on
> the SteppIR were just a bit faster ---- an if I could remember to retune
> the
> antenna every time before transmitting.
>
> Like most of us, I have noted many times that the ability to clearly copy
> a
> signal (i.e., a comfortable S/N situation) is often not correlated with S
> meter readings of the signal or the noise.
>
> Bill
> W2WO
>
>

1473. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 00:29:49 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <1CWJd.20616$B95.5386@lakeread02>
Source record: 83012

"Jim Higgins" <me7@privacy.net> wrote

> I notice an earlier "expert" recommended against charging sealed
> cells indoors. Hogwash! That's exactly one of the reasons
> sealed cells like the Cyclons were developed. The other was to
> eliminate the high labor expense - not to mention hassle - of
> frequent checks and water additions.

I never said I was an "expert", I only described my own safe use of a 12v deep cell marine battery indoors. But I notice your setup:

>I'm sitting here looking at my own setup
using a standard auto starting battery - cheap non-sealed Walmart
special

- Does NOT include a sealed battery, many of which are just cheap junk that could easily blow up with too much charge, and giving general advice to someone not knowledgeable about batteries, would be don't charge them indoors. That stands as good advice until you can demonstrate otherwise, and accept the responsibility for accidents resulting from misuse of batteries or charging equipment.

Jack Painter
Virginia Beach, Virginia

1474. roof joy-dipole help -RFI(req for info)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 00:46:17 UTC
From: ml <m@di.net>
Message-ID: <m-5D7D54.19461226012005@news.verizon.net>
Source record: 83013

hi

I need some help on a few things, but please excuse my poor writing style it's a problem ...

After a 15yr petition my coop board has agreed to let me put up a dipole on the roof. wow cant wait to get really back on the bands

naturally it's contingent on not creating any interference, and being 'low profile' and finally not damaging the roof....

the part that concerns me a bit is interference...

my roof has a elevator house structure in the middle, on that is a building master antenna. looks like 20 or 30ft high

I won't be allowed to put up any poles etc, all i can do is run wire between existing stuff, there are plenty of vent pipes and such so i believe i could stretch it ok and support it fine

but it will be lower then the tv antenna. how bad is this?

my roof concern would be how to design a dipole coax fed, to minimize the chance's of interference, i guess thats the best i could do

the other concern i had was i must run the coax down thru the electrical room on each floor

14story building i am on 4thfl

their are 2 exsiting core boars i might be able to squeeze some coax into one has the rg59? u tv coax the other the direct tv coax i think also 59u

my thoughts on that are my first goal is which if any would possibly cause interference from my coax to tv?? i am guessing the sat coax would be less bothered by my rig????

however am i correct in assuming that the sat cable would be most rfi causing to me?? how would i fix this a cavity or filter???

i guess my run might be as long as 200ft or 150ft-- what would be the 'best' coax to use aka that would give off least interference and have low loss, the hole isn't going to fit anything like bigger than 8u diameter - don't know if i can afford hard line or if that would make sence given the difficulty of working w/it and $$conectors

if i can't squeeze a 2nd coax i'd still like to hide a small 2m/440 mag mount perhaps fed via a small duplexer the one's i've seen for 'car'

use arent waterproof anyone know of any that are outdoor safe??

What would be the best type of dipole to use , goal being least likely to cause tvi

i'll have to run coax to the roof , how should my dipole to coax transistion be made?? a balun of some sort? if so which?

should i have a bit of dipole to ladderline or a few coax loops??

trying to figure what would be the best ballance of

least tvi offenceive , and designed properly/efficiency

my goal is to make it for at least 160-10 (dare i try 6m?)

i'd prob try for a horizontal run, but might have to do a inv V

Any help tips or suggestions are greatly appreciated guess this is all simple stuff but i wont have easy access to the roof, so i'd like flesh out the basic desin prior to work

i am guessing that my 2nd biggest point of interf might be aside from the master tv antenna itself, is the dist amp, havn't seen it but almost positive it's the cheepest one out, anyone know of a good source for those ie brand that is super filtered/shielded so i won't overload it perhaps if i pay out of pocket for a beter unit anyone can suggest such a brand/make/model?? (presuming i cause int i'd test first)

thanks to all

1475. Re: roof joy-dipole help -RFI(req for info)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 02:26:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fujgv09spje4lvmo14pmb9eftf4q9fimom@4ax.com>
Source record: 83014

On Thu, 27 Jan 2005 00:46:17 GMT, ml <m@di.net> wrote:

>After a 15yr petition my coop board has agreed to let me put up a dipole
>on the roof. wow cant wait to get really back on the bands

Kewel.

>naturally it's contingent on not creating any interference, and being
>'low profile' and finally not damaging the roof....

That would be the inverted V you mention much later.
>
>the part that concerns me a bit is interference...

Use big coax. Put a BalUn/Choke at the end.

>but it will be lower then the tv antenna. how bad is this?

answered by:

>14story building i am on 4thfl

Sweet. Could you move upstairs?

>i'll have to run coax to the roof , how should my dipole to coax
>transistion be made?? a balun of some sort? if so which?

Bingo - Current BalUn (or simply an air wound one).

>my goal is to make it for at least 160-10 (dare i try 6m?)

Try to confine yourself to what is reasonable.

>i am guessing that my 2nd biggest point of interf might be aside from
>the master tv antenna itself, is the dist amp, havn't seen it but almost
>positive it's the cheepest one out, anyone know of a good source for
>those ie brand that is super filtered/shielded so i won't overload it
>perhaps if i pay out of pocket for a beter unit anyone can suggest such
>a brand/make/model?? (presuming i cause int i'd test first)

Run your rig at 1/2 to 2/3rds power so as to not force circuits into
maximal distortion simply to obtain gain.

73's
Richard Clark, KB7QHC

1476. Re: roof joy-dipole help -RFI(req for info)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 02:41:02 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <8xYJd.20621$B95.14048@lakeread02>
Source record: 83015

Recommendation is to accept that some things just aren't meant to be. What did you do to the Coop board to change their minds after 15 years, drug them?

People who live on the 4th Fl of a condo don't take up some hobbies like diesel engine repair, boat building, or wiring a roof top dipole down 10 stories to their flat. You pretty well laid out all the impossibilities yourself, what's left for this group to offer, sympathy? You could always take your rig out to field days.

Jack

"ml" <m@di.net> wrote in message
news:m-5D7D54.19461226012005@news.verizon.net...
> hi
>
> I need some help on a few things, but please excuse my poor writing
> style it's a problem ...
>
>
> After a 15yr petition my coop board has agreed to let me put up a dipole
> on the roof. wow cant wait to get really back on the bands
>
>
> naturally it's contingent on not creating any interference, and being
> 'low profile' and finally not damaging the roof....
>
> the part that concerns me a bit is interference...
>
> my roof has a elevator house structure in the middle, on that is a
> building master antenna. looks like 20 or 30ft high
>
> I won't be allowed to put up any poles etc, all i can do is run wire
> between existing stuff, there are plenty of vent pipes and such so i
> believe i could stretch it ok and support it fine
>
> but it will be lower then the tv antenna. how bad is this?
>
> my roof concern would be how to design a dipole coax fed, to minimize
> the chance's of interference, i guess thats the best i could do
>
> the other concern i had was i must run the coax down thru the electrical
> room on each floor
>
> 14story building i am on 4thfl

>
> their are 2 exsiting core boars i might be able to squeeze some coax
> into one has the rg59? u tv coax the other the direct tv coax i think
> also 59u
>
> my thoughts on that are my first goal is which if any would possibly
> cause interference from my coax to tv?? i am guessing the sat coax
> would be less bothered by my rig????
>
> however am i correct in assuming that the sat cable would be most rfi
> causing to me?? how would i fix this a cavity or filter???
>
> i guess my run might be as long as 200ft or 150ft-- what would be the
> 'best' coax to use aka that would give off least interference and have
> low loss, the hole isn't going to fit anything like bigger than 8u
> diameter - don't know if i can afford hard line or if that would make
> sence given the difficulty of working w/it and $$conectors
>
>
> if i can't squeeze a 2nd coax i'd still like to hide a small 2m/440 mag
> mount perhaps fed via a small duplexer the one's i've seen for 'car'
> use arent waterproof anyone know of any that are outdoor safe??
>
> What would be the best type of dipole to use , goal being least likely
> to cause tvi
>
> i'll have to run coax to the roof , how should my dipole to coax
> transistion be made?? a balun of some sort? if so which?
>
> should i have a bit of dipole to ladderline or a few coax loops??
>
> trying to figure what would be the best ballance of
>
> least tvi offenceive , and designed properly/efficiency
>
> my goal is to make it for at least 160-10 (dare i try 6m?)
>
> i'd prob try for a horizontal run, but might have to do a inv V
>
>
> Any help tips or suggestions are greatly appreciated guess this is all
> simple stuff but i wont have easy access to the roof, so i'd like
> flesh out the basic desin prior to work
>
> i am guessing that my 2nd biggest point of interf might be aside from
> the master tv antenna itself, is the dist amp, havn't seen it but almost
> positive it's the cheepest one out, anyone know of a good source for
> those ie brand that is super filtered/shielded so i won't overload it
> perhaps if i pay out of pocket for a beter unit anyone can suggest such
> a brand/make/model?? (presuming i cause int i'd test first)

>
>
> thanks to all

1477. Re: Tuned dipole Q:

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 02:43:10 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41f8525e.23939653@news.crosslink.net>
Source record: 83016

On 26 Jan 2005 22:35:18 GMT, Allodoxaphobia <bit-bucket@config.com>
wrote:

>On Wed, 26 Jan 2005 21:27:31 GMT, W9DMK wrote:
>> On Wed, 26 Jan 2005 15:05:39 -0600, "Ken Bessler"
>><kg0wx@NOSPAMyahoo.com> wrote:
>>
>>>My 160/80m trap dipole can be operated without
>>>a tuner from <1.800 to 1.930. I mainly operate in
>>>that range (usually on 1.893) and I have a tuner for
>>>operating above 1.930. Easy.
>>>
>>>My question is this - is it better to resonate high and
>>>use a tuner to go lower or do it the way I'm doing now
>>>(resonate low and use a tuner to go higher)?
>>>
>>>Or will it even matter enough to notice??? My guess
>>>is (at these freqs) no......
>>
>> Dear Ken,
>>
>> Your trap dipole is resonant only in the sense that you see
>> approximately 50 + j 0 ohms at the input to the feedline. I will
>> assume that it is not actually of the length of a "resonant dipole"
>> (about 260 ft.).
>>
>> Therefore, we are talking about a "resonant" antenna/feedline
>> "system".
>>
>> The next issue is the radiation pattern of the antenna. Regardless of
>> how you use it (i.e., with or without a tuner), it will have a pattern
>> that is a function of its configuration and operating frequency.
>> Whether or not a tuner is involved is not a factor.
>>
>> The only real issue is efficiency. Everything else being equal, the
>> tuner is going to rob you of some of your power. How much will depend
>> on many factors - the primary ones being the actual impedance seen by
>> the tuner and the specific design of the tuner - especially its
>> inductor.
>>
>> Therefore, it would appear that you are doing the best thing - namely,
>> to use the tuner only when you have to.
>
>However, I would like to see an answer to his question:

>
> 1. Is it best to cut "high" and tune for "low" when necc.?
> -or-
> 2. Is it best to cut "low" and tune for "high" when necc.?
>
> -- when operating on a band (i.e., 75/80M or 160M) where a 50 to
> 100 kcs. shift in freq. is a large'ish percentage change in
> wavelength.
>
> 3. ..or, is it Mox Nix?

I don't consider 50 - 100 kHz to be a sufficiently large shift to make any difference. It's only 2 1/2%, which is nothing.

So, you are correct - es macht Nichts aus!

Remember, "resonance" is not all it's cracked up to be. In fact, it's almost irrelevant at the typical heights above ground encountered (45 ft or less for 80 and 160 m). I'm not saying that you do not need to cut a dipole to the frequency. What I am saying is that at low heights all the power goes straight into the clouds, anyway. The reason most people like "resonance" is for the ease of matching to the rig's output stage - not that the antenna works any better. You probably don't care in which direction in the horizontal plane the energy goes - it's going to be wrong half of the time, anyway - right?

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1478. Re: Tuned dipole Q:

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 02:48:27 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41f855fe.24867036@news.crosslink.net>
Source record: 83017

On Wed, 26 Jan 2005 18:30:36 -0500, "Hal Rosser"
<hmrosser@bellsouth.net> wrote:

>
>I read somewhere that as the length of each leg of the dipole approaches 5/8
>wave the gain increases.
>(The reason for the 5/8-wave vertical)
>So - from that - I would gues you'd have a smidgen better antenna by cutting
>it long and tuning to match.
>But for the record - I would cut it so as to use the tuner less often.
>
>

Do you suppose, by any chance, that Louis Varney had anything like
that in mind when he invented the G5RV antenna specifically for the 20
m band with its 1.5 wavelength flat-top (about 3/4 wavelength on each
side)?

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1479. Re: Choke Balun Impedance Recommendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 03:04:13 UTC
From: MikeN <mnewman@clear.net.nz>
Message-ID: <8hmgv0137ict9d85hum8girrupc1tenu5u@4ax.com>
Source record: 83018

On Thu, 24 Apr 2003 17:18:10 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>By all means, the slide rule is fine.
>
>To measure the common mode impedance of a choke balun, simply wind a
>piece of wire on the core with the same number of turns as you'll use
>for the actual balun. Connect one end of the wire to the center
>conductor of the antenna analyzer connector and the other to the
>connector shell. Read the impedance at the frequency of interest. Or if
>you prefer, you can wind it with a short piece of the actual coax you'll
>be using. Connect the two coax conductors together on each end of the
>winding, and measure as you would with a single wire. If the impedance
>is out of the analyzer's range, you can use a different number of turns
>and the relationship that the impedance is proportional to the square of
>the number of turns.
>
>Use the same method to measure a W2DU type balun (ferrite cores slipped
>over a coax line). If the measurement is out of range, measure a
>different number of cores and extrapolate -- the impedance is directly
>proportional to the number of cores.
>
>Roy Lewallen, W7EL
>
>Brian Kelly wrote:
>> Roy Lewallen <w7el@eznec.com> wrote in message
news:<vaehq5br51pa9@corp.supernews.com>...
>>
>>>500 - 1000 ohms is a good rule of thumb for a reasonably matched
>>>antenna. You can find the impedance of most cores at the Fair-Rite web
>>>site, or you can measure it with an impedance meter or antenna analyzer.
>>
>>
>> OK, I'll shoot for 750 ohms. Some day I'd like to understand how one
>> measures the impedance of a choke balun with MFJ analyzers but for now
>> I'll diddle the slide rule, buy the cores and get on the air.
>>
>> Tnx.
>>
>>
>>>Roy Lewallen, W7EL
>>
>>
>> w3rv

Would this method give meaningful results if used at 70 cms using the UHF range on something like a MFJ antenna analyser?

I could pop various beads onto a short piece of coax and determine the relative effectiveness, but how good would this be for absolute results?

Thanks

MikeN ZL1BNB

1480. Re: Ferrite bead impedance at UHF

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 03:16:19 UTC
From: MikeN <mnewman@clear.net.nz>
Message-ID: <ltmgv0p8fi950s3281cb46mtmmkm5sv2qq@4ax.com>
Source record: 83019

Back on 25/04/03 re "Choke balun impedance recommmendations" Roy Llewellan wrote:

"By all means, the slide rule is fine.

To measure the common mode impedance of a choke balun, simply wind a piece of wire on the core with the same number of turns as you'll use for the actual balun. Connect one end of the wire to the center conductor of the antenna analyzer connector and the other to the connector shell. Read the impedance at the frequency of interest. Or if you prefer, you can wind it with a short piece of the actual coax you'll be using. Connect the two coax conductors together on each end of the winding, and measure as you would with a single wire. If the impedance is out of the analyzer's range, you can use a different number of turns and the relationship that the impedance is proportional to the square of the number of turns.

Use the same method to measure a W2DU type balun (ferrite cores slipped over a coax line). If the measurement is out of range, measure a different number of cores and extrapolate -- the impedance is directly proportional to the number of cores.

Roy Lewallen, W7EL

My queries:-

Would this method give meaningful results if used at 70 cms using the UHF range on something like a MFJ antenna analyser?

I could pop various beads onto a short piece of coax and determine the relative effectiveness, but how good would this be for absolute results?

Thanks

1481. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 04:13:23 UTC
From: nm5k@wt.net
Message-ID: <1106799203.412793.140520@z14g2000cwz.googlegroups.com>
Source record: 83020

stryped@hotmail.com wrote:

>
>
> Is it bad to leave a charger hooked up to the battery permanently.
Mine
> is a 12/2 with automatic operation.

No. Thats the whole point of the "automatic" charger. The old style
"trickle"
chargers should not be left on past full charge for long periods.
I use a 12/2 automatic, and it's on 24/7. But, same for my 706. It's
usually
on 24/7...I bought it in 2001, and it probably hasn't had a full weeks
rest
since then...When a "12v" battery thats on a charger reaches appx 14.4
volts, it's
fully charged. If you unplug the charger, or if automatic cut off, the
voltage
will drop down to about 13.8v. When it drops much lower than that, the
charger
kicks back on, charges to appx 14.4v, and cuts off...Over and
over..This manner
of charging won't hurt a battery, and can be left on all day if you
want.
A trickle charger reaches 14.4, and keeps charging, but with a lower
current
level. It won't hurt it for short periods of time, but after a while,
the battery
overheats, and thats when you start boiling off electrolyte...How bad
depends on
the charge rate...A 1 amp or less trickle charge is not near as bad as
a 3-5
amp trickle charge to a fully charged battery. But after switching to
automatic,
I could never go back to the old style manual chargers...With those,
sometimes
I would forget to cut them off...And sometimes, I would cut them off,
and forget
to plug back in, and eventually, have a dead battery...Thats worse than
overcharging..
MK

1482. Re: Odd observation - nonresonant beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 05:17:43 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <41f87c5e_3@news1.prserv.net>
Source record: 83021

Not odd at all. The noise source is in a side lobe in one case and in a null in the other. Antenna pattern changes all
over the place as you move away from the optimum frequency of a yagi. Happens all the time. I once found a condition
where my HF tribander pulled in a 2 meter signal better than a 10 element 2 meter yagi mounted several feet higher.

--
Crazy George
Remove N O and S P A M imbedded in return address

1483. Re: Odd observation - nonresonant beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 05:43:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <v6vgv090ikesc71j829psr644s75pjnqht@4ax.com>
Source record: 82872

On Wed, 26 Jan 2005 16:09:34 -0800, "Caveat Lector" <CL@barahmas.com>
wrote:

>Military and Ham operators operate this way and claim a SUBJECTIVE increase
>in signal to noise over that of a wide open receiver.

This has been true back when I taught it to my students in the Navy.

>Technically this
>should not be true, Signal to noise ratio should not be reduced by
>decreasing receiver gain

Oh but it should. AGC will compress differences, thus lowering the
subjective ratio in comparison to a non-AGC perception. However, the
fluctuation of all signals will be wider. Myself, I've never been
afraid of automatic circuits, but often I find they are marginal to my
interests and for weak signal detection, I follow the conventions
you've offered.

73's
Richard Clark, KB7QHC

1484. Re: Tuned dipole Q:

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 06:21:59 UTC
From: Buck <iam@this.site>
Message-ID: <b12hv0pd64go3s8uh85c4tm27ot2gon4rf@4ax.com>
Source record: 82873

On Wed, 26 Jan 2005 15:05:39 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>My 160/80m trap dipole can be operated without
>a tuner from <1.800 to 1.930. I mainly operate in
>that range (usually on 1.893) and I have a tuner for
>operating above 1.930. Easy.
>
>My question is this - is it better to resonate high and
>use a tuner to go lower or do it the way I'm doing now
>(resonate low and use a tuner to go higher)?
>
>Or will it even matter enough to notice??? My guess
>is (at these freqs) no......

My opinion is that it is better to use the longest antenna reasonably
possible and use the tuner to trim it.
Buck
--
For what it's worth.

1485. Re: My 4 1/2 inch antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 09:13:38 UTC
From: dug88 <dug88@shaw.ca>
Message-ID: <6h2Kd.185787$8I.153288@pd7tw1no>
Source record: 82874
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,alt.personals.gay

i don't think so
been around a good month looking at properties an didn't see this

No problem
make a muscle grow
yes i can
unless you ask an idiot for help

any comments any buddy of what a true love can do to make you so hard it
hurts?

well, some of us got it, some don't

g night
get over on your side of the bed

"bbnn" <jl@fnn.gfd> wrote in message news:cssdda01mfq@enews1.newsguy.com...
> Psychiatrist to keyclowns wrote:
>
>>bbnn wrote:
>>
>>>Psychiatrist to keyclowns wrote:
>>>
>>>
>>>>with a little wand like that it would be more laike a gang snap than
>>>>
>>a
>>
>>>>gang bang...heheheh
>>>>
>>>>
>>>>
>>>>
>>>as if your dick is any bigger. the average length is 5" from the PDR
>>>medical book.
>>>
>>
>>Leave it to a keyclown to know that statistic..heheh
>>
>>
> at least i don't suck on them like you .. hehehehe

1486. Newsgroups on Decline? AOL dropping this NG

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 13:04:16 UTC
From: fractenna@aol.com
Message-ID: <20050127080416.12810.00000305@mb-m11.aol.com>
Source record: 82875

As a 12 year member of AOL, I note that the world's largest ISP has made a decision to drop newsgroups from it's service.

The decline of newsgroups has generally followed the tendency for this type forum to deviate dramatically from the original intent. But in the case of this NG, I too am of the opinion that it really has outlived it's intended function and time scale. It's become a rather limited BBS of sorts, with a dramatic amount of content that's either drug or sex related, or alludes to illegal activity.

No thanks.

There are a number of other forums around--hence the decline--and although antennas are a minor spark of interest, there clearly isn't the kind of activity you saw in the late 1990's, for example.

Oh well. The net antiquates many things, even parts of itself.

I'll check in once in a while to see who is still alive:-) Best to all, and drop me a line if you'd like.

73,
Chip N1IR

1487. Make money

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 13:41:53 UTC
From: Make-Money <onlyonesmelly@hotmail.com>
Message-ID: <1106833313.419636.95510@z14g2000cwz.googlegroups.com>
Source record: 82876

I'm sure you've read these letters asking you to send $1 to six different addresses. Putting your home address or mailing address on the internet can be risky, but through PayPal all you have to provide is your email address. It's safe and easy. Just go to www.paypal.com and set up your FREE account! I am not a gullible person and have never trusted things like this, but I gave it a try. Hey it's only $6. I figured at least 6 people would respond out of the millions of people that use the internet. You should give it a try too! You have nothing to lose, and thousands to gain! Read on for the letter that I found (of course, I added my PayPal e-mail on #6)...

HOW TO TURN $6 INTO $6,000+!!! THIS REALLY CAN MAKE YOU EASY MONEY!!! IT WORKS!!! BUT YOU HAVE TO FOLLOW IT TO THE LETTER FOR IT TO WORK!!!! A little while back, I was browsing through newsgroups, just like you are now and came across an article similar to this that said you could make thousands of dollars within weeks with only an initial investment of $6.00! So I thought, "Yeah, right, this must be some kind of scam" but like most of us, I was curious, so I kept reading. Anyway, it said that you send $1.00 though PayPal to each of the emails stated in the article. You then place your own email address in the bottom of the list at #6, and post the article in at least 200 news groups. (There are thousands) No catch. That was it. So after thinking it over, and talking to few people first, I thought about trying it. I figured what have I got to lose except $6.00, right? Like most of us I was a little skeptical and a little worried about the legal aspects of it. It follows the same regulations as the "mailed chain letters, which according to the U.S. Post Office (1-800-725-2161) is indeed legal! Then I invested the measly $6.00. Well GUESS WHAT!!? Within 7 days, I started getting money in my PayPal account! I was shocked! I figured it would end soon, but the money just kept coming in. In my first week, I made about $20.00. By the end second week I had made a total over

$1,200.00!!! In the third week I had over $10,000.00 and it's still growing. This is now my fourth week and I have made a total of just over $36,000.00 and it's still coming in rapidly. It's Certainly worth $6.00. I have spent more than that on the lottery!! Let me tell you how this works and most importantly, why it works? Also, make sure you print a copy of this article now, so that you can get the information off of it as you need it.

$$
REQUIREMENTS: You must have a confirmed PayPal account. If you do not have a PayPal account you can go to www.paypal.com and follow the instructions to set up a free account. In order to place the initial $6 into your account, you will have to confirm your bank account with

PayPal (which may take a few days). PayPal is 100% secure and is used my millions of people world wide. Confirming a www.paypal.com account simply means (1) PayPal will first ask you to confirm the email you used to sign up your PayPal account by sending you an email with a link for you to click to that email. As soon as you click that link your email is confirmed. (2) PayPal will then make two small deposits into your bank account if you set up your PayPal account with a checking or savings bank account. Or PayPal will make two small deposits to your credit card if you set up your PayPal account with your credit card. Then after a few days (it takes up to a few days for these deposits to appear in your bank account or on your credit card statement) then after a few days you go back to the www.paypal.com website and sign in. Then you click where it says this account is not yet confirmed. A screen will pop up that gives you 2 boxes to fill in. You then enter the numbers of the 2 small deposit amounts (two separate 2 digit numbers) that were deposited to your bank account or credit card. Now you have a working and confirmed PayPal account and can receive payments.

$$
[STEP 1]
Send, though PayPal, $1.00 to each email on the below list. Make the subject of the payment "Email List" and in the comments, write "PLEASE PUT ME ON YOUR EMAIL LIST." What you are doing is creating a service by this - and best of all you are not giving your address to anyone you do not know. THIS IS ABSOLUTELY LEGAL!! YOU ARE CREATING A SERVICE. Here are the latest PayPal e-mails on the e-mail lists:

1. Kobragt500 @aol.com

2. youngman2006 @ntlworld.com

3. Lenny8971 @aol.com

4. chrlwoods8 @aol.com

5. cerebayretailer @msn.com

6. drewsaelens @msn.com

www.paypal.com

Subject of Payment: ***Email List***

Comments: ***PLEASE PUT ME ON YOUR EMAIL LIST***

[STEP 2]
Now take the #1) email off the list that you see above, move the other addresses up one (6 becomes 5 & 5 becomes 4, etc) the put YOUR email address (the one used in your PayPal account) as #6) on the list. **MAKE SURE THE EMAIL YOU SUPPLY IS EXACTLY AS IT APPEARS IN YOUR PAYPAL ACCOUNT**

[STEP 3]
Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups, message boards, etc. (I think there are close to 32,000 groups) All you need is 200, but remember, the more you post, the more money you make - as well as everyone else on the list! In this situation your job is to let as many people see this letter as

possible. So they will make you and me reach!!!! You can even start posting the moment your email is confirmed. Payments will still appear in your PayPal account even while your bank account is being confirmed.

$$
DIRECTIONS ON HOW TO POST TO NEWSGROUPS/MESSAGE BOARDS.

[Step 1]
You do not need to re-type this entire letter to do your own posting. Simply put your CURSOR at the beginning of this letter and drag your CURSOR to the bottom of this document, and select 'copy' from the edit menu. This will copy the entire letter into your computer's temporary memory.

[Step 2]
Open a blank Notepad file and place your cursor at the top of the blank page. From the 'Edit' menu select 'Paste'. This will paste a copy of the letter into notepad so that you can add your email to the list.

[Step 3]
Save your new Notepad file as a .txt file. If you want to do your postings in different sittings, you'll always have this file to go back to.

[Step 4]
Use Netscape or Internet Explorer and try searching for various newsgroups, on-line forums, message boards, bulletin boards, chat sites, discussions, discussion groups, online communities, etc. EXAMPLE: go to any search engine like yahoo.com, google.com, altavista.com, excite.com, then search with subjects like "millionaire message board" or "money making message board" or "opportunity message board" or "money making discussions" or "business bulletin board" or "money making forum" etc. You will find thousands and thousands of message boards. Click them one by one then you will find the option to post a new message.

[Step 5]
Visit these message boards and post this article as a new message by highlighting the text of this letter and selecting 'Paste' from the 'Edit' menu. Fill in the Subject, this will be the header that everyone sees as they scroll thru the list of postings in a particular group, click the post message button. You're done with your first one! Congratulations! THAT'S IT!! All you have to do is jump to different newsgroups and post away. After you get the hang of it, it will take about 30 seconds for each newsgroup! **REMEMBER, THE MORE NEWSGROUPS

AND/OR MESSAGE BOARDS YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200** That's it! You will begin receiving money within days! **JUST MAKE SURE THE EMAIL YOU SUPPLY IS EXACTLY AS IT APPEARS ON PAYPAL.**

Have fun!

1488. Re: HAVE YOU HEARD THE GOOD NEWS!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 14:39:02 UTC
From: grasshouse@hotmail.com
Message-ID: <ctauebrab1@newsg1.svr.pol.co.uk>
Source record: 82877

Fw: this is not radio antenna related

fairy stories. groups-abuse@google.com

1489. Re: How does a "cross needle" swr work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 14:42:48 UTC
From: grasshouse@hotmail.com
Message-ID: <ctaulcapd1@news6.svr.pol.co.uk>
Source record: 82878

I don't mean to be picky here, but didn't you learn this kind of thing in your training for the licence and exams.

1490. Re: Is BPL going to take up more spectrum?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 14:44:13 UTC
From: King Zulu <KingZulu123@msn.com>
Message-ID: <177Kd.31343$IV5.22958@attbi_s54>
Source record: 82879
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.radio.amateur.dx

"yea right" <spam@spam.spam> wrote in message
news:pan.2005.01.17.08.14.38.913453@spam.spam...
>
>
>
http://broadcastengineering.com/newsletters/bth/20050116/gigabit-data-power-20050116/
>
> With a repeater every mile, they will not be able to fulfill the goal of
> cheap Internet for rural users. AUT (another useless technology)

"Their system uses repeaters placed at every one kilometer, (0.62 miles) and requires power lines to be modified to reduce interference with the data signals. The estimates were based on computer models, and that the data speeds available in a real-world version would depend on how many repeaters a power company used."

Nothing like trying to use something intended for one use for some other unrelated use. Why would any fool want to put high-speed transmission data on an unshielded single wire feedline that travels for miles in a hostile communications environment? One would think the idea wouldn't get off the professor's desk. Maybe PhD's should harvest rice six months each year to find out what the real world is all about?

ak

1491. Re: Tuned dipole Q:

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 15:22:33 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41f907ce$1_2@127.0.0.1>
Source record: 82880

W9DMK (Robert Lay) wrote:
> Do you suppose, by any chance, that Louis Varney had anything like
> that in mind when he invented the G5RV antenna specifically for the 20
> m band with its 1.5 wavelength flat-top (about 3/4 wavelength on each
> side)?

I read somewhere that Louis wanted that nice
cloverleaf pattern on 20m from his home QTH.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1492. Re: Tuned dipole Q:

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 15:31:15 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41f909d9$1_2@127.0.0.1>
Source record: 82881

Buck wrote:
> My opinion is that it is better to use the longest antenna reasonably
> possible and use the tuner to trim it.

The proper choice of feedline length will tune it
to system resonance without a conventional tuner.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1493. Re: Tuned dipole Q:

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 15:42:17 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41f90c6e$1_1@127.0.0.1>
Source record: 82882

Cecil Moore wrote:

> Buck wrote:
>> My opinion is that it is better to use the longest antenna reasonably
>> possible and use the tuner to trim it.
>
> The proper choice of feedline length will tune it
> to system resonance without a conventional tuner.

And of course, I'm talking about ladder-line, not coax.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1494. Re: Odd observation - nonresonant beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 16:11:34 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <Wo8Kd.2899$5t.2484@fed1read07>
Source record: 82883

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:v6vgv090ikesc71j829psr644s75pjnqht@4ax.com...
> On Wed, 26 Jan 2005 16:09:34 -0800, "Caveat Lector" <CL@barahmas.com>
> wrote:
> Try turning the AGC off, turn the RF Gain way down and the AF Gain up
>considerably. Then advance the RF gain until the signal is just copyable in
>head phones. Repeat for the two antenna conditions. Make sure your audio
>levels are equal.

>>Military and Ham operators operate this way and claim a SUBJECTIVE
>>increase
>>in signal to noise over that of a wide open receiver.
>
> RC wrote This has been true back when I taught it to my students in the
> Navy.

CL writes -- Indeed Richard -- I learned this while in the US Navy in the
50's

>> CL wrote Technically this
>>should not be true, Signal to noise ratio should not be reduced by
>>decreasing receiver gain

CL Writes Here I was comparing S/N ratio with a wide open receiver to a
reduced RF Gain receiver -- both with no AGC. The S/N ratio should be the
same.

>
> RC wrote Oh but it should. AGC will compress differences, thus lowering
> the
> subjective ratio in comparison to a non-AGC perception. However, the
> fluctuation of all signals will be wider. Myself, I've never been
> afraid of automatic circuits, but often I find they are marginal to my
> interests and for weak signal detection, I follow the conventions
> you've offered.

CL writes Ah yes AGC can cloud the issue -- using fast AGC can provide a
greater amplification of the noise (between words) than the signal (if the
signal is strong enough)

But on the other hand AGC can be a big noise reducer if used properly.
Tune in a strong SSB signal on 40M or 80M, with fast or no AGC -- assess the
noise between words. Now use slow AGC and listen to a greatly reduced noise
level (between words)

That is why I advised the original poster to use no AGC when assessing the
two different antenna conditions

But I agree -- use AGC as appropriate.

New operators are inclined to set the RF Gain to max, to read the S-meter. But the technique of increased AF Gain and reduced RF Gain with no AGC is used by many experienced ops. Disadvantage is, of course, when a big gun jumps on the frequency while you are set for no AGC -- ouch my ears. Maybe a small price to pay in order to pull out that weak one.

Also for weak signal detection, listening with headphones can make a big difference in comprehension as compared to listening to a speaker. Using the above techniques and head phones, top notch CW operators can copy code even when the signal is about the same as the noise.

I can't do this though (;-(
old ears I guess (;-)

--
73 es gd DX -- Caveat Lector

1495. Re: Newsgroups on Decline? AOL dropping this NG

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 16:39:06 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41f917ec.1207712093@news.galilei.com>
Source record: 82884

fractenna@aol.com (Fractenna) verbositized:

>As a 12 year member of AOL, I note that the world's largest ISP has made a
>decision to drop newsgroups from it's service.

Then you SHOULD remember when AOL was TOTALLY IN-HOUSE, the only
connect to the outside world at all was the ability to send e-mails
out-of-house. Then they started playing with home-brew web browsers
that rarely worked and were constantly being updated to fix the many
bugs in the programming.
It was not until AFTER they finally had a very limited web browser
that they decided to finally allow access to USENET Newsgroups.
It was the LAST external source of information they allowed, so
obviously it will be the FIRST to be cancelled as they try to revert
back to their original In-House state.
They have already screwed up e-mail to the MAX, so that it is almost
impossible to e-mail an AOL member.

I'm surprised they kept you suckered in for so long.
The WISE found REAL ISP's that did not price gouge them and who
offered many more valuable services.

Gary

1496. Re: Tuned dipole Q:

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 16:47:26 UTC
From: Spam Fighter <spamcollector@sympatico.ca>
Message-ID: <pan.2005.01.27.16.47.25.584210@sympatico.ca>
Source record: 82887

On Wed, 26 Jan 2005 15:05:39 -0600, Ken Bessler wrote:

> My 160/80m trap dipole can be operated without a tuner from <1.800 to
> 1.930. I mainly operate in that range (usually on 1.893) and I have a
> tuner for operating above 1.930. Easy.
>
> My question is this - is it better to resonate high and use a tuner to
> go lower or do it the way I'm doing now (resonate low and use a tuner to
> go higher)?
>
> Or will it even matter enough to notice??? My guess is (at these freqs)
> no......

How about a compromise? Split the difference.

1. Tune low, measure the length.
2. Tune high by trimming, measure the new length.
3. Solder a piece of wire equal to the difference in leg lengths to one
leg only.

1497. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 16:49:26 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <qY8Kd.316$Pi.216@newsread3.news.atl.earthlink.net>
Source record: 82885

<stryped@hotmail.com> wrote in message
news:1106746333.760224.80090@f14g2000cwb.googlegroups.com...
> Is it bad to leave a charger hooked up to the battery permanently. Mine
> is a 12/2 with automatic operation.

Geeeeez just jump in AND DO SOMETHING!!! Get your feet
wet, you going to spend the rest of your life worrying about what might
happen? Take the proper precautions and get with it. Try to ENJOY the
hobby!!!!!

1498. Re: Newsgroups on Decline? AOL dropping this NG

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 16:55:39 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41f91da0$1_1@127.0.0.1>
Source record: 82886

Gary V. Deutschmann, Sr. wrote:
> The WISE found REAL ISP's that did not price gouge them and who
> offered many more valuable services.

Time was when "REAL ISP's" all offered usenet/netnews
service. Now my "REAL ISP" has dropped its newserver
access. Netscape doesn't offer it except through Google.
Incidentally, Google's upgraded newsgroup interface
isn't half bad. But I suspect they will start charging
a fee for its use sometime in the future.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1499. Re: Odd observation - nonresonant beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 17:24:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2b8iv0ll8uer51fm3tme7dfcp9l7kso9pv@4ax.com>
Source record: 82888

On Thu, 27 Jan 2005 08:11:34 -0800, "Caveat Lector" <CL@barahmas.com>
wrote:

>Also for weak signal detection, listening with headphones can make a big
>difference in comprehension as compared to listening to a speaker. Using the
>above techniques and head phones, top notch CW operators can copy code even
>when the signal is about the same as the noise.
>
>I can't do this though (;-(
>old ears I guess (;-)

Hi OM,

Well, back when I was in college physics (before the flood), my
professor put me and a buddy on a task to build the perfect detector.
It correlates perfectly with your advice to use headphones.

He had us build a Synchronous Detector (not a simple device to
construct from tubes and at 455 KHz). Some may be familiar with this
form of detection, and yet they may be ignorant of its best
implementation. For others, this kind of detector is also found in
color TV detection and color information separation. Often the block
diagramming or circuitry is described in terms of I and Q paths. I
won't go into the particulars of design, but I will offer that these
two separate paths when broken out to separate Audio channels, and
then fed to stereo head phones, they offer an unique signal hearing
experience.

Basically, the entire two channel system is completed by the brain
combining phases and providing a perception of the wanted signal being
"heard" in the middle of your skull, while interfering off-frequency
signals are perceive off to one side or the other. In a sense, you
hear an enhanced signal through phase reinforcement.

73's
Richard Clark, KB7QHC

1500. Re: Loft Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 17:35:58 UTC
From: macve3gro@aol.com
Message-ID: <20050127123558.27405.00000268@mb-m17.aol.com>
Source record: 82889

IA few years ago, I had to use an indoor antenna on 80 and 160 metres due to covenant restrictions (I put up a small vertical outside for 40-10 metres. No one noticed it so no one cared.) The indoor antenna started at the floor of a bedroom closet, ran up into th attic to the dizzying height of 15 feet, and went horizontal for about 30 feet ending in a huge capacity hat that I constructed at the gable end of the attic. It resonanted at about 2.5 MHz and I fed it with an L-network mounted on the floor of the closet, using, for a ground plane, the heating ducts, copper plumbing and a few extra wires in the basement. It worked as well as most folks' outside dipoles on 75-80, and on 160 , on several cold crisp winter nights, I was able to work into the UK and France on CW. Yes, when I hit the key, the lights on the Christmas tree would glow--even though the lights were't plugged in! Anyways, moral of the story is don't limit yourself to 2 metres. Put something up. You'll be pleasantly surprised by what you can work with an indoor antenna. 73. Harry MacLean, VE3GRO, London, Ontario, Canada, e-mail MacVE3GRO@aol.com.
Harry MacLean, VE3GRO
500 Riverside Drive, London, ON N6H 2R7
(519) 473-1668

1501. Re: Newsgroups on Decline? AOL dropping this NG

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 17:37:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <i39iv0t04l8c3u20n395e14pmuhhi450ff@4ax.com>
Source record: 82890

On 27 Jan 2005 11:39:06 EST, raiar@bbs.galilei.com.nospam (Gary V. Deutschmann, Sr.) wrote:

>I'm surprised they kept you suckered in for so long.

Hi Gary,

Is there any irony in the convergence of SOL members logging in here with off topic comments to offer that because of off topic comments the news service is in decline?

Perhaps it is more an issue that the walls being built are not to keep people out, but to keep them in. This comedy must at some point include watch towers behind barb wire.

The greater irony is that the bright star of the dot.com firmament, SOL, no longer appears on the company mast head of Time-Warner to continue their embarrassment. Talk about a disappearing act!

73's
Richard Clark, KB7QHC

1502. Re: Odd observation - nonresonant beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 17:54:34 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <uV9Kd.2902$5t.2794@fed1read07>
Source record: 82891

Ah indeed Richard -- some Ham DXers use stereo headphones where the
earpieces are out of phase.

--
Caveat Lector

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:2b8iv0ll8uer51fm3tme7dfcp9l7kso9pv@4ax.com...
> On Thu, 27 Jan 2005 08:11:34 -0800, "Caveat Lector" <CL@barahmas.com>
> wrote:
>
>>Also for weak signal detection, listening with headphones can make a big
>>difference in comprehension as compared to listening to a speaker. Using
>>the
>>above techniques and head phones, top notch CW operators can copy code
>>even
>>when the signal is about the same as the noise.
>>
>>I can't do this though (;-(
>>old ears I guess (;-)
>
> Hi OM,
>
> Well, back when I was in college physics (before the flood), my
> professor put me and a buddy on a task to build the perfect detector.
> It correlates perfectly with your advice to use headphones.
>
> He had us build a Synchronous Detector (not a simple device to
> construct from tubes and at 455 KHz). Some may be familiar with this
> form of detection, and yet they may be ignorant of its best
> implementation. For others, this kind of detector is also found in
> color TV detection and color information separation. Often the block
> diagramming or circuitry is described in terms of I and Q paths. I
> won't go into the particulars of design, but I will offer that these
> two separate paths when broken out to separate Audio channels, and
> then fed to stereo head phones, they offer an unique signal hearing
> experience.
>
> Basically, the entire two channel system is completed by the brain
> combining phases and providing a perception of the wanted signal being
> "heard" in the middle of your skull, while interfering off-frequency
> signals are perceive off to one side or the other. In a sense, you
> hear an enhanced signal through phase reinforcement.
>
> 73's

> Richard Clark, KB7QHC

1503. Short lot 80 and possible 160 antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 17:54:53 UTC
From: Rick Scott <RickN7HJ@gmail.com>
Message-ID: <1106848493.091484.228860@z14g2000cwz.googlegroups.com>
Source record: 82892

Without dropping 200 or so on Commercial. Im in the process of trying to find a better 80 and possible 160 antenna for a short lot. Right now I have a G5RV that goes from corner to corner. I have just about 110ft from corner to corner on the long side.

Ive been looking at Windoms, but would have to modify it, and Im not sure.

SOOO, what other antennas are I missing. Warc, plus 40/80 are definite but would like to play with Top Band too.

BEAR in mind, I dont have a big tower to put a sloper or other on to. This is from a tree (50Ft) to a Mast I put up (20ft)
Thanks Scotty N7HJ

1504. Re: Odd observation - nonresonant beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 17:55:09 UTC
From: Bob Dixon <dixon.8@osu.edu>
Message-ID: <dixon.8-5B99CF.12550927012005@charm.magnus.acs.ohio-state.edu>
Source record: 82893

It may be possible to get even more improvement by slowly adjusting the
frequency setting of the Steppir over a wide range. The would steer its
nulls around and let you find the best s/n.

Bob W8ERD

In article <slrncvftb3.21r.bit-bucket@shell.config.com>,
Allodoxaphobia <bit-bucket@config.com> wrote:

> On Wed, 26 Jan 2005 10:22:55 -0500, Bill Ogden wrote:
> > I have a new SteppIR antenna to play with and I noticed an odd response. If
> > I set the beam for 17 or 15 meters but listen on 20 meters I seem to have a
> > better S/N ratio on signals. If I then switch the beam to 20 meters (while
> > continuing to listen on 20) the background noise and the signals go up but
> > the noise goes up more than the signals.
> >
> > Expressed another way, is a non-resonant antenna sometimes better for
> > reception than a resonant antenna?
> >
> > This may be a well-known effect, but it is new to me.
>
> Not expressly addressing your circumstances: But, I sometimes will
> switch to a different antenna on receive to get a better S/N ratio --
> even if the sigs drop in level.
>
> E.g., When on 15M, I might switch to the 80/40M dipoles for RCV.
> Or, when on 80M, I might switch to the tri-bander for RCV.
>
> (Then, like a klutz, I'll forget to switch back on XMIT. :-)
>
> 73
> Jonesy

1505. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 18:03:32 UTC
From: Dave VanHorn <dvanhorn@dvanhorn.org>
Message-ID: <KImdncFt85V4sWTcRVn-hg@comcast.com>
Source record: 82894

> This is not to say that Optima or Cyclon are bad battteries.
> It's to say that ham radio backup is not what they're designed
> for. Both will make a really sweet home UPS system, and there
> are some obvious advantages to a sealed design, not the least
> being satisfying any spousal concerns over damage to "her"
> carpet, etc. But you'll get more bang for your buck with a
> battery designed to deliver more amp-hours over a longer period.

Ok, so what would you reccomend for a battery that sits indoors (but in a battery box if need be) and would be on float most of the time, with deep discharge at say C/10 or C/20-ish rates?

1506. Re: Newsgroups on Decline? AOL dropping this NG

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 18:07:14 UTC
From: kelly@dvol.com
Message-ID: <1106848498.816877.229190@z14g2000cwz.googlegroups.com>
Source record: 82895

Fractenna wrote:
> As a 12 year member of AOL, I note that the world's largest ISP has made a
> decision to drop newsgroups from it's service.

A sterling example of why "the biggest" is immediatly suspect. I got myself online before there was an AOL, back when ISPs were not in the advertising biz and when all they provided was getting you "plugged in" and the rest was on you. It was upon us to pick and choose our e-mail, browser and newsreader clients, etc. The downsides of course were the limits on access hours/day, reliability was lousy and as often as not dialing the POP sites were expensive long-distance phone calls. But it worked. Clean, simple and very effective. Then along came goofy AOL with it's bottom line objective of opening up the Internet for the incredibly dumbed-down and clueless masses so that they could control and micromanage their online lives . . . I've used AOL as a "guest op" here and there. I can't even start to imagine how or why you people put up with their garbage.

One of my brothers found a use for AOL though. He collected a 15 inch high stack of AOL CDs and made an interesting lamp out of 'em.

> The decline of newsgroups has generally followed the tendency for this type
> forum to deviate dramatically from the original intent. But in the case of this
> NG, I too am of the opinion that it really has outlived it's intended function
> and time scale. It's become a rather limited BBS of sorts, with a dramatic
> amount of content that's either drug or sex related, or alludes to illegal
> activity.
>
> No thanks.
>
> There are a number of other forums around--hence the decline--and although
> antennas are a minor spark of interest, there clearly isn't the kind of
> activity you saw in the late 1990's, for example.

Gloom & doom from The Chipster. As long as Roy, Reg, Cecil and the rest of the senior antenna gurus are still popping up here so will I.

> Oh well. The net antiquates many things, even parts of itself.
>
> I'll check in once in a while to see who is still alive:-) Best to
all, and
> drop me a line if you'd like.

Go shovel out your driveway again and have a nice day.
> 73,
> Chip N1IR

w3rv

1507. Re: Newsgroups on Decline? AOL dropping this NG

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 18:28:47 UTC
From: Dave <noone@nowhere.com>
Message-ID: <ZvednWbRMbF2r2TcRVn-pA@crocker.com>
Source record: 82896

<Helmut Wabnig> wrote in message
news:bm7iv0lo6tf2ijonhtl72cph5i2pqm8sf4@4ax.com...
> On 27 Jan 2005 13:04:16 GMT, fractenna@aol.com (Fractenna) wrote:
>
> >As a 12 year member of AOL, I note that the world's largest ISP has made
a
> >decision to drop newsgroups from it's service.
>
> >.....
>
>
> Drop AOL !
>
> w.

he's just making an excuse, there are free sources of newsgroups out side of
aol so unless they are blocking access to some web sites they aren't
stopping anyone from getting to or posting to a group like this.

1508. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 18:33:28 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10vicvmfnj06gb0@corp.supernews.com>
Source record: 82897

"Dave VanHorn" <dvanhorn@dvanhorn.org> wrote in message
news:KImdncFt85V4sWTcRVn-hg@comcast.com...
>
>> This is not to say that Optima or Cyclon are bad battteries.
>> It's to say that ham radio backup is not what they're designed
>> for. Both will make a really sweet home UPS system, and there
>> are some obvious advantages to a sealed design, not the least
>> being satisfying any spousal concerns over damage to "her"
>> carpet, etc. But you'll get more bang for your buck with a
>> battery designed to deliver more amp-hours over a longer period.
>
> Ok, so what would you reccomend for a battery that sits indoors (but in a
> battery box if need be) and would be on float most of the time, with deep
> discharge at say C/10 or C/20-ish rates?
>
>
>
A sealed lead acid battery. Like in airplanes.
73
H.

1509. Re: Newsgroups on Decline? AOL dropping this NG

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 18:35:29 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10vid3epoft7ue1@corp.supernews.com>
Source record: 82898

"Dave" <noone@nowhere.com> wrote in message
news:ZvednWbRMbF2r2TcRVn-pA@crocker.com...
>
> <Helmut Wabnig> wrote in message
> news:bm7iv0lo6tf2ijonhtl72cph5i2pqm8sf4@4ax.com...
>> On 27 Jan 2005 13:04:16 GMT, fractenna@aol.com (Fractenna) wrote:
>>
>> >As a 12 year member of AOL, I note that the world's largest ISP has made
> a
>> >decision to drop newsgroups from it's service.
>>
>> >............
>>
>>
>> Drop AOL !
>>
>> w.
>
> he's just making an excuse, there are free sources of newsgroups out side
> of
> aol so unless they are blocking access to some web sites they aren't
> stopping anyone from getting to or posting to a group like this.
>
>

AOL sucks, anyway.
I used their stupid, crappy service for a few months years and years ago.
73
H.

1510. Re: Tuned dipole Q:

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 18:36:40 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <06civ09cfgpqs3rh4mj24f1aajvh5b6dmo@4ax.com>
Source record: 82899

On Wed, 26 Jan 2005 15:05:39 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>My 160/80m trap dipole can be operated without
>a tuner from <1.800 to 1.930. I mainly operate in
>that range (usually on 1.893) and I have a tuner for
>operating above 1.930. Easy.
>
>My question is this - is it better to resonate high and
>use a tuner to go lower or do it the way I'm doing now
>(resonate low and use a tuner to go higher)?
>
>Or will it even matter enough to notice??? My guess
>is (at these freqs) no......

Not enough info to tell. You need to measure or calculate the input Z
of your transmission line with the two (or more) wire lengths and then
calculate the tuner loss for each case. This will depend of the
topology of the tuner.

Remember that as a general rule, the tuner capacitors are lower loss
than the inductors. I think that you will find that over this
restricted frequency range there will be little difference, although
with some weird line length, you might create a condition where the
tuner is quite lossy.

1511. Re: Short lot 80 and possible 160 antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 18:37:48 UTC
From: Al - VA3KAI <niittyma@sympatico.ca>
Message-ID: <3yaKd.8090$Yg6.1228682@news20.bellglobal.com>
Source record: 82901

Rick - to open up more options, can you utilize ladder-line / twin lead all the way to the radio area or does your set-up absolutely need a coax feedline? I have seen commercial antennas (loaded dipoles) 110-120' that can be used for 160M up when fed with open wire that aren't too expensive. The ends can be dropped down for 5' or so at each end to fit into your lot.

Check out URL http://www.northwestantennas.com/ up here in Canada for one idea at $60-$70 USD, shipping included.

Also, your G5RV can be shorted out and used on 160M with a tuner. Good luck..... Al, va3kai

"Rick Scott" <RickN7HJ@gmail.com> wrote in message news:1106848493.091484.228860@z14g2000cwz.googlegroups.com...
> Without dropping 200 or so on Commercial. Im in the process of trying
> to find a better 80 and possible 160 antenna for a short lot. Right
> now I have a G5RV that goes from corner to corner. I have just about
> 110ft from corner to corner on the long side.
>
>
> Ive been looking at Windoms, but would have to modify it, and Im not
> sure.
>
> SOOO, what other antennas are I missing. Warc, plus 40/80 are definite
> but would like to play with Top Band too.
>
>
> BEAR in mind, I dont have a big tower to put a sloper or other on to.
> This is from a tree (50Ft) to a Mast I put up (20ft)
> Thanks Scotty N7HJ
>

1512. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 18:39:54 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <_zaKd.20796$B95.5153@lakeread02>
Source record: 82900

"Jim Higgins" <me7@privacy.net> wrote
"Jack Painter"> <223bthp@cox.net> wrote:
>
> >"Jim Higgins" <me7@privacy.net> wrote
> >
> > > I notice an earlier "expert" recommended against charging sealed
> >> cells indoors. Hogwash! That's exactly one of the reasons
> >> sealed cells like the Cyclons were developed. The other was to
> >> eliminate the high labor expense - not to mention hassle - of
> >> frequent checks and water additions.
> >
> >I never said I was an "expert", I only described my own safe use of a 12v
> >deep cell marine battery indoors. But I notice your setup:
> >
> >>I'm sitting here looking at my own setup using a standard auto
> >>starting battery - cheap non-sealed Walmart special
> >
> >- Does NOT include a sealed battery, many of which are just cheap junk
that
> >could easily blow up with too much charge, and giving general advice to
> >someone not knowledgeable about batteries, would be don't charge them
> >indoors. That stands as good advice until you can demonstrate otherwise,
and
> >accept the responsibility for accidents resulting from misuse of
batteries
> >or charging equipment.
> >
> >Jack Painter
> >Virginia Beach, Virginia
>
> Jack, you basically don't know enough about what you're talking
> about to be giving advice - especially since you now want to play
> the safety card. If you're really concerned with safety, then
> anecdotal advice based on limited personal experience is NOT the
> way to go. I suggest you heed your own advice regarding
> accepting responsibility.
>

OK Jim, I'll accept you were an expert in the battery field, and your advice
is appreciated. How about just quoting some of your
manufacturer-recommendations for safe battery charging? You know, the kind
that are in large, bold print, usually in red ink, in both the battery and
charger instructions? "Cautions" and "Warnings", listing various types of
personal injury, or death, that can result from misuse or failure to follow

instructions. Unfortunately, these warnings don't travel around with used batteries and used chargers that sit in someone's garage for decades.

Jack Painter
Virginia Beach, Virginia

1513. Re: Short lot 80 and possible 160 antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 19:20:01 UTC
From: Rick Scott <RickN7HJ@gmail.com>
Message-ID: <1106853601.329710.299550@f14g2000cwb.googlegroups.com>
Source record: 82902

Unfortunately do to condix (and XYL) my options for ladder line in
preclude bringing it inside because I go under the house in teh crawl
space then up behind the tub wall into my room.

So Coax is the way I need to go.
Ill check the site out thanks.

Scotty N7HJ

1514. Re: Newsgroups on Decline? AOL dropping this NG

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 20:29:45 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <41F94F39.3060208@psu.edu>
Source record: 82903

Fractenna wrote:
> As a 12 year member of AOL, I note that the world's largest ISP has made a
> decision to drop newsgroups from it's service.

From experience with a lot of AOL users, their decision will sit very
well with a lot of newsgroup regulars! 8^)

> The decline of newsgroups has generally followed the tendency for this type
> forum to deviate dramatically from the original intent. But in the case of this
> NG, I too am of the opinion that it really has outlived it's intended function
> and time scale. It's become a rather limited BBS of sorts, with a dramatic
> amount of content that's either drug or sex related, or alludes to illegal
> activity.
>
> No thanks.

Okay.

> There are a number of other forums around--hence the decline--and although
> antennas are a minor spark of interest, there clearly isn't the kind of
> activity you saw in the late 1990's, for example.
>
> Oh well. The net antiquates many things, even parts of itself.
>
> I'll check in once in a while to see who is still alive:-) Best to all, and
> drop me a line if you'd like.

Well, good luck!

- Mike KB3EIA -

1515. Re: Newsgroups on Decline? AOL dropping this NG

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 20:53:05 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10vil5h3rihll07@corp.supernews.com>
Source record: 82904

Mike
Frac's comment speaks volumes IMHO
(I didn't last 12 days with that stupid "service" in '87 or whenever it was
I tried it).

"You've got mail!" It's "You HAVE mail." !!!!
Illiterate morons.
;^)

73
H.

"Mike Coslo" <mjc5remove@psu.edu> wrote in message
news:41F94F39.3060208@psu.edu...
> Fractenna wrote:
>> As a 12 year member of AOL, I note that the world's largest ISP has made
>> a
>> decision to drop newsgroups from it's service.
>
>
> From experience with a lot of AOL users, their decision will sit very well
> with a lot of newsgroup regulars! 8^)
>
>
>> The decline of newsgroups has generally followed the tendency for this
>> type forum to deviate dramatically from the original intent. But in the
>> case of this
>> NG, I too am of the opinion that it really has outlived it's intended
>> function
>> and time scale. It's become a rather limited BBS of sorts, with a
>> dramatic
>> amount of content that's either drug or sex related, or alludes to
>> illegal
>> activity.
>>
>> No thanks.
>
> Okay.
>
>
>> There are a number of other forums around--hence the decline--and
>> although
>> antennas are a minor spark of interest, there clearly isn't the kind of
>> activity you saw in the late 1990's, for example.
>>

>> Oh well. The net antiquates many things, even parts of itself.
>>
>> I'll check in once in a while to see who is still alive:-) Best to all,
>> and
>> drop me a line if you'd like.
>
>
> Well, good luck!
>
> - Mike KB3EIA -
>

1516. How about a wire 1/4 vertical near a tree ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 21:20:15 UTC
From: "M. van Wijk" <"pa5mwremove all between"@home.nl>
Message-ID: <ctblug$8st$1@news1.zwoll1.ov.home.nl>
Source record: 82907

Hello,

I just moved to a new location. My backyard has some 20 trees spread around at a distance of 5 to max 10mtrs between each of them.
I would like to opt for a full size 40mtr(7Mhz) vertical and have (only)the 2 following options her:

1) full size 1/4 wire vertical inside fishing pole, mounted in a tree at a foot height between 7 and 10mtrs from ground level. Some 4 elevated radials will be added.

2) full size 1/4 wire vertical at ground level, parallel to a tree at a distance of 0.5 till max 1 mtr. Ground screen will be some 16 pcs of wire buried in the surrounding ground.

I have no clue about any effects of trees here. They are not pine trees. There are lots of other parameters in the whole picture, but the trees is a totally unkown factor for me.

Please share me your experiences.

Thanks in advance.

'73 Mark, PA5MW

1517. Re: Odd observation - nonresonant beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 21:35:35 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <IRcKd.4392$BY6.4151@fe08.lga>
Source record: 82905

I always operate CW this way --- always have since my first S-85 receiver.
I fully agree that it improves CW readability. On SSB, I sometimes turn the
RF down (on my Omni 6+) until the meter reads zero on the background noise.
This seems to help a little, but not to the extent it does for CW.

The absence of a full-time RF gain control has caused me to delay ordering
an Orion; I am still thinking about it.

Bill
W2WO

"Caveat Lector" <CL@barahmas.com> wrote in message
news:1jWJd.2586$5t.2049@fed1read07...
> Try turning the AGC off, turn the RF Gain way down and the AF Gain up
> considerably. Then advance the RF gain until the signal is just copyable
in
> head phones. Repeat for the two antenna conditions. Make sure your audio
> levels are equal.
>
> Military and Ham operators operate this way and claim a SUBJECTIVE
increase
> in signal to noise over that of a wide open receiver. Technically this
> should not be true, Signal to noise ratio should not be reduced by
> decreasing receiver gain
>
> But the human ear with its threshold levels, logarithmic hearing, and
brain
> filtering may account for this.
>
> --
> Caveat Lector
>
>
>
> "Bill Ogden" <wogden@attglobal.net> wrote in message
> news:fxVJd.34757$2A.31622@fe09.lga...
> > My observation was based entirely on my ears --- a very subjective
> > measurement I know. However, the effect was rather striking. It might
> > have
> > been due to the high noise crashes (when the beam was tuned to the
"right"
> > band) that create more subjective interference due to overloading the
ear.
> >
> > I have heard from others now who mention that using the "wrong" antenna

> > sometimes appears to improve signal readability. (Of course, this could
> > be
> > due to polarization differences, etc, etc, that are probably not
involved
> > with the SteppIR setup.)
> >
> > It is all very subjective and probably not worth a technical debate.
> > However it would be tempting to utilize the effect if the band changes
on
> > the SteppIR were just a bit faster ---- an if I could remember to retune
> > the
> > antenna every time before transmitting.
> >
> > Like most of us, I have noted many times that the ability to clearly
copy
> > a
> > signal (i.e., a comfortable S/N situation) is often not correlated with
S
> > meter readings of the signal or the noise.
> >
> > Bill
> > W2WO
> >
> >
>
>

1518. Re: Odd observation - nonresonant beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 21:38:54 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <PUcKd.4395$307.419@fe08.lga>
Source record: 82906

Excellent point. That might account for my "odd observation". I have
usually seen the effect when noise levels are high -- mostly due to storm
activity -- and the noise is probably directional in these cases.

Bill
W2WO

"Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message
news:41f87c5e_3@news1.prserv.net...
> Not odd at all. The noise source is in a side lobe in one case and in a
null in the other. Antenna pattern changes all
> over the place as you move away from the optimum frequency of a yagi.
Happens all the time. I once found a condition
> where my HF tribander pulled in a 2 meter signal better than a 10 element
2 meter yagi mounted several feet higher.
>
> --
> Crazy George
> Remove N O and S P A M imbedded in return address
>
>

1519. Re: Odd observation - nonresonant beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 22:04:32 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <QzdKd.2911$5t.1790@fed1read07>
Source record: 82908

NO RF GAIN CONTROL -- HERESY

--
Caveat Lector

"Bill Ogden" <wogden@attglobal.net> wrote in message
news:IRcKd.4392$BY6.4151@fe08.lga...
>I always operate CW this way --- always have since my first S-85 receiver.
> I fully agree that it improves CW readability. On SSB, I sometimes turn
> the
> RF down (on my Omni 6+) until the meter reads zero on the background
> noise.
> This seems to help a little, but not to the extent it does for CW.
>
> The absence of a full-time RF gain control has caused me to delay ordering
> an Orion; I am still thinking about it.
>
> Bill
> W2WO
>
>

1520. 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 22:15:07 UTC
From: SideBand <AINO8SPAMW@cac.net>
Message-ID: <LJdKd.24019$by5.851@newssvr19.news.prodigy.com>
Source record: 82910

Anyone out there know of any decent solution to getting 160M working in a mobile? The application is a semi-truck. I've got the Iron Horses for 75, 40, 20, 15, and 10M, but I'd like to work something out for 160 meters that will work on the truck.

I know I'm going to take an efficiency hit, but you're doing that for everything except 10M on a Semi anyway.. Just so I can get a signal out there to be heard, in the off chance.

ANY suggestions or ideas would be greatly appreciated.

73 de AI8W, Chris

1521. Re: Tuned dipole Q:

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 22:15:19 UTC
From: Buck <iam@this.site>
Message-ID: <lipiv0tapfn241spo1csp9ier40cv7rsbf@4ax.com>
Source record: 82909

On Wed, 26 Jan 2005 15:05:39 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>My 160/80m trap dipole can be operated without
>a tuner from <1.800 to 1.930. I mainly operate in
>that range (usually on 1.893) and I have a tuner for
>operating above 1.930. Easy.
>
>My question is this - is it better to resonate high and
>use a tuner to go lower or do it the way I'm doing now
>(resonate low and use a tuner to go higher)?
>
>Or will it even matter enough to notice??? My guess
>is (at these freqs) no......

I use a multi-band dipole, but it is full length. I have about 130 feet of 75 meter dipole and 67 feet for 40 meters (the lengths may vary, but they are tuned to the SSB portions I use.) I feed them into the house via 75 ohm coax. The 40 meter elements hang about 6 inches below the 75 meter element. No tuner or other matching is necessary and the 75 meters band width is increased because of the 40 meter hanging below it.

This is the same style antenna I used for the first time as a novice. I have continued to use it over the last 26 years.

If you are going to use a tuner for tuning the antenna to all bands, I would eliminate the traps altogether and tune down the 75/80 meter elements. There are several places on the Web that explain what lengths actually work best for all-band operation.

Someone has an Off-center Fed Dipole that they claim works really well for all bands and it is a bit shorter than the 1/2 wave 80 meter dipole. Look for Off center fed dipole and doublets in a search engine. I am sure you will keep yourself occupied for many hours reading various solutions. I am sure one of them will fit your need perfectly.

Good luck.

Buck
N4PGW
Buck
--
For what it's worth.

1522. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 22:25:18 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10viqidf8hho265@corp.supernews.com>
Source record: 82911

"SideBand" <AINO8SPAMW@cac.net> wrote in message
news:LJdKd.24019$by5.851@newssvr19.news.prodigy.com...
> Anyone out there know of any decent solution to getting 160M working in a
> mobile? The application is a semi-truck. I've got the Iron Horses for 75,
> 40, 20, 15, and 10M, but I'd like to work something out for 160 meters
> that will work on the truck.
>
> I know I'm going to take an efficiency hit, but you're doing that for
> everything except 10M on a Semi anyway.. Just so I can get a signal out
> there to be heard, in the off chance.
>
> ANY suggestions or ideas would be greatly appreciated.
>
> 73 de AI8W, Chris

Big screwdriver with a proper top hat and a good impedance match at
resonance.
The resonant feed point impedance must be a bit less than 10 ohms.
I recall in QST a while back a guy who'd done WAS on 160 from his pickup, so
it can work.
73
H.

1523. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 22:37:24 UTC
From: SideBand <AINO8SPAMW@cac.net>
Message-ID: <E2eKd.24022$by5.12340@newssvr19.news.prodigy.com>
Source record: 82912

H. Adam Stevens, NQ5H wrote:
> "SideBand" <AINO8SPAMW@cac.net> wrote in message
> news:LJdKd.24019$by5.851@newssvr19.news.prodigy.com...
>
>>Anyone out there know of any decent solution to getting 160M working in a
>>mobile? The application is a semi-truck. I've got the Iron Horses for 75,
>>40, 20, 15, and 10M, but I'd like to work something out for 160 meters
>>that will work on the truck.
>>
>>I know I'm going to take an efficiency hit, but you're doing that for
>>everything except 10M on a Semi anyway.. Just so I can get a signal out
>>there to be heard, in the off chance.
>>
>>ANY suggestions or ideas would be greatly appreciated.
>>
>>73 de AI8W, Chris
>
>
> Big screwdriver with a proper top hat and a good impedance match at
> resonance.
> The resonant feed point impedance must be a bit less than 10 ohms.
> I recall in QST a while back a guy who'd done WAS on 160 from his pickup, so
> it can work.
> 73
> H.
>
>
And where, on a semi-truck, would you mount a big screwdriver with a
proper top-hat? I'm not discounting the suggestion, but at the same
time, I can't think of where I could possibly mount one.

I was thinking something more along the lines of a mono bander that I
could mount on one of the mirrors, that wouldn't be too large. Say,
something with a loading coil somewhere along its length, and something
that wouldn't be too expensive (Hopefully less than $50.00 US) to
construct. However, I'm not sure that's the best solution, either, which
is why I asked here.

A screwdriver is not in my near future. I'm recovering financially from
3 months off last year due to a gallstone the size of a golf ball, and
an accident in the truck earlier this month.

Thanks for the suggestion. Any other thoughts?

de AI8W, Chris

1524. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 22:44:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0hriv0luuphu8k2dl3g5nvr0btrqg1s96b@4ax.com>
Source record: 82913

On Thu, 27 Jan 2005 22:37:24 GMT, SideBand <AINO8SPAMW@cac.net> wrote:

>Thanks for the suggestion. Any other thoughts?
>
Hi Chris,

Is this a tractor/trailer rig? Put a monster whip up front and pull
it back to the trailer (where-ever) with a monster coil at the end and
make the trailer the -ahem- top hat.

Everything that could go wrong probably will....

73's
Richard Clark, KB7QHC

1525. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 23:04:48 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10visseop5h1ea4@corp.supernews.com>
Source record: 82914

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:0hriv0luuphu8k2dl3g5nvr0btrqg1s96b@4ax.com...
> On Thu, 27 Jan 2005 22:37:24 GMT, SideBand <AINO8SPAMW@cac.net> wrote:
>
>>Thanks for the suggestion. Any other thoughts?
>>
> Hi Chris,
>
> Is this a tractor/trailer rig? Put a monster whip up front and pull
> it back to the trailer (where-ever) with a monster coil at the end and
> make the trailer the -ahem- top hat.
>
> Everything that could go wrong probably will....
>
> 73's
> Richard Clark, KB7QHC
Richard, you beat me to it.
H.

1526. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 23:08:39 UTC
From: SideBand <AINO8SPAMW@cac.net>
Message-ID: <XveKd.24030$by5.9454@newssvr19.news.prodigy.com>
Source record: 82915

Richard Clark wrote:
> On Thu, 27 Jan 2005 22:37:24 GMT, SideBand <AINO8SPAMW@cac.net> wrote:
>
>
>>Thanks for the suggestion. Any other thoughts?
>>
>
> Hi Chris,
>
> Is this a tractor/trailer rig? Put a monster whip up front and pull
> it back to the trailer (where-ever) with a monster coil at the end and
> make the trailer the -ahem- top hat.
>
> Everything that could go wrong probably will....
>
> 73's
> Richard Clark, KB7QHC

That's a great idea.. A long wire along the trailer... It's a flatbed, too, so I could use the stake posts to hold PVC pipes for antenna supports... Hrm.. Now if only the AH-4 tuner for my 706 would do 160M, I could just set up the wire and tune it, much like I did with the one on the old truck.

I'll have to give that one some thought.

Thanks Richard.

de AI8W, Chris

1527. Re: Ferrite bead impedance at UHF

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 23:13:51 UTC
From: MikeN <mnewman@clear.net.nz>
Message-ID: <cdtiv0lf0iss0uof71cpfv2u2qbofs3tij@4ax.com>
Source record: 82917

On Tue, 25 Jan 2005 21:39:50 -0800, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Wed, 26 Jan 2005 17:48:26 +1300, MikeN <mnewman@clear.net.nz>
>wrote:
>>How could one measure the effectiveness of a ferrite bead used to
>>decouple a feedline from a driven element at 70cms, with simple
>>equipment which could be built by a homebrewer, and what would that
>>simple equipment be.
>
>Hi Mike,
>
>One of the "best of class" questions.
>
>A test that would work at the most fundamental level would measure the
>conversion of RF to heat.
>
>Let's take one bead whose characteristic Resistance is 25 Ohms,
>substantially the same as the Z of a quarter wave antenna. Instead of
>adding this bead surrounding the transmission line of the antenna (its
>usual, purposeful application) we place it on the radiator at the
>base. This adds 25 Ohms to the 37 Ohm native Radiation Resistance,
>and thus the bead "should" absorb roughly half the power (what ever
>you throw at the antenna typically).
>
>Of course this is all hip-shot math, but the details contain so many
>variables that this post would become encyclopedic if I attempted to
>go to that granularity. Suffice it to say that the more important
>discussion lies in the how and what, not the how much.
>
>How? Measuring the heat of a bead may not be straightforward if you
>were to attempt this directly with a surface temperature measurement.
>So better, measure it in a bath of water. The experimental
>sophistication goes up, but conceptually remains rather simple. You
>now have to brush up on your understanding of the caloric bomb.
>Others may head for the exit to buy a "better" solution, but the
>caloric bomb remains one of the most accurate methods available to
>even the guys with money to "burn" on figuring this out.
>
>Going further, you may discover that there's just not enough heat to
>gear up to with your thermometer. Well, now it becomes time with the
>What. Boost the ante and use a fever thermometer (after first
>elevating the bath temperature) but now you have to calculate how to
>build a bath with a small enough time constant but high enough

>isolation from the otherwise "cooler" environment. If this is getting
>a bit too much, try boosting the heat generation (wrap the radiator
>through the bead to raise its loss resistance by the square of turns).
>
>This caloric method will lead to an absolute evaluation of the bead R.
>Finding the relative evaluation of the bead R will probably provide
>more resolution. Comparisons are easier to make too. However,
>barring having a known sample bead to compare to, you are left to ask
>yourself "yes this is better, but is better good enough?"
>
>How could you do a relative test? Take the same scenario above (the
>bead surrounding the radiator of a quarterwave vertical) and take
>Field Strength readings as you change beads. The best bead is
>evidenced by the poorest Field Strength. Is best enough? Well....
>
>Is it sensitive enough? Try the same turns ratio boost described
>above (but it will still not resolve if that particular bead is good
>enough).
>
>The list could go on, but the two above evidence: Power,
>Current/Voltage/Resistance. There's not much left which is not a
>variation on a theme (which returns us to How). I hope you note that
>this requires only a thermometer or FSM which qualify as simple
>equipment. Give me a bigger budget, and it will only increase cost to
>no measurable increase in accuracy. You might have the advantage of
>seeing the answer on a digital display - but who's to say that it is
>actually right, much less close?
>
>73's
>Richard Clark, KB7QHC

That's an interesting dissertation Richard, but I'm not sure that it
readily suits my needs.

Last time I used a calorimeter was nearly fifty years ago in a Physics
I lab - I can't remember what the experiment was.

Thanks
MikeN, ZL1BNB

1528. Ferrite bead balun for UHF?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 23:14:06 UTC
From: MikeN <mnewman@clear.net.nz>
Message-ID: <kdtiv0ddt558fmhlfsb3ip324ssiq40ebh@4ax.com>
Source record: 82916

I've modelled a 70 cm Moxon rectangle - with impedance of 50 +j0, and F/B around 30dB. The cardiod radiation pattern is ideal for my application - a repeater on one side of the service area, co-sited with a 70 cm link repeater. The service area covers only about 25 square miles - filling in a local coverage gap. I need the rearward null of the cardiod to minimise interference problems with a co-channel repeater 85 miles away.

The antenna is balanced - so I need to decouple the coax feed line.

The obvious choices (at least to me) for feeding the antenna are:

1. Coaxial sleeve balun: this requires a bit of measurement and cutting, also waterproofing, and is not easy to fit in the physical arrangement.

2. Ferrite bead balun: dead easy to install, and doesn't compromise weatherproofness of feedline.

I have some ferrite beads which the supplier specifies as having 200 ohms impedance at 100 MHz, which snuggly fit on a short piece of RG-400/U coax connecting to the main LDF5-50 feedline.

But who knows how what impedance they represent at 70 cm?

Can someone tell me about the effectiveness of ferrite bead balun chokes at UHF, and how test this.

What other arrangements which would achieve the desired results?

Thanks

MikeN, ZL1BNB

1529. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 23:14:09 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ctbsk1cui1@hercules.btinternet.com>
Source record: 82918

"SideBand" <AINO8SPAMW@cac.net> wrote in message
news:LJdKd.24019$by5.851@newssvr19.news.prodigy.com...
> Anyone out there know of any decent solution to getting 160M working in
> a mobile? The application is a semi-truck. I've got the Iron Horses for
> 75, 40, 20, 15, and 10M, but I'd like to work something out for 160
> meters that will work on the truck.
>
> I know I'm going to take an efficiency hit, but you're doing that for
> everything except 10M on a Semi anyway.. Just so I can get a signal out
> there to be heard, in the off chance.
>
> ANY suggestions or ideas would be greatly appreciated.
>
> 73 de AI8W, Chris
==========

For design and performance of a 160 meter band vertical antenna, download program HELICAL3 from website below. There are other loaded vertical programs..

Use 1.5" or 2" diameter plastic pipe, with helical winding of thick enamel insulated wire, mounted on vehicle roof, as tall as possible, stayed, with short, top caapacitance tuning rod.

Range on 160m with a few hundred watts = 100 miles at noon on groundwave.

1700 miles on very quiet, wiinter nights at midnight via F-layer.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

1530. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 23:24:56 UTC
From: Dave <noone@nowhere.com>
Message-ID: <od6dnRrPj-vJ5WTcRVn-3Q@crocker.com>
Source record: 82919

stake posts around the perimeter and a wire around them... looks like a 160m
halo to me.

"SideBand" <AINO8SPAMW@cac.net> wrote in message
news:XveKd.24030$by5.9454@newssvr19.news.prodigy.com...
> Richard Clark wrote:
> > On Thu, 27 Jan 2005 22:37:24 GMT, SideBand <AINO8SPAMW@cac.net> wrote:
> >
> >
> >>Thanks for the suggestion. Any other thoughts?
> >>
> >
> > Hi Chris,
> >
> > Is this a tractor/trailer rig? Put a monster whip up front and pull
> > it back to the trailer (where-ever) with a monster coil at the end and
> > make the trailer the -ahem- top hat.
> >
> > Everything that could go wrong probably will....
> >
> > 73's
> > Richard Clark, KB7QHC
>
> That's a great idea.. A long wire along the trailer... It's a flatbed,
> too, so I could use the stake posts to hold PVC pipes for antenna
> supports... Hrm.. Now if only the AH-4 tuner for my 706 would do 160M, I
> could just set up the wire and tune it, much like I did with the one on
> the old truck.
>
> I'll have to give that one some thought.
>
> Thanks Richard.
>
> de AI8W, Chris

1531. Re: "Maxwell's Equations"?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 23:44:31 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41f9786c.4472518@news.iol.ie>
Source record: 82920
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"see sea oh ecks at you aitch see dot comm" <spammers@bugger.off.invalid>
wrote:

: In uk.radio.amateur ZZZPK <zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net>
wrote:
: > oh so now its ok for Chris... therefore its ok for me.
: >
: > so your previous posts and your comments to our american cousin have
: > been a waste of time
:
: Oi - who you callin' a Merkun?

oh some person who has a problem understanding set theory.

1532. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 23:49:49 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <10vivh0l30s8k19@corp.supernews.com>
Source record: 82921

Reg Edwards wrote:

> "SideBand" <AINO8SPAMW@cac.net> wrote in message
> news:LJdKd.24019$by5.851@newssvr19.news.prodigy.com...
>
>>Anyone out there know of any decent solution to getting 160M working in
>>a mobile? The application is a semi-truck. I've got the Iron Horses for
>>75, 40, 20, 15, and 10M, but I'd like to work something out for 160
>>meters that will work on the truck.
>>
>>I know I'm going to take an efficiency hit, but you're doing that for
>>everything except 10M on a Semi anyway.. Just so I can get a signal out
>>there to be heard, in the off chance.
>>
>>ANY suggestions or ideas would be greatly appreciated.
>>
>>73 de AI8W, Chris
>
> ============================
>
> For design and performance of a 160 meter band vertical antenna, download
> program HELICAL3 from website below. There are other loaded vertical
> programs..
>
> Use 1.5" or 2" diameter plastic pipe, with helical winding of thick enamel
> insulated wire, mounted on vehicle roof, as tall as possible, stayed, with
> short, top caapacitance tuning rod.
>
> Range on 160m with a few hundred watts = 100 miles at noon on groundwave.
>
> 1700 miles on very quiet, wiinter nights at midnight via F-layer.
> ----
> ....
> Regards from Reg, G4FGQ
> For Free Radio Design Software go to
> http://www.btinternet.com/~g4fgq.regp
> ....
>
>

Chris's problem is that he has to keep the tip of the antenna below
about 13.5 feet from the ground to be legal with the various DOT's.

Dave WD9BDZ

1533. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 23:52:10 UTC
From: grasshouse@hotmail.com
Message-ID: <ctburt$8vd$1@news7.svr.pol.co.uk>
Source record: 82922

http://moonrakerukltd.com/amateur/mobile_w.htm

7 feet/160 METRE HELICAL WHIP WITH 3/8 BASE, BANDWIDTH (15 kHz) £49.95

1534. yagi plans

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-27 23:58:11 UTC
From: noexqs <wim@noexqs.demon.nl>
Message-ID: <10vj00kmpf70r5f@corp.supernews.com>
Source record: 82923

You might consider a G6KSN loopyagi (applicable for VHF - UHF -SHF).
More info on: www.loopyagi.da.ru

Computer optimised and built a 8elm 2m loopyagi myself
(performance comparable with DJ9BV long yagi designs)

Regards,

Will

1535. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 00:03:49 UTC
From: Dave VanHorn <dvanhorn@dvanhorn.org>
Message-ID: <-a2dnWnCTP3OHGTcRVn-1A@comcast.com>
Source record: 82924

>>
> A sealed lead acid battery. Like in airplanes.

I suspect that having the word "aircraft" on the case will cost me dearly.

What would that equate to in terms of something I might find at battery masters, or the inexpensive section of batteries plus?

1536. Re: Odd observation - nonresonant beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 00:04:09 UTC
From: bob <bobh@iag.net>
Message-ID: <ZjfKd.1327$Yd7.135@newsread2.news.atl.earthlink.net>
Source record: 82925

> Expressed another way, is a non-resonant antenna sometimes better for
> reception than a resonant antenna?

There are several possible causes here.
Probably, on the design frequency, its antenna is probably matched to 50 ohms , for good transmission. A matched antenna does not necessarily give the best S/N for reception, and usually a mismatch does. Its hard to calculate.
One filing mentions the possible change in pattern, and therefore a possible change in S/N.
Suggestion- make a number of measurements, and if it hold up, send a note about it to QEX. Include as much info as you can, especially the SWR or better the antenna impedance on the different frequencies.
w4mb

1537. Re: "Maxwell's Equations"?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 00:05:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8b0jv019v2fgmevn9bt5jd22tl6vgchumi@4ax.com>
Source record: 82930
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Thu, 27 Jan 2005 23:44:31 GMT,
zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net (ZZZPK)
wrote:
>oh some person who has a problem understanding set theory.
Is that a chemistry set, or an erector set? Or set to your partner?

1538. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 00:05:24 UTC
From: Dave VanHorn <dvanhorn@dvanhorn.org>
Message-ID: <9NednYUWt9kvHGTcRVn-3g@comcast.com>
Source record: 82926

Power mount to raise it up when you're parked, otherwise leave it retracted,
lest a bridge give you a severe re-tuning incident.

1539. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 00:06:49 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10vj0gnen056ra0@corp.supernews.com>
Source record: 82928

"David G. Nagel" <nagel@core.com> wrote in message
news:10vivh0l30s8k19@corp.supernews.com...
> Reg Edwards wrote:
>
>> "SideBand" <AINO8SPAMW@cac.net> wrote in message
>> news:LJdKd.24019$by5.851@newssvr19.news.prodigy.com...
>>
>>>Anyone out there know of any decent solution to getting 160M working in
>>>a mobile? The application is a semi-truck. I've got the Iron Horses for
>>>75, 40, 20, 15, and 10M, but I'd like to work something out for 160
>>>meters that will work on the truck.
>>>
>>>I know I'm going to take an efficiency hit, but you're doing that for
>>>everything except 10M on a Semi anyway.. Just so I can get a signal out
>>>there to be heard, in the off chance.
>>>
>>>ANY suggestions or ideas would be greatly appreciated.
>>>
>>>73 de AI8W, Chris
>>
>> ============================
>>
>> For design and performance of a 160 meter band vertical antenna, download
>> program HELICAL3 from website below. There are other loaded vertical
>> programs..
>>
>> Use 1.5" or 2" diameter plastic pipe, with helical winding of thick
>> enamel
>> insulated wire, mounted on vehicle roof, as tall as possible, stayed,
>> with
>> short, top caapacitance tuning rod.
>>
>> Range on 160m with a few hundred watts = 100 miles at noon on
>> groundwave.
>>
>> 1700 miles on very quiet, wiinter nights at midnight via F-layer.
>> ----
>> ....
>> Regards from Reg, G4FGQ
>> For Free Radio Design Software go to
>> http://www.btinternet.com/~g4fgq.regp
>> ....
>>
>>

> Chris's problem is that he has to keep the tip of the antenna below about
> 13.5 feet from the ground to be legal with the various DOT's.
>
> Dave WD9BDZ

Chris
Must the antenna also only mount on the tractor?
I just thought of a multi-turn loop, corners as far forward and back,
wide as possible, above the cab.
Use a tuner and balanced feed.
73
H.

1540. Re: Short lot 80 and possible 160 antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 00:07:50 UTC
From: bob <bobh@iag.net>
Message-ID: <qnfKd.1331$Yd7.989@newsread2.news.atl.earthlink.net>
Source record: 82929

"Rick Scott" <RickN7HJ@gmail.com> wrote in message
news:1106848493.091484.228860@z14g2000cwz.googlegroups.com...
> Without dropping 200 or so on Commercial. Im in the process of trying
> to find a better 80 and possible 160 antenna for a short lot. Right
> now I have a G5RV that goes from corner to corner. I have just about
> 110ft from corner to corner on the long side.
>
Drop the ends of a half-wave dipole enough to fit the lot. You will loose a
little in signal, but probably less than in the matching section for a short
antenna.
w4mb

1541. Re: How about a wire 1/4 vertical near a tree ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 00:08:07 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41f98143.11445938@news.crosslink.net>
Source record: 82927

On Thu, 27 Jan 2005 22:20:15 +0100, "M. van Wijk" <pa5mwremove
all(incl) between @home.nl> wrote:

>Hello,
>
>I just moved to a new location. My backyard has some 20 trees spread around
>at a distance of 5 to max 10mtrs between each of them.
>I would like to opt for a full size 40mtr(7Mhz) vertical and have (only)the
>2 following options her:
>
>1) full size 1/4 wire vertical inside fishing pole, mounted in a tree at a
>foot height between 7 and 10mtrs from ground level. Some 4 elevated radials
>will be added.
>
>2) full size 1/4 wire vertical at ground level, parallel to a tree at a
>distance of 0.5 till max 1 mtr. Ground screen will be some 16 pcs of wire
>buried in the surrounding ground.
>
>
>
>I have no clue about any effects of trees here. They are not pine trees.
>There are lots of other parameters in the whole picture, but the trees is a
>totally unkown factor for me.
>
>Please share me your experiences.

Dear Mark,

I thought no one had many trees over there. There's a rumour that you
make shoes from trees. Can't be so - would be damned uncomfortable.

Anyway, trees are bad news for verticals. They absorb too much of the
energy - the closer you are to the tree, the more energy is induced in
the tree and dissipated as wasted heat. There is no data on this that
I am aware of, but I would say the effect is similar to that of
surrounding your antenna with the wood rafters and sheathing of an
attic.

My recommendation would be to get your energy running perpendicular to
the trees to minimize that coupling and hope for the best. In other
words, in your environment a poor dipole would be better than an
excellent vertical. In fact, that's usually my position even without
the tree problem - Hi!

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail

http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1542. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 00:11:30 UTC
From: SideBand <AINO8SPAMW@cac.net>
Message-ID: <SqfKd.13645$Vj3.494@newssvr17.news.prodigy.com>
Source record: 82931

H. Adam Stevens, NQ5H wrote:
> "David G. Nagel" <nagel@core.com> wrote in message
> news:10vivh0l30s8k19@corp.supernews.com...
>
>>Reg Edwards wrote:
>>
>>
>>>"SideBand" <AINO8SPAMW@cac.net> wrote in message
>>>news:LJdKd.24019$by5.851@newssvr19.news.prodigy.com...
>>>
>>>
>>>>Anyone out there know of any decent solution to getting 160M working in
>>>>a mobile? The application is a semi-truck. I've got the Iron Horses for
>>>>75, 40, 20, 15, and 10M, but I'd like to work something out for 160
>>>>meters that will work on the truck.
>>>>
>>>>I know I'm going to take an efficiency hit, but you're doing that for
>>>>everything except 10M on a Semi anyway.. Just so I can get a signal out
>>>>there to be heard, in the off chance.
>>>>
>>>>ANY suggestions or ideas would be greatly appreciated.
>>>>
>>>>73 de AI8W, Chris
>>>
>>>==========
>>>
>>>For design and performance of a 160 meter band vertical antenna, download
>>>program HELICAL3 from website below. There are other loaded vertical
>>>programs..
>>>
>>>Use 1.5" or 2" diameter plastic pipe, with helical winding of thick
>>>enamel
>>>insulated wire, mounted on vehicle roof, as tall as possible, stayed,
>>>with
>>>short, top caapacitance tuning rod.
>>>
>>>Range on 160m with a few hundred watts = 100 miles at noon on
>>>groundwave.
>>>
>>>1700 miles on very quiet, wiinter nights at midnight via F-layer.
>>>----
>>>.....
>>>Regards from Reg, G4FGQ
>>>For Free Radio Design Software go to

>>>http://www.btinternet.com/~g4fgq.regp
>>>...
>>>
>>>
>>
>>Chris's problem is that he has to keep the tip of the antenna below about
>>13.5 feet from the ground to be legal with the various DOT's.
>>
>>Dave WD9BDZ
>
>
> Chris
> Must the antenna also only mount on the tractor?
> I just thought of a multi-turn loop, corners as far forward and back,
> wide as possible, above the cab.
> Use a tuner and balanced feed.
> 73
> H.
>
>
That's an idea, but most balanced tuners I know of are manual only, and
it's hard enough keeping a 70-foot long, 80,000 lb vehicle on the road
without trying to tune, too..

Thanks for the idea.

de AI8W, Chris

1543. Re: Ferrite bead impedance at UHF

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 00:12:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fg0jv0tdqk2l8ve9un2q0b6kd8ssebsmg5@4ax.com>
Source record: 82933

On Fri, 28 Jan 2005 12:13:51 +1300, MikeN <mnewman@clear.net.nz>
wrote:

>That's an interesting dissertation Richard, but I'm not sure that it
>readily suits my needs.

Hi Mike,

Well, you are going to have to make up your mind. In one post you
want a simple instrument, in another post you are fishing for answers
with an antenna analyzer (but you don't have a FSM?). That seems to
me to be at least a 10dB variation in $$$. Now if the spec is that
loose, I can up the ante another 10dB to give you a direct reading
answer.

How much are you willing to spend?

73's
Richard Clark, KB7QHC

1544. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 00:12:31 UTC
From: SideBand <AINO8SPAMW@cac.net>
Message-ID: <PrfKd.13646$Vj3.11594@newssvr17.news.prodigy.com>
Source record: 82932

grasshouse@hotmail.com wrote:
> http://moonrakerukltd.com/amateur/mobile_w.htm
>
> 7 feet/160 METRE HELICAL WHIP WITH 3/8 BASE, BANDWIDTH (15 kHz) ï¿½49.95
>
>

EEK! That's about $90.00 USD.. give or take...

Was hoping to build something...

de AI8W, Chris

1545. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 00:24:51 UTC
From: SideBand <AINO8SPAMW@cac.net>
Message-ID: <nDfKd.13648$Vj3.1365@newssvr17.news.prodigy.com>
Source record: 82934

Reg Edwards wrote:
> "SideBand" <AINO8SPAMW@cac.net> wrote in message
> news:LJdKd.24019$by5.851@newssvr19.news.prodigy.com...
>
>>Anyone out there know of any decent solution to getting 160M working in
>>a mobile? The application is a semi-truck. I've got the Iron Horses for
>>75, 40, 20, 15, and 10M, but I'd like to work something out for 160
>>meters that will work on the truck.
>>
>>I know I'm going to take an efficiency hit, but you're doing that for
>>everything except 10M on a Semi anyway.. Just so I can get a signal out
>>there to be heard, in the off chance.
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>
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>
> For design and performance of a 160 meter band vertical antenna, download
> program HELICAL3 from website below. There are other loaded vertical
> programs..
>
> Use 1.5" or 2" diameter plastic pipe, with helical winding of thick enamel
> insulated wire, mounted on vehicle roof, as tall as possible, stayed, with
> short, top caapacitance tuning rod.
>
> Range on 160m with a few hundred watts = 100 miles at noon on groundwave.
>
> 1700 miles on very quiet, wiinter nights at midnight via F-layer.
> ----
> ....
> Regards from Reg, G4FGQ
> For Free Radio Design Software go to
> http://www.btinternet.com/~g4fgq.regp
> ....
>
>
Reg:

Thanks for this.. it'll help allot..

Question, though.. What should I put down for "earth electrode loss
resistance"? I'll be using the truck's body as the ground plane.

I'd just thought about doing this with a 2 foot (or so) 2 inch PVC pipe with end caps, feed point at the one end of the PVC, and a 102" whip out the other end. Now that I know this program exists, it's easier to think about! Since the SS whips are tapered, what would be a good guess for the diameter of it? Average it to 3mm? Or will it make that much of a difference?

Thanks

de AI8W, Chris

1546. Re: Tuned dipole Q: Thanks for the info, OM's!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 00:34:27 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <nMfKd.4418$PB.1381@okepread01>
Source record: 82935

Thanks to everyone for the info. For the record, I'm going to leave the antenna tuned for 1.875 and use the tuner for those rare times when I go above 1.930.

Since I operate on 1.893 about 75% of the time (not using the tuner at all), I figure I'll be OK.

--
73's es gd dx de Ken KGWX
Grid EM17ip, Flying Pigs #1055,
List Owner, Yahoo! E-groups:
VX-2R & FT-857

1547. Re: "Maxwell's Equations"?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 00:35:21 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41f988c1.8654101@news.iol.ie>
Source record: 82936
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Richard Clark <kb7qhc@comcast.net> wrote:

: On Thu, 27 Jan 2005 23:44:31 GMT,
: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net (ZZZPK)
: wrote:
: >oh some person who has a problem understanding set theory.
: Is that a chemistry set, or an erector set? Or set to your partner?

no ...

dancing.

1548. Re: "Maxwell's Equations"?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 00:39:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6c2jv01vaabvnbatda49hedgq56oc29ldo@4ax.com>
Source record: 82937
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Fri, 28 Jan 2005 00:35:21 GMT,
zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net (ZZZPK)
wrote:

>>Or set to your partner?
>no ...
>
>dancing.
That IS a dancing term. The question is in what proportion is it to
antennas?

1549. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 00:56:55 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10vj3elrj67jt93@corp.supernews.com>
Source record: 82939

"SideBand" <AINO8SPAMW@cac.net> wrote in message
news:SqfKd.13645$Vj3.494@newssvr17.news.prodigy.com...
> H. Adam Stevens, NQ5H wrote:
>> "David G. Nagel" <nagel@core.com> wrote in message
>> news:10vivh0l30s8k19@corp.supernews.com...
>>
>>>Reg Edwards wrote:
>>>
>>>
>>>>"SideBand" <AINO8SPAMW@cac.net> wrote in message
>>>>news:LJdKd.24019$by5.851@newssvr19.news.prodigy.com...
>>>>
>>>>
>>>>>Anyone out there know of any decent solution to getting 160M working in
>>>>>a mobile? The application is a semi-truck. I've got the Iron Horses for
>>>>>75, 40, 20, 15, and 10M, but I'd like to work something out for 160
>>>>>meters that will work on the truck.
>>>>>
>>>>>I know I'm going to take an efficiency hit, but you're doing that for
>>>>>everything except 10M on a Semi anyway.. Just so I can get a signal out
>>>>>there to be heard, in the off chance.
>>>>>
>>>>>ANY suggestions or ideas would be greatly appreciated.
>>>>>
>>>>>73 de AI8W, Chris
>>>>
>>>>==========
>>>>
>>>>For design and performance of a 160 meter band vertical antenna,
>>>>download
>>>>program HELICAL3 from website below. There are other loaded vertical
>>>>programs..
>>>>
>>>>Use 1.5" or 2" diameter plastic pipe, with helical winding of thick
>>>>enamel
>>>>insulated wire, mounted on vehicle roof, as tall as possible, stayed,
>>>>with
>>>>short, top caapacitance tuning rod.
>>>>
>>>>Range on 160m with a few hundred watts = 100 miles at noon on
>>>>groundwave.
>>>>
>>>>1700 miles on very quiet, wiinter nights at midnight via F-layer.
>>>>----

>>>>...
>>>>Regards from Reg, G4FGQ
>>>>For Free Radio Design Software go to
>>>>http://www.btinternet.com/~g4fgq.regp
>>>>...
>>>>
>>>>
>>>
>>>Chris's problem is that he has to keep the tip of the antenna below about
>>>13.5 feet from the ground to be legal with the various DOT's.
>>>
>>>Dave WD9BDZ
>>
>>
>> Chris
>> Must the antenna also only mount on the tractor?
>> I just thought of a multi-turn loop, corners as far forward and back,
>> wide as possible, above the cab.
>> Use a tuner and balanced feed.
>> 73
>> H.
>>
>>
> That's an idea, but most balanced tuners I know of are manual only, and
> it's hard enough keeping a 70-foot long, 80,000 lb vehicle on the road
> without trying to tune, too..
>
> Thanks for the idea.
>
> de AI8W, Chris
You don't have to use a balanced tuner.
Terminate the loop into the truck body.
What auto tuners cover 160?
I never checked.
73 es gud luck
de NQ5H

1550. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 00:57:50 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10vj3gcii6ul2bb@corp.supernews.com>
Source record: 82938

"Dave VanHorn" <dvanhorn@dvanhorn.org> wrote in message
news:-a2dnWnCTP3OHGTcRVn-1A@comcast.com...
>
>>>
>> A sealed lead acid battery. Like in airplanes.
>
> I suspect that having the word "aircraft" on the case will cost me dearly.
>
> What would that equate to in terms of something I might find at battery
> masters, or the inexpensive section of batteries plus?
>
>
>
I think a car stereo store
But the same technology is available without FAA approval ;^)

1551. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 01:03:48 UTC
From: SideBand <AINO8SPAMW@cac.net>
Message-ID: <UbgKd.13655$Vj3.10167@newssvr17.news.prodigy.com>
Source record: 82940

H. Adam Stevens, NQ5H wrote:
> "SideBand" <AINO8SPAMW@cac.net> wrote in message
> news:SqfKd.13645$Vj3.494@newssvr17.news.prodigy.com...
>
>>H. Adam Stevens, NQ5H wrote:
>>
>>>"David G. Nagel" <nagel@core.com> wrote in message
>>>news:10vivh0l30s8k19@corp.supernews.com...
>>>
>>>
>>>>Reg Edwards wrote:
>>>>
>>>>
>>>>
>>>>>"SideBand" <AINO8SPAMW@cac.net> wrote in message
>>>>>news:LJdKd.24019$by5.851@newssvr19.news.prodigy.com...
>>>>>
>>>>>
>>>>>
>>>>>>Anyone out there know of any decent solution to getting 160M working in
>>>>>>a mobile? The application is a semi-truck. I've got the Iron Horses for
>>>>>>75, 40, 20, 15, and 10M, but I'd like to work something out for 160
>>>>>>meters that will work on the truck.
>>>>>>
>>>>>>I know I'm going to take an efficiency hit, but you're doing that for
>>>>>>everything except 10M on a Semi anyway.. Just so I can get a signal out
>>>>>>there to be heard, in the off chance.
>>>>>>
>>>>>>ANY suggestions or ideas would be greatly appreciated.
>>>>>>
>>>>>>73 de AI8W, Chris
>>>>>
>>>>>==========
>>>>>
>>>>>For design and performance of a 160 meter band vertical antenna,
>>>>>download
>>>>>program HELICAL3 from website below. There are other loaded vertical
>>>>>programs..
>>>>>
>>>>>Use 1.5" or 2" diameter plastic pipe, with helical winding of thick
>>>>>enamel
>>>>>insulated wire, mounted on vehicle roof, as tall as possible, stayed,
>>>>>with
>>>>>short, top caapacitance tuning rod.

>>>>>
>>>>>Range on 160m with a few hundred watts = 100 miles at noon on
>>>>>groundwave.
>>>>>
>>>>>1700 miles on very quiet, wiinter nights at midnight via F-layer.
>>>>>----
>>>>>.....
>>>>>Regards from Reg, G4FGQ
>>>>>For Free Radio Design Software go to
>>>>>http://www.btinternet.com/~g4fgq.regp
>>>>>.....
>>>>>
>>>>>
>>>>
>>>>Chris's problem is that he has to keep the tip of the antenna below about
>>>>13.5 feet from the ground to be legal with the various DOT's.
>>>>
>>>>Dave WD9BDZ
>>>
>>>
>>>Chris
>>>Must the antenna also only mount on the tractor?
>>>I just thought of a multi-turn loop, corners as far forward and back,
>>>wide as possible, above the cab.
>>>Use a tuner and balanced feed.
>>>73
>>>H.
>>>
>>>
>>
>>That's an idea, but most balanced tuners I know of are manual only, and
>>it's hard enough keeping a 70-foot long, 80,000 lb vehicle on the road
>>without trying to tune, too..
>>
>>Thanks for the idea.
>>
>>de AI8W, Chris
>
> You don't have to use a balanced tuner.
> Terminate the loop into the truck body.
> What auto tuners cover 160?
> I never checked.
> 73 es gud luck
> de NQ5H
>
>
The AT-180 does.. so does Alinco's long wire tuner (which can be made to
interface to my 706Mk][G).. There are others, I'm sure It'd be nice to
just press a button and tune the sucker, that's for sure. But I'd also
like to do it for as few dollars as I can..

de AI8W, Chris

1552. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 01:09:25 UTC
From: SideBand <AINO8SPAMW@cac.net>
Message-ID: <9hgKd.13656$Vj3.2238@newssvr17.news.prodigy.com>
Source record: 82941

```
SideBand wrote:
> Reg Edwards wrote:
>
>> "SideBand" <AINO8SPAMW@cac.net> wrote in message
>> news:LJdKd.24019$by5.851@newssvr19.news.prodigy.com...
>>
>>> Anyone out there know of any decent solution to getting 160M working in
>>> a mobile? The application is a semi-truck. I've got the Iron Horses for
>>> 75, 40, 20, 15, and 10M, but I'd like to work something out for 160
>>> meters that will work on the truck.
>>>
>>> I know I'm going to take an efficiency hit, but you're doing that for
>>> everything except 10M on a Semi anyway.. Just so I can get a signal out
>>> there to be heard, in the off chance.
>>>
>>> ANY suggestions or ideas would be greatly appreciated.
>>>
>>> 73 de AI8W, Chris
>>
>>
>> ============================
>>
>> For design and performance of a 160 meter band vertical antenna, download
>> program HELICAL3 from website below. There are other loaded vertical
>> programs..
>>
>> Use 1.5" or 2" diameter plastic pipe, with helical winding of thick
>> enamel
>> insulated wire, mounted on vehicle roof, as tall as possible, stayed,
>> with
>> short, top caapacitance tuning rod.
>>
>> Range on 160m with a few hundred watts = 100 miles at noon on
>> groundwave.
>>
>> 1700 miles on very quiet, wiinter nights at midnight via F-layer.
>> ----
>> ..........................................................
>> Regards from Reg, G4FGQ
>> For Free Radio Design Software go to
>> http://www.btinternet.com/~g4fgq.regp
>> ..........................................................
>>
>>
```

> Reg:
>
> Thanks for this.. it'll help allot..
>
> Question, though.. What should I put down for "earth electrode loss
> resistance"? I'll be using the truck's body as the ground plane.
>
> I'd just thought about doing this with a 2 foot (or so) 2 inch PVC pipe
> with end caps, feed point at the one end of the PVC, and a 102" whip out
> the other end. Now that I know this program exists, it's easier to think
> about! Since the SS whips are tapered, what would be a good guess for
> the diameter of it? Average it to 3mm? Or will it make that much of a
> difference?
>
> Thanks
>
> de AI8W, Chris

I know.. bad form to reply to your own post...

Got something here I think will work...

Resonant at 1.903
h=.61
d=510 (around 2", plus the insulation thickness.)
n=28
w=3
l=2.49
r=3
e=5 ohms

Makes for a 4.6kHz bandwidth (not wide, but I knew that going into
this...) with an efficiency of 2.4 %.. 16.2dB down from "ideal", and
50ohms (or close) with a 4.1uF cap.

Of course, this is assuming that the whip doesn't have to be
perpendicular to the centerline of the coil. If it can be parallel to
the coil (perpendicular to the winds), then this might work... I hope.

I'm gonna play with it some more, and see what I can dig up.. Maybe a
larger coil form will give a wider bandwidth?

de AI8W, Chris

1553. Re: How about a wire 1/4 vertical near a tree ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 01:15:35 UTC
From: W4WNT <w4wnt@carolina.rr.com>
Message-ID: <XmgKd.60170$fE4.7883062@twister.southeast.rr.com>
Source record: 82942

Try the vertical off the ground, keeping the base of the antenna and four radials about 3-4 meters off the ground. should work quite well and uses less radials. Theoretically you can use two radials (worth comparing, you may be pleasantly surprised).

Bill, W4WNT

"M. van Wijk" <pa5mwremove all(incl) between @home.nl> wrote in message news:ctblug$8st$1@news1.zwoll1.ov.home.nl...
> Hello,
>
> I just moved to a new location. My backyard has some 20 trees spread
> around
> at a distance of 5 to max 10mtrs between each of them.
> I would like to opt for a full size 40mtr(7Mhz) vertical and have
> (only)the
> 2 following options her:
>
> 1) full size 1/4 wire vertical inside fishing pole, mounted in a tree at a
> foot height between 7 and 10mtrs from ground level. Some 4 elevated
> radials
> will be added.
>
> 2) full size 1/4 wire vertical at ground level, parallel to a tree at a
> distance of 0.5 till max 1 mtr. Ground screen will be some 16 pcs of wire
> buried in the surrounding ground.
>
>
>
> I have no clue about any effects of trees here. They are not pine trees.
> There are lots of other parameters in the whole picture, but the trees is
> a
> totally unkown factor for me.
>
> Please share me your experiences.
>
> Thanks in advance.
>
> '73 Mark, PA5MW
>
>

1554. Re: How about a wire 1/4 vertical near a tree ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 01:18:38 UTC
From: Buck <iam@this.site>
Message-ID: <pf4jv0puh16ml9f6u9f38bj8284iilri12@4ax.com>
Source record: 82943

On Thu, 27 Jan 2005 22:20:15 +0100, "M. van Wijk" <pa5mwremove
all(incl) between @home.nl> wrote:

>Hello,
>
>I just moved to a new location. My backyard has some 20 trees spread around
>at a distance of 5 to max 10mtrs between each of them.
>I would like to opt for a full size 40mtr(7Mhz) vertical and have (only)the
>2 following options her:
>
>1) full size 1/4 wire vertical inside fishing pole, mounted in a tree at a
>foot height between 7 and 10mtrs from ground level. Some 4 elevated radials
>will be added.
>
>2) full size 1/4 wire vertical at ground level, parallel to a tree at a
>distance of 0.5 till max 1 mtr. Ground screen will be some 16 pcs of wire
>buried in the surrounding ground.
>
>
>
>I have no clue about any effects of trees here. They are not pine trees.
>There are lots of other parameters in the whole picture, but the trees is a
>totally unkown factor for me.
>
>Please share me your experiences.
>
>Thanks in advance.
>
>'73 Mark, PA5MW
>

Don't take me for an expert here, but I like the option number 2.
While the tree may have some effect, I don't think it will stop your
signal or cause so much loss you can't be heard. However, the more
radials, the better. Rather than the four above ground radials, the
16 buried may produce better results.

--
Buck
N4PGW

1555. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 02:17:26 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <10vj8624bcav497@corp.supernews.com>
Source record: 82944

Dave VanHorn wrote:

>>A sealed lead acid battery. Like in airplanes.
>
>
> I suspect that having the word "aircraft" on the case will cost me dearly.
>
> What would that equate to in terms of something I might find at battery
> masters, or the inexpensive section of batteries plus?
>
>
I would never use an aircraft battery for anything other than in an
aircraft. For weight savings aircraft everything is made as light as
possible consistent with safety and operation. Light weight and battery
capacity are completely at odds with each other.

Dave WD9BDZ

1556. Re: longwire attachment question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 02:52:46 UTC
From: m <m@spam.off>
Message-ID: <XUhKd.14693$8i7.442876@wagner.videotron.net>
Source record: 82945

Great stuff...thanks Richard!

Ive got a homemade tuner going at present that is doing a good job of taming all the signals that my 70ft. wire is getting....so things are really getting fun! (even the hour putting up the wire early Sun day morning, about -35 degrees.. ;-)

Thanks again

Mike

Richard Harrison wrote:
> Mike wrote:
> "I was mainly concerned with signal loss due to load mismatch if I use
> coax to get the signal into the basement for the wire."
>
> A versatile tuner allows a match between antenna and radio under most
> conditions. It does not prevent an unshielded and imbalanced line from
> picking up noise on the path to the radio. Coax may avoid noise pickup.
>
> Autotransformers at each end of the coax can give high-impedance match
> at the antenna and at the radio. Such transformers are used to match
> Beverage Antennas to coax.. See the "ARRL Antenna Book" or ON4UN`s
> "Low-Band DXing" for ferrite-winding details.
>
> An air-core transformer at each end of the coax can step up / down the
> impedance too. Suppose you want to match 450 ohms to 50 ohms. The
> impedance ratio is 9 to 1. The turns ratio is 3 to 1.
>
> The reactance of the primary may ne chosen as about 10 times the 450
> ohms or 550 ohms of the antenna. About 500 microhenries (0.5 mhy) would
> work. My ARRL L/C/F Calculator shows the number of turns per inch, wire
> size, coil diameter, and coil length needed to make the coil.. There`s
> nothing critical about it. Its inductance was an arbitrary choice.
>
> The coils are tapped up about 1/3 of the turns from the cold (grounded)
> end of the coil, for the coax connection. The full coil is used across
> the antenna and across the receiver input.
>
> If you have no noise, a single wire connecting your receiver to the
> antenna will likely grab more signal and lose less of it on its way to
> the receiver.
>
> I`ve used the transformers on each end of the low-impedance line
> (twisted pair)) to the receiver. This system was part of a 1938 GE

> "V-Doublet" antenna kit. It was a quiet all-band signal grabber.
>
> Best regards, Richarrd Harrison, KB5WZI
>

1557. RFI: 2M & Aviation band antenna for pick-up truck.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 03:06:58 UTC
From: Slip'er <cjhixon1@cox.net>
Message-ID: <X_hKd.3293$5t.235@fed1read07>
Source record: 82946

I have a handheld tranceiver (VS VXA-700) and I'd like to mount a good antenna on my pick-up. Can you point me to a good retail product? My pickup is an 02 F150. I'm thinking I'd like to use one of the stake pockets as a mounting point? If I need to compromise on antenna band width, I'd lean toward best reception on 2m band.

Anything hidden pitfalls I need to be aware of?

Thanks,
Carl

1558. Re: 2M & Aviation band antenna for pick-up truck.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 03:26:31 UTC
From: Slip'er <cjhixon1@cox.net>
Message-ID: <ghiKd.3296$5t.3240@fed1read07>
Source record: 82947

Also, what about a 1/4 wave glass mount? Any good? Others better? Thanks.

1559. Re: Ferrite bead impedance at UHF

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 03:55:33 UTC
From: MikeN <mnewman@clear.net.nz>
Message-ID: <4dajv0t3i98ehcqnfo0kjd9ro7ek21pue1@4ax.com>
Source record: 82948

On Thu, 27 Jan 2005 16:12:27 -0800, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Fri, 28 Jan 2005 12:13:51 +1300, MikeN <mnewman@clear.net.nz>
>wrote:
>
>>That's an interesting dissertation Richard, but I'm not sure that it
>>readily suits my needs.
>
>
>Hi Mike,
>
>Well, you are going to have to make up your mind. In one post you
>want a simple instrument, in another post you are fishing for answers
>with an antenna analyzer (but you don't have a FSM?). That seems to
>me to be at least a 10dB variation in $$$. Now if the spec is that
>loose, I can up the ante another 10dB to give you a direct reading
>answer.
>
>How much are you willing to spend?
>
>73's
>Richard Clark, KB7QHC

Hi Richard

Well that calorimeter is a simple instrument, but how can I apply my
simple knowledge to give a meaningful result.

Would it go something like this?

1. Take a polystyrene cup packed in a piece of polystyrene foam,
and with a polystyrene lid.

2. Pass a piece of thin - say RG174 - coax through the lid.
Run the centre conductor through the bead and wrap back around bead
and solder to to braid.

3. Immerse the bead in say 150 cc of H20 - initially at freezing.
Use an in-glass thermometer to measure temperature. Apply some 70 cm
rf from my handheld (on low power).

4. Measure the rf voltage across to the coax at the ferrite bead
using a simple diode detector - calibrated to give RMS applied
voltage E.

5. Measure the temperature rise with time until a steady state above ambient temperature is reached.

6. Replace the ferrite bead with a resistor, and apply DC voltage same as E to get the same temperature rise in the same time period. Change the resistance value as necessary to get the same temperature rise over same time.

7. Dummy load is now dissipating the same power as the ferrite core did.

8. Calculate the impedance from Z=E^2 / W.

9. Repeat to see if results are reproducable.

10. Substantial inaccuracy will result from differing thermal mass of bead and resistor. Bead is 29mm long, with 16mm OD, and 8mm ID.

11. So what should I do to refine this procedure?. What am I missing here?

I'd like your comments.

Thanks

MikeN, ZL1BNB

1560. Isotron antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 04:11:06 UTC
From: George Csahanin <george@dyb.com>
Message-ID: <uXiKd.20173$wi2.9270@newssvr11.news.prodigy.com>
Source record: 82949

Howdy y'all.

I had to finally try one. Got a 40meter Isotron, put it up at about 15'. It does work.

Not sure how well, but it sends and hears. Worked a guiy in Cuba from Awstin, TX and a K6 on CW. Not the greatest reports.

Anybody else tried them?

Just curious. Please no flames. This was idle curiosity.

GeorgeC
W2DB

1561. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 04:22:12 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10vjffi5fmq3cf7@corp.supernews.com>
Source record: 82950

"David G. Nagel" <nagel@core.com> wrote in message
news:10vj8624bcav497@corp.supernews.com...
> Dave VanHorn wrote:
>
>>>A sealed lead acid battery. Like in airplanes.
>>
>>
>> I suspect that having the word "aircraft" on the case will cost me
>> dearly.
>>
>> What would that equate to in terms of something I might find at battery
>> masters, or the inexpensive section of batteries plus?
>>
>>
> I would never use an aircraft battery for anything other than in an
> aircraft. For weight savings aircraft everything is made as light as
> possible consistent with safety and operation. Light weight and battery
> capacity are completely at odds with each other.
>
> Dave WD9BDZ

The aircraft sealed lead acids and the ones at the car stereo store are
almost identical.
My point on a sealed battery has to do with hydrogen gas in a closed space.
H.
NQ5H
(And a pilot since '67)

1562. THIS IS REALLY GREAT AND IT REALLY WORKS!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 04:24:52 UTC
From: "darellesbac@yahoo.com" <darellesbac@yahoo.com>
Message-ID: <1106886292.039468.10440@f14g2000cwb.googlegroups.com>
Source record: 82951

Make Tons Of Money Fast!
I was browsing through newsgroups, just like you are, and came across an article similar to this that said you could make thousands of dollars within weeks with an initial investment of $6.00! I thought," Scam", but I was curious, so I kept reading. It said : send $1.00 to each of the 6 names and address stated in the article. Then place your name and address in the bottom of the list at #6, and post the article in at least 200 newsgroups. (There are thousands) No catch.
I was skeptical and worried about the legal aspects of it all, but checked it out with the U.S. Post Office (1-800-725-2161) and they confirmed that it is legal! I invested the measly $6.00. GUESS WHAT!!... Within 7 days, I started getting money in the mail! I figured it would end soon, but the money kept coming in. My first week, I made about $25.00. By the end of the second week I had made a total of over $1,000.00! Third week I had over $10,000.00. Fourth week and I've made a total of just over $42,000.00! How and why this works.. Make a copy of this NOW, so you can get information off of it as you need it.
1: Get 6 separate pieces of paper and write the following on each piece "PLEASE PUT ME ON YOUR MAILING LIST." Now get 6 US $1.00 bills and place ONE inside EACH of the 6 pieces of paper so the bill will not be seen through the envelope to prevent thievery. Next, place one paper in each of the 6 envelopes and seal them. What you are doing is creating a service by this. Mail the 6 envelopes to :
#1) Gary Wilson 21 Weston St. Apt-315 GrandRapids, MI 49503
#2) Fred P.O. Box 25534 Yuma, AZ 85367
#3] Jason Calbourn 452 Kuhn Street Pontiac, MI. 48342
#4] Natalie Sanderson 114 Oak Hereford, TX 79045
#5] Demetria Garcia P.O. Box 421 Richgrove CA 93261
#6) Thomas Ledbetter 1401 E.Bristol St.Apt. A202 Phila Pa 19124
2: Take the #1 name off the list that you see above, move the other names up (6 becomes 5, 5 becomes 4, etc...) and add YOUR Name as number 6 on the list. Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups. (there are close to 24,000 groups) Just need 200, but remember, more posting, more money.

1563. Re: Ferrite bead impedance at UHF

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 05:01:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <lvejv09je0uo4cpq6f34hebm5vlqtbm61q@4ax.com>
Source record: 82953

On Fri, 28 Jan 2005 16:55:33 +1300, MikeN <mnewman@clear.net.nz>
wrote:

>6. Replace the ferrite bead with a resistor, and apply DC voltage
>same as E to get the same temperature rise in the same time period.

Per your earlier use of an RF detector, you have to first consider the conversion factor (was the meter peak reading or average?). Why bother, you already have a power source (the HT) you already have a detector (your same simple detector). No conversion necessary.

>Change the resistance value as necessary to get the same temperature
>rise over same time.
>
>7. Dummy load is now dissipating the same power as the ferrite
>core did.
>
>8. Calculate the impedance from Z=E^2 / W.

Hi Mike,

Step 8. is unnecessary given step 7. You only want to know the ferrite R which is directly obtainable from the Resistor setting (or Resistor choice). You don't even need to compute power anymore as that has fallen out of the equation in the method you describe - which, by the way, is a good example of crafting a solution. It shows you simplifying my stark description of caloric measurement to instead engage in bolometrics (comparison of heating). This method is probably superior in simplicity and results would easily be within 20% (which is not shabby for UHF).

Your introduction of a resistor is also an example of what Metrologists call a "transfer standard." It is an example of using the "substitution method." Your only concern is that the resistor present a true resistance and not some complex Z. In other words it should match the feed, and not offer much stray X. With that said, it becomes a tougher problem (but then you needed to do the same thing with the actual Z of the ferrite) that is, matching. It is arguable that they would both mismatch equally (and given the Power term is canceled, match is not particularly necessary). Everything here depends on your re-obtaining identical indications.

This discussion reveals the cost of absolute determinations.

To increase the success it behooves you to up the power to cut down on environmental temperature biasing the experiment (also cuts down on other subtle influences like the difference in mass of heated

samples).

There are also indirect methods which can tolerate far more imprecision. Ferrites are composed with bulk properties that have frequency dependencies. These properties, however, vary quite smoothly and slowly across great ranges of frequency. They also exhibit distinctive family properties. The different grades of Ferrites react with peak Resistances in different bands, but for our purposes one family of Ferrites can be quite useful across a significant percentage of bandwidth. Consult:
http://bytemark.com/products/ferrmat.htm
Unfortunately, Bytemark.com has fallen short of complete documentation. They offer a link to illustrate Z over F, but it is a dead link (and has been for years).

However, by this one page alone you can discern the family characteristics I speak of. Your best hope is that your beads are composed of something like type 43 or 64 instead of type 61 or 73.

An indirect method would be to measure the bead in series with a good resistor - at two or three frequencies. HF, VHF and UHF would be eminently suitable. If the bead shows a higher R at UHF, this trend would tend to support an assumption you are have a suitable material type. Both types 43 and 64 should exhibit useful resistances in both bands. The slope frequency characteristics of these materials easily span both higher bands.

Let's put some useful context to this. For any bead that snuggly fits over the jacket of an RG-58 cable the following Rs should be seen for:

Material HF VHF UHF
75 ~20 ~10 ~5
73 | 77 25-30 ~20 ~15
43 ~20 ~32 ~30
64 ~5 ~30 ~35

This should put material identification within reach.

73's
Richard Clark, KB7QHC

1564. Re: Ferrite bead impedance at UHF

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 05:05:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10vji0ofvj0mpd8@corp.supernews.com>
Source record: 82952

MikeN wrote:
> Back on 25/04/03 re "Choke balun impedance recommmendations" Roy
> Llewellan wrote:
>
> "By all means, the slide rule is fine.
>
> To measure the common mode impedance of a choke balun, simply wind a
> piece of wire on the core with the same number of turns as you'll use
> for the actual balun. Connect one end of the wire to the center
> conductor of the antenna analyzer connector and the other to the
> connector shell. Read the impedance at the frequency of interest. Or
> if you prefer, you can wind it with a short piece of the actual coax
> you'll be using. Connect the two coax conductors together on each end
> of the winding, and measure as you would with a single wire. If the
> impedance is out of the analyzer's range, you can use a different
> number of turns and the relationship that the impedance is
> proportional to the square of the number of turns.
>
> Use the same method to measure a W2DU type balun (ferrite cores
> slipped over a coax line). If the measurement is out of range, measure
> a different number of cores and extrapolate -- the impedance is
> directly proportional to the number of cores.
>
> Roy Lewallen, W7EL
>
> My queries:-
>
> Would this method give meaningful results if used at 70 cms using the
> UHF range on something like a MFJ antenna analyser?
>
> I could pop various beads onto a short piece of coax and determine the
> relative effectiveness, but how good would this be for absolute
> results?
>
> Thanks

The MFJ antenna analyzer only reports SWR at 70 cm, and any value >5 is just reported as ">5". So I don't think it would be useful for this measurement, except maybe as described below. Even at 2 meters, you'd have to be careful to keep the length of the wire containing the beads at a small fraction of a wavelength. That might not be possible with something like a complete W2DU balun -- you'd probably have to measure a smaller number of beads and extrapolate.

One thing you might try is this:

Make up a test jig from a female connector (BNC would be best), a piece of copper clad board, a piece of small diameter coax two or three inches long, and a small 47 or 51 ohm resistor. (You'll probably have to use something smaller than RG-58 because you'll have to bend it into a loop. But it's important that it be considerably shorter than a quarter wavelength long.) Solder the BNC connector directly to the ground plane, and connect the coax to it with extremely short leads. Call this end 1 of the coax. Solder the resistor across the other end of the coax, end 2, with extremely short leads. Hook the MFJ to the test connector with an ordinary coax patch cable and measure the SWR at the frequency of interest. Unless you can get a reasonable SWR (well below 5:1) with this setup, there's no point in proceeding. If you can, then try touching the shield side of the short coax to the ground plane. The SWR should remain reasonable.

If you got a reasonable SWR with this setup, the next step is to touch the *center* conductor of end 2 and attached resistor to the ground plane at the same point as the connector is soldered. Notice that the SWR skyrockets -- this is simulating a worst case situation for a balun. (If the SWR doesn't skyrocket, your coax is too long to do a valid test.) Now add beads to the outside of the short coax and repeat the test, that is, touch the center conductor of end 2 to the ground plane at the connector. If you can find a combination of beads that'll drop the SWR back down to within the range of the meter, you have enough impedance for a balun. You could probably get by with less, but any combination of beads that passes this test will surely be enough.

Roy Lewallen, W7EL

1565. Re: How about a wire 1/4 vertical near a tree ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 05:06:19 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <TvmdnUwvhdyxVWTcRVn-rg@comcast.com>
Source record: 82954

"M. van Wijk" <pa5mwremove all(incl) between @home.nl> wrote in message
news:ctblug$8st$1@news1.zwoll1.ov.home.nl...
> Hello,
>
> I just moved to a new location. My backyard has some 20 trees spread
> around
> at a distance of 5 to max 10mtrs between each of them.
> I would like to opt for a full size 40mtr(7Mhz) vertical and have
> (only)the
> 2 following options her:
>
> 1) full size 1/4 wire vertical inside fishing pole, mounted in a tree at a
> foot height between 7 and 10mtrs from ground level. Some 4 elevated
> radials
> will be added.
>
> 2) full size 1/4 wire vertical at ground level, parallel to a tree at a
> distance of 0.5 till max 1 mtr. Ground screen will be some 16 pcs of wire
> buried in the surrounding ground.
>
>
>
> I have no clue about any effects of trees here. They are not pine trees.
> There are lots of other parameters in the whole picture, but the trees is
> a
> totally unkown factor for me.
>
> Please share me your experiences.
>
> Thanks in advance.
>
> '73 Mark, PA5MW
>
>
Mark,
I had a 40 m 1/4 vertical hanging from a tree branch. Feedpoint was about 8 meters above ground with 4 radials. On the average, performance was equal to the 40 m dipole at 15 meters. It was about 3 meters from the tree trunk. If you are going to have buried, or ground mounted radials, you would need a lot more than 4. Oh, BTW, the tree is 25 m tall.

Tam/WB2TT

1566. Re: Odd observation - nonresonant beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 05:14:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10vjii4l4hhjs58@corp.supernews.com>
Source record: 82955

bob wrote:
>>Expressed another way, is a non-resonant antenna sometimes better for
>>reception than a resonant antenna?
>
>
> There are several possible causes here.
> Probably, on the design frequency, its antenna is probably matched to 50
> ohms , for good transmission. A matched antenna does not necessarily give
> the best S/N for reception, and usually a mismatch does. Its hard to
> calculate.

Although this can be true at VHF/UHF, where the receiver noise dominates, it's not true at HF, where the observation was made. At HF, external noise dominates, so the quality of impedance match makes no difference in S/N ratio.

> One filing mentions the possible change in pattern, and therefore a
> possible change in S/N.
>. . .

I'm certain that's the explanation (assuming it's not a mistaken subjective observation) -- the noise is coming pedominantly from one direction, and by tuning the antenna a pattern null was created in that direction. Signals from other directions are then stronger than the reduced noise.

I've often directed my 40 meter 4 square array toward the southwest to put a null toward the U.S. Midwest and Gulf Coast, where a lot of thunderstorms occur in the summertime. VKs jump out of the noise when I do that. Rotatable loop receiving antennas are often used in the same way, to null out noise coming from one direction.

Roy Lewallen, W7EL

1567. new game for antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 06:01:01 UTC
From: Mushnick <nospam@nospam.com>
Message-ID: <35u2ohF4o4ugpU3@individual.net>
Source record: 82956

http://www.outpimp.com/?x=487454
Easy to go far

1568. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 07:43:59 UTC
From: nm5k@wt.net
Message-ID: <1106898239.681287.217750@z14g2000cwz.googlegroups.com>
Source record: 82957

SideBand wrote:
> H. Adam Stevens, NQ5H wrote:
> > "SideBand" <AINO8SPAMW@cac.net> wrote in message
> > news:LJdKd.24019$by5.851@newssvr19.news.prodigy.com...
> >
> >>Anyone out there know of any decent solution to getting 160M
working in a
> >>mobile? The application is a semi-truck. I've got the Iron Horses
for 75,
> >>40, 20, 15, and 10M, but I'd like to work something out for 160
meters
> >>that will work on the truck.

Are the "iron horses" like hamsticks, but another brand? What I would
do is
get another one. Doesn't really matter what band, but I would get the
one
that is tallest physically, and uses a tall "stinger" whip. Then strip
it down,
and make a "plastic bugcatcher" with a new wider coil.
I use this type of antenna myself, except that mine is 80-10 with a
coil
than can be tapped for each band.
For a 160m whip with no hat, coil position will have a large influence
on
efficiency. So if say you used a junk 6 ft tall hamstick, I would wind
the
new coil at the top of that glass whip, and then clamp a tall "4-5 ft"
whip
to the top of that. Use a thin plastic form to wind the coil on. On
mine, the
the coil is wound on an appx 3 inch plastic tube, and is capped on each
end
with a plastic peanut butter jar cap. Melt a hole large enough for the
glass
whip to insert snugly up the middle of that coil form, and apply some
glue,
etc to hold it in place. For an 80m antenna built in this manner, you
would
need appx 80-85-90 turns or so, plus or minus...That is about a foots
worth of
winding on the 3 inch form, if the windings are made from an insulated
wire,
say 18 gauge or so.

The insulation will add some spacing to the windings, which is good..
My antenna is a 6 ft glass stick, with the coil at the 5 ft level. The
coil
is about a foot tall, end extends to the top of that glass mast. I use
a 5 ft
stinger whip, so my total length is 10 ft, or appx 3.3 m.
To use 160m on the same stick, your coil will be slightly more than 3
times
as long, to keep the same winding ratio. So if say on 80, the coil was
at the
5 ft level, on a 6 ft "1.5m" base mast stick, ".3 m coil length in
Reg's
vertload program", on 160m, the coil would be 1 meter long, and the
bottom
of the coil would drop to about the .8 m level, but still extend to the
top
of that glass mast. Thats a pretty tall coil, and will have some weight
with
all that wire..So I wouldn't get carried away with wire gauge...I'd use
16-18
gauge or so...
Anyway, thats about the cheapest way to make a 160m antenna that will
work
halfway well. It's a bugcatcher electrically...Of course, you will need
a
matching device..

To see a picture of mine, go to... http://web.wt.net/~nm5k/fd03-1.jpg
Thats about the only pix I can dig up that shows the whole antenna.
It's on the truck utility bed, about 4 ft off the ground at the base...
Even with the distant picture, you can make out the stinger whip at
top...
Will give you an idea what I'm talking about...
That one is 10 ft total. The glass whip was a 6 ft 20m hamstick, that
was
stripped of it's top coil. The stinger whip is 5 ft tall. You can see
the
homebrew coil at about the 5 ft level, extending to the top of the
glass
whip. The stinger is held on by two small hose clamps.
That's the 80m coil, which is nearly a foot tall. If you converted that
to
160m, the base of the coil would have to drop 2-3 ft, in order to have
the top
of the coil at the top of the glass stick.

> >>
> >>I know I'm going to take an efficiency hit, but you're doing that
for
> >>everything except 10M on a Semi anyway.. Just so I can get a signal
out

> >>there to be heard, in the off chance.

Yep...Using vertload, my antenna has about a 14.7 % efficiency on 80m, using
6 ohms as the ground loss number...On 160m, using the described 160m coil, and
same overall length, ground loss number, efficiency would drop to about 2.07 %
.. But, thats the way the ball rolls....It will still work...
I've worked many 160m mobiles..
A small amp would help...
I think one of the "hamstick" type companies makes a 160m "hamstick", if you
don't feel like making one...
One thing to remember....On 160m, ground losses will almost certainly overshadow
coil losses, so trying to make a super duper efficient coil, with real thick
wire, is generally a waste of time. Always use the longest stinger you can get
away with..I also have a solid 3 ft base mast that I can add, and make the
antenna longer "13 ft" and more efficient. In that case, the coil is 8ft up,
instead of 5 ft. Efficiency jumps up a good bit. It's not the prettiest thing,
but it works real well on all bands 80-10. And the best part was it didn't cost
me a dime. There is a black wire that taps the coil, but you can't really see
it in that picture. I also would like to make a 160m antenna, and might just
make me one like I described. I'll probably have a stand alone 160m antenna,
and go back to that one, on the other bands. I have a quick disconnect.
MK

BTW, if you are curious...That truck is my 68 F-250...It's kinda old...
I now also have yet another old ford..."74 F-100" It's got a camper also...
I'm trying to decide where to mount the antenna on it...Not as easy as that 68.
..I'll probably have to install a ball mount on the cab on the other truck...
I have a thing about old trucks...Kind of an illness...:/ I may eventually swap
one out, and buy another small car...Can't decide which one I like best though..
That 68 in the pix has nearly been rebuilt mechanically...New engine, front end,
etc, etc, etc...Needs to be repainted though... But the 74 is a bit

smoother,
being a 1/2 ton, instead of a 3/4 like the 68..Maybe better for long
trips.
The camper is a bit bigger and about a ft taller on the 74 also...
Yes, we have newer cars too, but I don't drive them too much
myself...:/
I like my "war wagons". People stay out of my way...

1569. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 08:32:55 UTC
From: SideBand <AINO8SPAMW@cac.net>
Message-ID: <XMmKd.13722$Vj3.3654@newssvr17.news.prodigy.com>
Source record: 82958

Mark:

Great idea...

In fact, the semi I'm planning to put this on is a '97 Ford LTLA9000. Only 872,722 miles on it. Just had the motor rebuilt, so it'll be good for at least another half a million. This was my first truck. I'm planning on keeping it until I retire, then turning it into a motor home.

The vertload program is quite interesting. It shows I can make an antenna with twice the efficiency of a base loaded antenna with similar dimensions, and I can tailor it to the truck for where I can mount it, and all of a sudden new mounting possibilities are popping up.

I took the fairings off the truck awhile ago, and the bolt holes on the fuel tank straps are still there for the fairings. It would be quite simple to weld up some angle-iron to make a mount for this, and keep the feed point low to the ground, so I can have a longer whip (higher efficiency! Yay!) on top of the load coil.

What I've got figured here is a 2 foot long, 1 inch OD copper "mast", a 1 meter (3 feet, 3 inches), 3 inch OD coil form, and a 78 3/4" whip, which should be resonant close to 1.903 with a 3.81% efficiency. Total overall height of the antenna is 3.61M, or 142 1/8", or 11' 10 1/8", which leaves me a little over a foot and a half to play with. Good deal.

Reg's vertload program (THANKS REG!) doesn't show a 2:1 SWR bandwidth, so I'll have to try it to see what the bandwidth will be. I really only need it to handle the width of an SSB signal (3 kHz), with some "wiggle room" to move up or down a few KC's for an SSB net I want to check in to during the winter nights. I have an AT-180 tuner I can use to match it down to "usable".

I'm going to play with the numbers a bit to see where I can move things around to get even better efficiency, then I'm going to build the sucker when I have it where I want it.

The really good news here is that I can build this thing for just a little over $20.00, which is exactly where I want it to be. Of course, I won't get around to building it until this summer, but it'll be ready for next winter's nets..

I just wish Reg's program would show a 2:1 SWR bandwidth (or a 3dB point bandwidth!).. that would be a godsend to those of us who would like to build some of these for SSB use.

Just thought I'd share.. This is cool. If I'd known stuff like this was
out there, I would have been playing with mobile antenna building a long
time ago.

73 de AI8W, Chris

nm5k@wt.net wrote:
> SideBand wrote:
>
>>H. Adam Stevens, NQ5H wrote:
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>>>"SideBand" <AINO8SPAMW@cac.net> wrote in message
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> I like my "war wagons". People stay out of my way...
>

1570. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 10:28:06 UTC
From: nm5k@wt.net
Message-ID: <1106908086.474192.61230@c13g2000cwb.googlegroups.com>
Source record: 82959

It would be quite
simple to weld up some angle-iron to make a mount for this, and keep
the
feed point low to the ground, so I can have a longer whip (higher
efficiency! Yay!) on top of the load coil.....................

I'd ground that angle iron as well as possible. Myself, I tried angle
iron
one time, and it didn't work too well. I did run an extra grounding
strap to
body/frame. But it wasn't enough...I think the problem was from a lack
of
metal area directly underneath the antenna. That seems to be fairly
critical.
When I moved it from that angle iron support behind the back window,
and moved
to the side toolbox, the low band performance was much better. The top
of that
utility bed toolbox is a pretty good platform, and is a few inches
wide, and
naturally, pretty well grounded. Maybe use real wide angle iron??
I think you will find the bandwidth to be fairly narrow. And swaying of
the
antenna vs body of the truck will vary the SWR a lot at that low freq.
If it's
rigid, or guyed some way, it will be more stable. Should be plenty
enough for
SSB bandwidth, but for multiple freq's, I'd add extra taps on the coil,
to allow
you to move around. I have three or four 80m taps on my coil...
BTW, I was thinking about coil length vs wire size, and I may have been
a bit
off. An 80m coil of insulated 14 gauge would probably be about a
foot...
But 16 or 18 gauge would probably be a bit shorter. About wire size...
In the past I had made coils using larger dia wire thinking it really
mattered..
It does make a slight improvement, but I'd say slight...Hardly worth
the extra
weight...I made one using thick 14 gauge, and I can't tell a heck of a
lot of
difference compared to 16 or even 18 gauge. I think my present coil is
16 gauge
wire. That antenna is *light*. About like a fishing rod and reel. Using

thick
wire will make the coil much heavier, and then you have to worry about
it overly
swaying, unless guyed. So I don't use overly thick wire anymore. If I
make a 160
antenna, it will probably be 16 gauge...Maybe even 18...
If you mount the antenna low, it does increase ground loss, but I think
getting
the coil that much higher from the base *should* override the increased
ground
loss. Or as good as I can calculate anyway...I've never actually
mounted one
real low yet to compare..I do have hitches...Maybe I could try an
experimental
antenna on my bumper/bumper hitch...Would give me about a 3 ft longer
base under
the coil, compared to it's current mount on the toolbox.
Yea, vertload is pretty handy...I think probably the "Reg" program I
use the most
out of his vast collection. But I've been running these "plastic
bugcatchers" for
years...Since about 1990 I guess...I like the light weight. I've got a
"real"
80 m bugcatccher coil, and just that coil alone probably weighs 5 times
the total
weight of that 10 ft antenna I have. It's heavy and requires heavy
hardware to
support it. But heavy hardware doesn't "talk" any better than light
hardware..:/
MK

1571. Re: 2M & Aviation band antenna for pick-up truck.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 10:53:41 UTC
From: glc1173@aol.com
Message-ID: <20050128055341.17775.00000247@mb-m07.aol.com>
Source record: 82960
Body handling: HTML body converted to readable text

Slip'er wrote:
>2M & Aviation band antenna for pick-up >truck.

I'd just do what most with CBs in pickups do - snake the coax out through a window and put a mag mount on the truck roof.
On-glass antennas are inefficient.
Matt,
N4GSV

~~~~~~~~~~~~~~~~~~~~
Dissident news - plus immigration, gun rights, weather, Internet Gun Show
ALAMANCE INDEPENDENT:
official newspaper of the Vast Right Wing Conspiracy
~~~~~~~~~~~~~~~~~~~~

1572. Re: How about a wire 1/4 vertical near a tree ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 12:38:01 UTC
From: kelly@dvol.com
Message-ID: <1106915881.317383.276900@f14g2000cwb.googlegroups.com>
Source record: 82961

M. van Wijk (incl) wrote:
> Hello,
>
> I just moved to a new location. My backyard has some 20 trees spread
around
> at a distance of 5 to max 10mtrs between each of them.
> I would like to opt for a full size 40mtr(7Mhz) vertical and have
(only)the
> 2 following options her:
>
> 1) full size 1/4 wire vertical inside fishing pole, mounted in a tree
at a
> foot height between 7 and 10mtrs from ground level. Some 4 elevated
radials
> will be added.
>
> 2) full size 1/4 wire vertical at ground level, parallel to a tree at
a
> distance of 0.5 till max 1 mtr. Ground screen will be some 16 pcs of
wire
> buried in the surrounding ground.
>
>
>
> I have no clue about any effects of trees here. They are not pine
trees.
> There are lots of other parameters in the whole picture, but the
trees is a
> totally unkown factor for me.
>
> Please share me your experiences.
>
> Thanks in advance.

You might consider a simple inverted L given all the trees you have available. Build a very conventional half-wave coax-fed 40M dipole. Suspend half of it (35 feet long?) vertically with the lower end a foot or two above the ground from one tree then pull the other half more or less horizontally to another tree. Pull the coax away from the elevated feedpoint toward the Radio Room. Trim wires to resonance. No messy radials needed and most likely you wouldn't need a tuner or "tuning network" either. It would be just a standard inverted vee rotated 45°. Half-wave inverted Ls without radials scream, been there, done 'em.

Research on the subject done by the U.S. Army years ago determined that trees have no measurable effects on HF antennas. Trees do have an effect on vhf/uhf antennas. There was a thread in this NG in the past which addressed the topic in sdome detail and which is probably still archived. Run a search on "Do Trees Absorb RF?"

>

> '73 Mark, PA5MW

w3rv

1573. Re: Dual Rhombic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 13:34:58 UTC
From: DeltaEcho <Makniovo_9a4de@iovo.ipc.hr>
Message-ID: <ctdf1k$b9f$1@sunce.iskon.hr>
Source record: 82962

"Pierre Desjardins" <pierred1@sympatico.ca> wrote in message
news:03mcv0d9vlip0llv09mfht36o53sokpfra@4ax.com...
> Hi to all
>
> I read somewhere that the dual rhombic could give a gain of almost 27
> db using these dimension for 144,2 mHz:

Nowhere near 27 dB.

>
> L1- 29.5 ft, L2- 50.67 ft, X- 52.2 degrees, Y- 37.7 degrees, R1/2 660
> ohms noninductive, Ht: 12.29 ft, Elevation angle: 7.5 degrees,
> Vertical beamwidth: 5.5 degrees and Horizontal beamwidth: 8.5 degrees.
We did once erect exactly the same antenna. It was about 1 S unit worse than
2x 17 elements F9FT yagi, tested on RX only and for

1 hour when we hastily dismantled it due the snow blizzard :(. OTOH, -1 S
unit on 34 el yagi is nod bad for piece(s) of wire...

>
> Has anyone ever verified this? Here, using simulation with EZNEC+, I
> get about 15 dBi in free space and much lower on real ground. Am I
> missing something?

This is about right. My single rhombic for 1296 MHz got pretty much the
same gain and radiation pattern as simulated in NEC2.

>
> Thanks for your answers
>
> 73 de Pierre VE2PID

GL de Mario 9A4DE

1574. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 13:53:20 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ctdg4g$96q$1@hercules.btinternet.com>
Source record: 82963

Chris,
Diameter of whip or loading rod is not critical. Enter average diameter over its length.

If not stated, bandwidth is between 3dB points when transmitting. When receiving, bandwidth is broader, say the 2 dB points, because the receiver input resistance damps down the very high antenna Q.

Earth electrode resistance depends on size of vehicle and type of soil under it. For a mobile home enter 3 ohms. For a volkswagon beetle enter 14 ohms.

A larger coil form will give a narrower bandwidth. Double length and height and for the same inductance (fewer turns), coil Q will also be doubled. You can't have high efficiency without high Q and narrow bandwidth.

If a flexible whip is used, to reduce overall height it can be curved backwards in parallel with the vehicle's roof. This also allows fewer turns of thicker wire on the helix and a higher coil Q with greater efficiency. There will be an overall gain but not so great as if the whip is vertical throughout its length.

Leave a gap equal to helix diameter between the bottom of the helix and a metal roof.

The helix is in fact the L&C Z-matching coil. On 160m, in order to resonate with its own self-capacitance, it needs a large inductance. There will be several hundred turns. Therefore, to have a loss as low as possible it has to be physically large. The only space available is in the antenna - and that's why it's there.

Ignore silly irrelevant done-to-death arguments about whether the current at one end of the helix is or is not the same as the other.

The most important dimension of short verticals is overall height. Next comes physical size of helix. The fatter it is the better. Obesity is not a problem. Only the wind.

Reg, G4FGQ

1575. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 14:56:38 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10vkkl4naf1jr07@corp.supernews.com>
Source record: 82964

"Jim Higgins" <me7@privacy.net> wrote in message
news:j8jkv0pu5f9pfchbf1chu9shof82k4l0p7@4ax.com...
> On Thu, 27 Jan 2005 22:22:12 -0600, in
> <10vjffi5fmq3cf7@corp.supernews.com>, "H. Adam Stevens, NQ5H"
> <NQ5H@ARRL.net> wrote:
>
>>
>>"David G. Nagel" <nagel@core.com> wrote in message
>>news:10vj8624bcav497@corp.supernews.com...
>>> Dave VanHorn wrote:
>>>
>>>>>>A sealed lead acid battery. Like in airplanes.
>>>>
>>>>
>>>> I suspect that having the word "aircraft" on the case will cost me
>>>> dearly.
>>>>
>>>> What would that equate to in terms of something I might find at battery
>>>> masters, or the inexpensive section of batteries plus?
>>>>
>>>>
>>> I would never use an aircraft battery for anything other than in an
>>> aircraft. For weight savings aircraft everything is made as light as
>>> possible consistent with safety and operation. Light weight and battery
>>> capacity are completely at odds with each other.
>>>
>>> Dave WD9BDZ
>>
>>The aircraft sealed lead acids and the ones at the car stereo store are
>>almost identical.
>>My point on a sealed battery has to do with hydrogen gas in a closed
>>space.
>>H.
>>NQ5H
>>(And a pilot since '67)
>>
>
> Sealed batteries don't produce hydrogen unless heavily
> overcharged, and then they produce considerably less than a
> flooded battery.
>
> 73 de Jim, KB3PU

Precisely.
If you were to store a battery array indoors you wouldn't want hydrogen venting.
Or would you?
;^)
(Got a match?)

I went to SLA batteries in my Baron because of the greatly reduced corrosion.
Aerobatic folks like 'em 'cause you can fly inverted without making a mess.

73
H.

1576. Re: Odd observation - nonresonant beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 15:03:09 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <NusKd.3326$5t.1821@fed1read07>
Source record: 82965

I am not satisfied that the original poster has not made a "mistaken
subjective observation"

Don't think we have heard from him on this aspect.

--
Caveat Lector

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10vjii4l4hhjs58@corp.supernews.com...
> bob wrote:
>>>Expressed another way, is a non-resonant antenna sometimes better for
>>>reception than a resonant antenna?
>>
>>
>> There are several possible causes here.
>> Probably, on the design frequency, its antenna is probably matched to 50
>> ohms , for good transmission. A matched antenna does not necessarily give
>> the best S/N for reception, and usually a mismatch does. Its hard to
>> calculate.
>
> Although this can be true at VHF/UHF, where the receiver noise dominates,
> it's not true at HF, where the observation was made. At HF, external noise
> dominates, so the quality of impedance match makes no difference in S/N
> ratio.
>
> > One filing mentions the possible change in pattern, and therefore a
> > possible change in S/N.
> >. . .
>
> I'm certain that's the explanation (assuming it's not a mistaken
> subjective observation) -- the noise is coming pedominantly from one
> direction, and by tuning the antenna a pattern null was created in that
> direction. Signals from other directions are then stronger than the
> reduced noise.
>
> I've often directed my 40 meter 4 square array toward the southwest to put
> a null toward the U.S. Midwest and Gulf Coast, where a lot of
> thunderstorms occur in the summertime. VKs jump out of the noise when I do
> that. Rotatable loop receiving antennas are often used in the same way, to
> null out noise coming from one direction.
>
> Roy Lewallen, W7EL

1577. Re: Dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 15:15:15 UTC
From: F8BOE <f8boe-8@bluemail.ch>
Message-ID: <41fa5705$0$22834$626a14ce@news.free.fr>
Source record: 82966

Hello,

Only for info, a dummy load with 20meters of bad quality RG58 coax cable
works great too! And you can also load the stuff with an LC resonnant
circuit that's smaller than an "isotron" and much cheaper.
Sorry but I couldn't resist... By the way, the miracle antennas only work on
27 MHz.

73 de F8BOE Olivier ...-.-

"George Csahanin" <george@dyb.com> a crit dans le message de news:
uXiKd.20173$wi2.9270@newssvr11.news.prodigy.com...
> Howdy y'all.
>
> I had to finally try one. Got a 40meter Isotron, put it up at about 15'.
> It
> does work.
>
> Not sure how well, but it sends and hears. Worked a guiy in Cuba from
> Awstin, TX and a K6 on CW. Not the greatest reports.
>
> Anybody else tried them?
>
> Just curious. Please no flames. This was idle curiosity.
>
> GeorgeC
> W2DB
>
>

1578. Re: Dummy loads

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 15:18:41 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10vkluf7ouh23b0@corp.supernews.com>
Source record: 82967

"F8BOE" <f8boe-8@bluemail.ch> wrote in message
news:41fa5705$0$22834$626a14ce@news.free.fr...
> Hello,
>
> Only for info, a dummy load with 20meters of bad quality RG58 coax cable
> works great too! And you can also load the stuff with an LC resonnant
> circuit that's smaller than an "isotron" and much cheaper.
> Sorry but I couldn't resist... By the way, the miracle antennas only work
> on 27 MHz.
>
> 73 de F8BOE Olivier ...-.-
>
>
> "George Csahanin" <george@dyb.com> a crit dans le message de news:
> uXiKd.20173$wi2.9270@newssvr11.news.prodigy.com...
>> Howdy y'all.
>>
>> I had to finally try one. Got a 40meter Isotron, put it up at about 15'.
>> It
>> does work.
>>
>> Not sure how well, but it sends and hears. Worked a guiy in Cuba from
>> Awstin, TX and a K6 on CW. Not the greatest reports.
>>
>> Anybody else tried them?
>>
>> Just curious. Please no flames. This was idle curiosity.
>>
>> GeorgeC
>> W2DB
>>
>>

"By the way, the miracle antennas only work on 27 MHz."

I gotta remember that. That's great.
Thanks for the laugh.
73
H.

>
>

1579. Re: Ferrite bead impedance at UHF

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 15:19:37 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <dKsKd.5$qP.2@trnddc04>
Source record: 82968

Mike

I'll top post this because it might not be appropriate for your situation.
I dont know what you consider "simple equipment" and I dont know what
equipment you already have. I'm a *do it yourselfer* and recently built a
simple slotted line from Home Depot tubing, and picked up a "very
affordable" ($25.00) generator and voltmeter ($20.00)at the TRW HAM swap
meet. This set up allows me to determine the impedance of the baluns and
dipoles I'm interested in at 137 MHz.
Iy may be that the slotted line would be more difficult to build for 432.
And the idea of constructing something like this isnt of interest to you.
But, it sure works well at 137 MHz for evaluating ferrite tubes.

Jerry

"MikeN" <mnewman@clear.net.nz> wrote in message
news:ltmgv0p8fi950s3281cb46mtmmkm5sv2qq@4ax.com...
> Back on 25/04/03 re "Choke balun impedance recommmendations" Roy
> Llewellan wrote:
>
> "By all means, the slide rule is fine.
>
> To measure the common mode impedance of a choke balun, simply wind a
> piece of wire on the core with the same number of turns as you'll use
> for the actual balun. Connect one end of the wire to the center
> conductor of the antenna analyzer connector and the other to the
> connector shell. Read the impedance at the frequency of interest. Or
> if you prefer, you can wind it with a short piece of the actual coax
> you'll be using. Connect the two coax conductors together on each end
> of the winding, and measure as you would with a single wire. If the
> impedance is out of the analyzer's range, you can use a different
> number of turns and the relationship that the impedance is
> proportional to the square of the number of turns.
>
> Use the same method to measure a W2DU type balun (ferrite cores
> slipped over a coax line). If the measurement is out of range, measure
> a different number of cores and extrapolate -- the impedance is
> directly proportional to the number of cores.
>
> Roy Lewallen, W7EL
>
> My queries:-
>
> Would this method give meaningful results if used at 70 cms using the
> UHF range on something like a MFJ antenna analyser?

>
> I could pop various beads onto a short piece of coax and determine the
> relative effectiveness, but how good would this be for absolute
> results?
>
> Thanks

1580. Re: How about a wire 1/4 vertical near a tree ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 17:14:44 UTC
From: "Stephen J. Beyers" <sjbeyers@shawneelink.net>
Message-ID: <NLKdnUL5zqiS7mfcRVn-hQ@shawneelink.net>
Source record: 82969

I also have recently moved to a new QTH. At my last, I was a devotee of ground mounted verticals with many buried radials. My main antenna there was a 42 foot vertical, with 48 buried radials, each about 50 feet long. This time, being older and less inclined to digging, and work in general, but still being a devotee of verticals, I decided to try a vertical dipole in a tree. It is 28 feet long (tall), with the bottom end inches off the ground. The feed is in the middle with open wire line and an air-core balun. I use a "balanced balanced" Richard Measures-style "L" network tuner in the shack. The tree is a tall, skinny one, and the vertical wire is about five feet from the tree. I have been using it for about three months now, on 80 through 20 meters, mostly on my favorite, 40 cw.

I suppose at this point, following the pattern of others, I should go into a dissertation on signal absorption by trees, effect on pattern, effect of lack of radials, etc. I don't have any first-hand information on all that, but I can say that it works great for me. Performance is comparable to the aforementioned vertical at my previous QTH, considering that it is somewhat shorter. I certainly wouldn't advise against trying one because of seemingly adverse theoretical considerations.

Steve W9HJW

1581. Re: How about a wire 1/4 vertical near a tree ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 17:24:13 UTC
From: Buck <iam@this.site>
Message-ID: <c8tkv01ttj64odlfrchpffrkg261p831tb@4ax.com>
Source record: 82970

On 28 Jan 2005 04:38:01 -0800, kelly@dvol.com wrote:

>
>M. van Wijk (incl) wrote:
>> Hello,
>>
>> I just moved to a new location. My backyard has some 20 trees spread
>around
>> at a distance of 5 to max 10mtrs between each of them.
>> I would like to opt for a full size 40mtr(7Mhz) vertical and have
>(only)the
>> 2 following options her:
>>
>> 1) full size 1/4 wire vertical inside fishing pole, mounted in a tree
>at a
>> foot height between 7 and 10mtrs from ground level. Some 4 elevated
>radials
>> will be added.
>>
>> 2) full size 1/4 wire vertical at ground level, parallel to a tree at
>a
>> distance of 0.5 till max 1 mtr. Ground screen will be some 16 pcs of
>wire
>> buried in the surrounding ground.
>>
>>
>>
>> I have no clue about any effects of trees here. They are not pine
>trees.
>> There are lots of other parameters in the whole picture, but the
>trees is a
>> totally unkown factor for me.
>>
>> Please share me your experiences.
>>
>> Thanks in advance.
>
>You might consider a simple inverted L given all the trees you have
>available. Build a very conventional half-wave coax-fed 40M dipole.
>Suspend half of it (35 feet long?) vertically with the lower end a foot
>or two above the ground from one tree then pull the other half more or
>less horizontally to another tree. Pull the coax away from the elevated
>feedpoint toward the Radio Room. Trim wires to resonance. No messy
>radials needed and most likely you wouldn't need a tuner or "tuning

>network" either. It would be just a standard inverted vee rotated 45ï¿½.
>Half-wave inverted Ls without radials scream, been there, done 'em.
>
>Research on the subject done by the U.S. Army years ago determined that
>trees have no measurable effects on HF antennas. Trees do have an
>effect on vhf/uhf antennas. There was a thread in this NG in the past
>which addressed the topic in sdome detail and which is probably still
>archived. Run a search on "Do Trees Absorb RF?"
>>
>> '73 Mark, PA5MW
>
>w3rv

Since he has room to hang a vertical, he can hang a slanted dipole
too. That would be a little directional but pointed in the right
direction it could be a great antenna.

--
Buck
N4PGW

1582. Re: How about a wire 1/4 vertical near a tree ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 17:25:33 UTC
From: Buck <iam@this.site>
Message-ID: <8btkv0h4o3blgfmbrdvor602ft3pdvd34q@4ax.com>
Source record: 82971

On Fri, 28 Jan 2005 12:24:13 -0500, Buck <iam@this.site> wrote:

>On 28 Jan 2005 04:38:01 -0800, kelly@dvol.com wrote:
>
>>
>>M. van Wijk (incl) wrote:
>>> Hello,
>>>
>>> I just moved to a new location. My backyard has some 20 trees spread
>>around
>>> at a distance of 5 to max 10mtrs between each of them.
>>> I would like to opt for a full size 40mtr(7Mhz) vertical and have
>>(only)the
>>> 2 following options her:
>>>
>>> 1) full size 1/4 wire vertical inside fishing pole, mounted in a tree
>>at a
>>> foot height between 7 and 10mtrs from ground level. Some 4 elevated
>>radials
>>> will be added.
>>>
>>> 2) full size 1/4 wire vertical at ground level, parallel to a tree at
>>a
>>> distance of 0.5 till max 1 mtr. Ground screen will be some 16 pcs of
>>wire
>>> buried in the surrounding ground.
>>>
>>>
>>>
>>> I have no clue about any effects of trees here. They are not pine
>>trees.
>>> There are lots of other parameters in the whole picture, but the
>>trees is a
>>> totally unkown factor for me.
>>>
>>> Please share me your experiences.
>>>
>>> Thanks in advance.
>>
>>You might consider a simple inverted L given all the trees you have
>>available. Build a very conventional half-wave coax-fed 40M dipole.
>>Suspend half of it (35 feet long?) vertically with the lower end a foot
>>or two above the ground from one tree then pull the other half more or
>>less horizontally to another tree. Pull the coax away from the elevated

>>feedpoint toward the Radio Room. Trim wires to resonance. No messy
>>radials needed and most likely you wouldn't need a tuner or "tuning
>>network" either. It would be just a standard inverted vee rotated 45ï¿½.
>>Half-wave inverted Ls without radials scream, been there, done 'em.
>>
>>Research on the subject done by the U.S. Army years ago determined that
>>trees have no measurable effects on HF antennas. Trees do have an
>>effect on vhf/uhf antennas. There was a thread in this NG in the past
>>which addressed the topic in sdome detail and which is probably still
>>archived. Run a search on "Do Trees Absorb RF?"
>>>
>>> '73 Mark, PA5MW
>>
>>w3rv
>
>
>Since he has room to hang a vertical, he can hang a slanted dipole
>too. That would be a little directional but pointed in the right
>direction it could be a great antenna.

OOPS! forget my last....

(remember to engage brain before fingers.)
--
Buck
N4PGW

1583. Re: How about a wire 1/4 vertical near a tree ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 18:48:05 UTC
From: kelly@dvol.com
Message-ID: <1106938085.532299.113400@z14g2000cwz.googlegroups.com>
Source record: 82822

Buck wrote:

> >
> >
> >Since he has room to hang a vertical, he can hang a slanted dipole
> >too. That would be a little directional but pointed in the right
> >direction it could be a great antenna.
>
>
> OOPS! forget my last....
>
> (remember to engage brain before fingers.)

Heh. We all do it. "Welcome to da club."

> --
> Buck
> N4PGW

w3rv

1584. Re: Is BPL going to take up more spectrum?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 18:49:56 UTC
From: mzenier@eskimo.com
Message-ID: <ctggvfmbk1@eskinews.eskimo.com>
Source record: 82871
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.radio.amateur.dx

In article <Xns95EBD22D65B30a216b130c132d203@63.218.45.20>,
-=jd=- <jd770YOUR@HATpostmark.net> wrote:
>
>I've heard it said that for the past several decades, society has been
>steadily replacing things that work just fine, with stuff that merely
>sounds "neat".
>
>BPL may be yet another example.

During the dot.com boom, they were laying underground fiber all over.
(Downtown Seattle was especially bad, as the place was boomtown squared).
And most of it is lying in the ground unused because of "The Last Mile"
problem. It's as expensive to build the local distribution network to
get it from the fiber companies hub to individual customer sites as it
is to build the long distance network.

So along come the investor owned electrical utilities, who would just
love to have an unregulated business (so that they can get a more
profitable tap on the consumer's veins) yelling "WE CAN DO THAT".

With BPL they can set up in the business to compete with the cable and
telephone companies. So what if the stuff doesn't work, they can replace
it later with the same hardware the cable company uses. BAIT AND SWITCH.

And the regulated rate payers will probably foot a good part of the bill
because the whole company isn't making the profit levels the regulators
will allow.

Mark Zenier mzenier@eskimo.com Washington State resident

1585. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 19:51:22 UTC
From: SideBand <AINO8SPAMW@cac.net>
Message-ID: <_IwKd.3374$wA5.1493@newssvr33.news.prodigy.com>
Source record: 82823

nm5k@wt.net wrote:
> It would be quite
> simple to weld up some angle-iron to make a mount for this, and keep
> the
> feed point low to the ground, so I can have a longer whip (higher
> efficiency! Yay!) on top of the load coil.....................
>
> I'd ground that angle iron as well as possible. Myself, I tried angle
> iron
> one time, and it didn't work too well. I did run an extra grounding
> strap to
> body/frame. But it wasn't enough...I think the problem was from a lack
> of
> metal area directly underneath the antenna. That seems to be fairly
> critical.
> When I moved it from that angle iron support behind the back window,
> and moved
> to the side toolbox, the low band performance was much better. The top
> of that
> utility bed toolbox is a pretty good platform, and is a few inches
> wide, and
> naturally, pretty well grounded. Maybe use real wide angle iron??
> I think you will find the bandwidth to be fairly narrow. And swaying of
> the
> antenna vs body of the truck will vary the SWR a lot at that low freq.
> If it's
> rigid, or guyed some way, it will be more stable. Should be plenty
> enough for
> SSB bandwidth, but for multiple freq's, I'd add extra taps on the coil,
> to allow
> you to move around. I have three or four 80m taps on my coil...
> BTW, I was thinking about coil length vs wire size, and I may have been
> a bit
> off. An 80m coil of insulated 14 gauge would probably be about a
> foot...
> But 16 or 18 gauge would probably be a bit shorter. About wire size...
> In the past I had made coils using larger dia wire thinking it really
> mattered..
> It does make a slight improvement, but I'd say slight...Hardly worth
> the extra
> weight...I made one using thick 14 gauge, and I can't tell a heck of a
> lot of
> difference compared to 16 or even 18 gauge. I think my present coil is
> 16 gauge

> wire. That antenna is *light*. About like a fishing rod and reel. Using
> thick
> wire will make the coil much heavier, and then you have to worry about
> it overly
> swaying, unless guyed. So I don't use overly thick wire anymore. If I
> make a 160
> antenna, it will probably be 16 gauge...Maybe even 18...
> If you mount the antenna low, it does increase ground loss, but I think
> getting
> the coil that much higher from the base *should* override the increased
> ground
> loss. Or as good as I can calculate anyway...I've never actually
> mounted one
> real low yet to compare..I do have hitches...Maybe I could try an
> experimental
> antenna on my bumper/bumper hitch...Would give me about a 3 ft longer
> base under
> the coil, compared to it's current mount on the toolbox.
> Yea, vertload is pretty handy...I think probably the "Reg" program I
> use the most
> out of his vast collection. But I've been running these "plastic
> bugcatchers" for
> years...Since about 1990 I guess...I like the light weight. I've got a
> "real"
> 80 m bugcatccher coil, and just that coil alone probably weighs 5 times
> the total
> weight of that 10 ft antenna I have. It's heavy and requires heavy
> hardware to
> support it. But heavy hardware doesn't "talk" any better than light
> hardware..:/
> MK
>

Sage advice.

The mount strap for the fuel tank is mounted directly to the truck frame, so grounding isn't really going to be that big of an issue. I have the cab and the sleeper strapped together with 3" strap, the doors strapped to the cab with 1 1/2" strap, and the sleeper strapped to the frame with 3" strap. All the "strap" is tinned copper flat braid.

I know ground losses will be greater, but having the antenna longer will hopefully more than overcome that..

I could, also, tilt it back along the sleeper, but that gets it too close to the sheet metal, and I'll get coupling losses from that.

I've also changed my mind on using a SS whip on the top. 1" copper pipe would be better, and easier to guy/stabilize. I can fashion standoffs from the cab/sleeper junction out of PVC, too, if necessary.

This is going to be fun.. Maybe I should set up a switched cap/inductor at the feed point so I can force the antenna on to other nearby frequencies. A wheatstone bridge could take care of the controls...

Thanks for all the pointers.

73 de AI8W, Chris

1586. Re: How about a wire 1/4 vertical near a tree ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 19:54:35 UTC
From: Jim Leder <k8cxm@spam.fuse.net>
Message-ID: <SLwKd.7$VC6.2@fe37.usenetserver.com>
Source record: 82824

Every winter after the yard has been mowed for the final time and the leaves have been collected, I've been hanging a 1/4 wave wire from a tree branch. This year I have a 'dual' wire, one element for 30 and one for 20. I pound in a ground rode to hold it in place and they lay 16 radials 16 feet long around it on the ground with the ends held in with nails. The radials are connected to the ground rod. It works OK, not great, but OK. I also use a simple dipole up 40 feet on 30 and find the vertical works better under certain conditions, and it doesn't have the end nulls the dipole has. It's a nice temporary antenna and when snow is on the ground over those radials, it does work much better. When spring comes, I take it down and roll the radial wires up till next winter.
The wire vertical is maybe 15 feet away from the nearest tree, out on a limb, so to speak. The tree has never been a factor. 3 years ago I did the same thing for 40 and 30 and the wires were less than 6 feet from the tree and it seemed to work OK.

"Stephen J. Beyers" <sjbeyers@shawneelink.net> wrote in message
news:NLKdnUL5zqiS7mfcRVn-hQ@shawneelink.net...
>I also have recently moved to a new QTH. At my last, I was a devotee of
>ground mounted verticals with many buried radials. My main antenna there
>was a 42 foot vertical, with 48 buried radials, each about 50 feet long.
>This time, being older and less inclined to digging, and work in general,
>but still being a devotee of verticals, I decided to try a vertical dipole
>in a tree. It is 28 feet long (tall), with the bottom end inches off the
>ground. The feed is in the middle with open wire line and an air-core
>balun. I use a "balanced balanced" Richard Measures-style "L" network
>tuner in the shack. The tree is a tall, skinny one, and the vertical wire
>is about five feet from the tree. I have been using it for about three
>months now, on 80 through 20 meters, mostly on my favorite, 40 cw.
>
> I suppose at this point, following the pattern of others, I should go into
> a dissertation on signal absorption by trees, effect on pattern, effect of
> lack of radials, etc. I don't have any first-hand information on all that,
> but I can say that it works great for me. Performance is comparable to
> the aforementioned vertical at my previous QTH, considering that it is
> somewhat shorter. I certainly wouldn't advise against trying one because
> of seemingly adverse theoretical considerations.
>
> Steve W9HJW
>

1587. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 20:01:03 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <4SwKd.20858$B95.17037@lakeread02>
Source record: 82825

"SideBand" <AINO8SPAMW@cac.net> wrote

> I've also changed my mind on using a SS whip on the top. 1" copper pipe
> would be better, and easier to guy/stabilize.
> 73 de AI8W, Chris

Chris, a whip could however, be tied-down for streets with low hanging
wires!

73,
Jack

1588. Re: "Maxwell's Equations"?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 20:02:28 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <41fa997f.2571095@news.iol.ie>
Source record: 82826
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Richard Clark <kb7qhc@comcast.net> wrote:

: On Fri, 28 Jan 2005 00:35:21 GMT,
: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net (ZZZPK)
: wrote:
:
: >>Or set to your partner?
: >no ...
: >
: >dancing.
: That IS a dancing term. The question is in what proportion is it to
: antennas?

oh... set dancing is very much related to antennas.

you can have a set of 4, 6, 8 or more
all or some dancing together (driven in phase)
or all dancing to a slighly different pattern (out of phase)

some dancers were BOOTS...others dance BAREFOOT (10-4)

the proportion is as you like it, just depends how distant your
observation is....and of course how lacking one's understanding of
set theory is.

1589. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 20:03:36 UTC
From: SideBand <AINO8SPAMW@cac.net>
Message-ID: <sUwKd.3377$wA5.1096@newssvr33.news.prodigy.com>
Source record: 82827

Reg Edwards wrote:
> Chris,
> Diameter of whip or loading rod is not critical. Enter average diameter
> over its length.
>
>
> If not stated, bandwidth is between 3dB points when transmitting. When
> receiving, bandwidth is broader, say the 2 dB points, because the receiver
> input resistance damps down the very high antenna Q.
>
>
> Earth electrode resistance depends on size of vehicle and type of soil under
> it. For a mobile home enter 3 ohms. For a volkswagon beetle enter 14 ohms.
>
>
> A larger coil form will give a narrower bandwidth. Double length and height
> and for the same inductance (fewer turns), coil Q will also be doubled. You
> can't have high efficiency without high Q and narrow bandwidth.
>
>
> If a flexible whip is used, to reduce overall height it can be curved
> backwards in parallel with the vehicle's roof. This also allows fewer turns
> of thicker wire on the helix and a higher coil Q with greater efficiency.
> There will be an overall gain but not so great as if the whip is vertical
> throughout its length.
>
>
> Leave a gap equal to helix diameter between the bottom of the helix and a
> metal roof.
>
>
> The helix is in fact the L&C Z-matching coil. On 160m, in order to resonate
> with its own self-capacitance, it needs a large inductance. There will be
> several hundred turns. Therefore, to have a loss as low as possible it has
> to be physically large. The only space available is in the antenna - and
> that's why it's there.
>
>
> Ignore silly irrelevant done-to-death arguments about whether the current at
> one end of the helix is or is not the same as the other.
>
>
> The most important dimension of short verticals is overall height. Next
> comes physical size of helix. The fatter it is the better. Obesity is not a

> problem. Only the wind.
> ----
> Reg, G4FGQ
>
>
Reg:

Thanks for all the pointers.

I've since found "vertload" as well.. I think I'm going to go that route. I can make something that will work for my purposes, and that's the point of all of this.

Thanks for all these great programs. If the "real world" works as predicted, then I should have something set up for next winter.

Back about 10 years ago, I built an antenna for my CB base (I wasn't a HAM then), and I was shooting blind. The SWR was, at best, 1.7:1, but boy did it get out. On the roof of the apartment, (2 stories tall) 3 blocks from the ocean in Oceanside, CA, I was able to hit Escondido on a legal 4 watts AM, 12 watts SSB, with an S7 or better... That's when I decided I liked working with building things. I've built every base antenna for both CB and HAM radio since then... Mobiles seem to act differently, and everything I've tried for mobile before now has come with mixed results. These programs you wrote for us will definitely be a big help.

Thanks again.. I'm gonna play with these and see what I can come up with for high efficiency, decent bandwidth (10-15KC would be enough!), for the sizes I have to deal with. Then, when I build it, I'll play with getting it to behave as designed.

73 de AI8W, Chris

1590. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 20:13:05 UTC
From: SideBand <AINO8SPAMW@cac.net>
Message-ID: <I1xKd.3379$wA5.1217@newssvr33.news.prodigy.com>
Source record: 82828

Jack Painter wrote:
> "SideBand" <AINO8SPAMW@cac.net> wrote
>
> > I've also changed my mind on using a SS whip on the top. 1" copper pipe
>
>>would be better, and easier to guy/stabilize.
>>73 de AI8W, Chris
>
>
> Chris, a whip could however, be tied-down for streets with low hanging
> wires!
>
> 73,
> Jack
>
>

Jack:

We're talking about a Semi tractor here.. It's already 13'4" tall, and in order to get this antenna where it would do the most good, it would have to be on one side or the other of the truck. Mounting it on the front bumper would make me over length, and make it impossible to open the hood for maintenance. Putting it behind the sleeper would raise it another 3 feet, and allow it to couple to the exhaust stacks, not to mention the back of the sleeper and the bulkhead on the trailer, and would kill the signal even more, not to mention the risk of having the trailer hit the antenna during turns, etc...

A whip will also blow around and change the SWR depending on how close/far it got to/from the metal sides of the sleeper.

I think a copper pipe will do better, and be easier to guy and keep out of the way.

Thanks

73 de AI8W, Chris

1591. Re: Newsgroups on Decline? AOL dropping this NG

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 20:28:18 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-A4C655.11284728012005@netnews.worldnet.att.net>
Source record: 82829

In article <41F94F39.3060208@psu.edu>, Mike Coslo <mjc5remove@psu.edu>
wrote:

> From experience with a lot of AOL users, their decision will sit very
> well with a lot of newsgroup regulars! 8^)

I second the above, and wish to add, "don't let the keyboard hit you in
the butt on your way out of the Usenet system........"

"couldn't happen to a nicer bunch of folks........"

"austa Lavista BABY........."

Now if we could get the WebTver's to do the same thing........

Me

1592. A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 20:48:52 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1106945332.550095.48480@z14g2000cwz.googlegroups.com>
Source record: 82830

Most people have added an amplifier only to find out that the
difference in signal
was very small. Thus many people deride the value of a 'silly' db gain
whereas DX'ers say that a single db extra is a lot !
Fact is that most long distance signals on 20 metres come in at angles
of 11 degrees or less where as the 'normal' antenna has a TOA of around
14 degrees.
So where a dxer points to the extra 1db gain as being everything in
fact it is the lowering of the TOA that comes with the extra gain. In
my opinion if one designs his antenna for a lower TOA say 10 to 11
degrees then even tho its gain may well be below the dxers choise(a
very long boom or stacked antennas) the lower TOA with less gain will
show little difference
to the antenna of choics because the lower edge of the radiation lobe
will follow the same line and any extra gain provided will have the
same effect of adding an amplifier which is minimal compared to the
ability of capturing signals that arrive at low angles.
I believe it is time for antenna designers to concentrate less on
obtaining gain and instead concentrate more on lowering the TOA.
without the need of excessive real estate requirements.
What say ?
Art

1593. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 20:51:54 UTC
From: Cecil Moore <w5dxp@totalzone.com>
Message-ID: <41faa765$1_2@127.0.0.1>
Source record: 82831

art wrote:
> I believe it is time for antenna designers to concentrate less on
> obtaining gain and instead concentrate more on lowering the TOA.
> without the need of excessive real estate requirements.
> What say ?

I lowered my 20m dipole from 40 ft. to 30 ft. because that gave
me a better skip into Arizona where a lot of my friends are.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1594. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 21:15:53 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ctea29$5i1$1@titan.btinternet.com>
Source record: 82832

Cecil wrote -
> I lowered my 20m dipole from 40 ft. to 30 ft. because that gave
> me a better skip into Arizona where a lot of my friends are.
>
==========

No Cecil, it didn't. It just gave you worse skip into where you didn't want
it.

Reg

1595. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 21:35:08 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <41fab31f_3@news1.prserv.net>
Source record: 82833

Chris:

I see you got lots of answers, but I don't think anyone mentioned the old WW2 approach. Back in the '40s, police radios
were on 1600-1700 kHz, and mobile antennas were bumper mounted 8 or 10 foot bamboo fishing poles wrapped close wound
with as much bell wire as you could put on them. And they worked amazingly well. I've never seen a shootout between
one and a good loaded whip with a capacity hat, but for whatever reasons, I suspect the bamboo pole would come close.
And it meets your other criteria, cheap. And which, now that I think about it, is equivalent to these fiberglass things
they sell for other bands now. Hmmmm.

--
Crazy George
Remove N O and S P A M imbedded in return address
"SideBand" <AINO8SPAMW@cac.net> wrote in message
news:LJdKd.24019$by5.851@newssvr19.news.prodigy.com...
> Anyone out there know of any decent solution to getting 160M working in
> a mobile? The application is a semi-truck. I've got the Iron Horses for
> 75, 40, 20, 15, and 10M, but I'd like to work something out for 160
> meters that will work on the truck.
>
> I know I'm going to take an efficiency hit, but you're doing that for
> everything except 10M on a Semi anyway.. Just so I can get a signal out
> there to be heard, in the off chance.
>
> ANY suggestions or ideas would be greatly appreciated.
>
> 73 de AI8W, Chris

1596. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 21:42:56 UTC
From: SideBand <AINO8SPAMW@cac.net>
Message-ID: <AlyKd.11220$0s5.101@newssvr31.news.prodigy.com>
Source record: 82834

Reg Edwards wrote:
> "SideBand" <AINO8SPAMW@cac.net> wrote in message
> news:LJdKd.24019$by5.851@newssvr19.news.prodigy.com...
>
>>Anyone out there know of any decent solution to getting 160M working in
>>a mobile? The application is a semi-truck. I've got the Iron Horses for
>>75, 40, 20, 15, and 10M, but I'd like to work something out for 160
>>meters that will work on the truck.
>>
>>I know I'm going to take an efficiency hit, but you're doing that for
>>everything except 10M on a Semi anyway.. Just so I can get a signal out
>>there to be heard, in the off chance.
>>
>>ANY suggestions or ideas would be greatly appreciated.
>>
>>73 de AI8W, Chris
>
> ============================
>
> For design and performance of a 160 meter band vertical antenna, download
> program HELICAL3 from website below. There are other loaded vertical
> programs..
>
> Use 1.5" or 2" diameter plastic pipe, with helical winding of thick enamel
> insulated wire, mounted on vehicle roof, as tall as possible, stayed, with
> short, top caapacitance tuning rod.
>
> Range on 160m with a few hundred watts = 100 miles at noon on groundwave.
>
> 1700 miles on very quiet, wiinter nights at midnight via F-layer.
> ----
> ....
> Regards from Reg, G4FGQ
> For Free Radio Design Software go to
> http://www.btinternet.com/~g4fgq.regp
> ....
>
>

Reg, et al:

On the Vertload program, I've been playing with the numbers a bit, and
I've found some things that I have questions from the pro's on..

First, let me explain the situation:

The Truck in question is a Ford LTLA9000. I plan on mounting this antenna 6-8 inches from the side of the tractor on a mount coming off of one of the fuel tanks, which are mounted just below the driver's/passenger's door.

The cab (driving area) of the truck is about 4 feet shorter than the top of the sleeper. The cab is all steel. I use a mag mount 5/8 wave 2M antenna on top of the cab, with great results.

The fuel tanks are aluminum. The straps mounting the fuel tanks to the frame are steel, and mount directly to the frame of the truck under the cab. The sides of the sleeper are steel, up to the level of the top of the cab. The top of the sleeper is fiberglass, with steel runner supports inside.

I plan to mount the antenna off of the fuel tank straps, which will put it roughly 8" to a foot away from the cab, and the steel sides of the sleeper. I have several places I can guy the coil to on the side and top of the cab. I have one or two places I can put PVC standoffs on the cab and sleeper to keep the antenna away from the cab, and to keep it from "flying out" while rolling down the road.

This truck, with a trailer on it and a full load (80,000 lbs gross weight) is capable of traveling at 117 MPH on a straightaway. Faster if I "turn around" the transmission again (no plans on that.. I'm getting too old for high speed "chicken truckin" anymore). I usually keep it down to around 70MPH when the speed limits allow.

So, I've planned on using 1" copper pipe for both the mast and the "whip" at the top, for ruggedness. Inside the coil, I can use some 1" ID PVC for support, and put the 3" coil over those supports, with end caps, etc...

Now, on the antenna, I've found that moving the loading coil up higher on the whip increases the efficiency. So:

1. Does that efficiency increase come at the cost of bandwidth?
2. Does having the load closer to the base increase the bandwidth, if all other numbers (coil diameter, coil length, etc) are the same?
3. Would getting the loading coil above the "steel" increase my chances of making a usable antenna with the bandwidth and efficiency I desire?

I know I'm asking the impossible here; that is a wider bandwidth, higher efficiency, shortened 160M antenna for mobile operations. Like I said, I'd like to get about 10-15KC of usable bandwidth, with an efficiency that'll let me get an ERP of more than a watt or two with 100 watts in. On top of that, I'd like to build it.

Hope this wasn't too much information, and I hope you all can make sense of this.

73 de AI8W, Chris

1597. Re: Isotron antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 21:43:11 UTC
From: Barnacle Bill <quahog@fish.net>
Message-ID: <10vlcffgfi2ueb7@corp.supernews.com>
Source record: 82835

On 2005-01-28, George Csahanin <george@dyb.com> wrote:
> Howdy y'all.
>
> I had to finally try one. Got a 40meter Isotron, put it up at about 15'. It
> does work.
>
> Not sure how well, but it sends and hears. Worked a guiy in Cuba from
> Awstin, TX and a K6 on CW. Not the greatest reports.
>
> Anybody else tried them?
>
> Just curious. Please no flames. This was idle curiosity.
>
> GeorgeC
> W2DB

Try this: run a random wire from an antenna tuner up to the
point where the Isotron Dummy Load is. Enjoy.

Or this: Put a line isolator between the coax and the Isotron
Dummy Load so that the braid of the coax doesn't radiate.
Enjoy (snicker).

Barnacle Bill

1598. Re: Isotron antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 21:50:41 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <RsyKd.3404$5t.454@fed1read07>
Source record: 82836

22 reviews from owners of the Isotron antennas at URL:
http://www.eham.net/reviews/detail/311

--
Caveat Lector

Someone wrote
>> Howdy y'all.
>>
>> I had to finally try one. Got a 40meter Isotron, put it up at about 15'.
>> It
>> does work.
>>
>> Not sure how well, but it sends and hears. Worked a guiy in Cuba from
>> Awstin, TX and a K6 on CW. Not the greatest reports.
>>
>> Anybody else tried them?
>>
>> Just curious. Please no flames. This was idle curiosity.
>>
>> GeorgeC
>> W2DB

1599. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 22:44:51 UTC
From: Buck <iam@this.site>
Message-ID: <huflv052rdil7fe5pits7jl8uogtjpm2r8@4ax.com>
Source record: 82837

On 28 Jan 2005 12:48:52 -0800, "art" <aunwin@insightbb.com> wrote:

>Most people have added an amplifier only to find out that the
>difference in signal
>was very small. Thus many people deride the value of a 'silly' db gain
>whereas DX'ers say that a single db extra is a lot !
>Fact is that most long distance signals on 20 metres come in at angles
>of 11 degrees or less where as the 'normal' antenna has a TOA of around
>14 degrees.
>So where a dxer points to the extra 1db gain as being everything in
>fact it is the lowering of the TOA that comes with the extra gain. In
>my opinion if one designs his antenna for a lower TOA say 10 to 11
>degrees then even tho its gain may well be below the dxers choise(a
>very long boom or stacked antennas) the lower TOA with less gain will
>show little difference
>to the antenna of choics because the lower edge of the radiation lobe
>will follow the same line and any extra gain provided will have the
>same effect of adding an amplifier which is minimal compared to the
>ability of capturing signals that arrive at low angles.
>I believe it is time for antenna designers to concentrate less on
>obtaining gain and instead concentrate more on lowering the TOA.
>without the need of excessive real estate requirements.
>What say ?
>Art

I have always thought that if one changed the azimuth angle of a beam
it would improve a number of contact signals, pending the angle they
are reflected from the atmosphere.

--
Buck
N4PGW

1600. Re: Newsgroups on Decline? AOL dropping this NG

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 23:02:00 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1106953320.608798.94580@f14g2000cwb.googlegroups.com>
Source record: 82838

;-) If it bugs you, change it!

1601. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 23:08:02 UTC
From: "aunwin@insightbb.com"
Message-ID: <lBzKd.33942$eT5.9301@attbi_s51>
Source record: 82839

So true ! Many a DXer loses signals because his TOA is to low
Art

"Cecil Moore" <w5dxp@totalzone.com> wrote in message
news:41faa765$1_2@127.0.0.1...
> art wrote:
>> I believe it is time for antenna designers to concentrate less on
>> obtaining gain and instead concentrate more on lowering the TOA.
>> without the need of excessive real estate requirements.
>> What say ?
>
> I lowered my 20m dipole from 40 ft. to 30 ft. because that gave
> me a better skip into Arizona where a lot of my friends are.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> -----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
> News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000
> Newsgroups
> ---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1602. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 23:10:43 UTC
From: "aunwin@insightbb.com"
Message-ID: <ODzKd.33178$IV5.6955@attbi_s54>
Source record: 82840

You can move the antenna boom up or down some 10 degrees and you would not
be able to tell the difference per
Lawson W2PV
Art
"Buck" <iam@this.site> wrote in message
news:huflv052rdil7fe5pits7jl8uogtjpm2r8@4ax.com...
> On 28 Jan 2005 12:48:52 -0800, "art" <aunwin@insightbb.com> wrote:
>
>>Most people have added an amplifier only to find out that the
>>difference in signal
>>was very small. Thus many people deride the value of a 'silly' db gain
>>whereas DX'ers say that a single db extra is a lot !
>>Fact is that most long distance signals on 20 metres come in at angles
>>of 11 degrees or less where as the 'normal' antenna has a TOA of around
>>14 degrees.
>>So where a dxer points to the extra 1db gain as being everything in
>>fact it is the lowering of the TOA that comes with the extra gain. In
>>my opinion if one designs his antenna for a lower TOA say 10 to 11
>>degrees then even tho its gain may well be below the dxers choise(a
>>very long boom or stacked antennas) the lower TOA with less gain will
>>show little difference
>>to the antenna of choics because the lower edge of the radiation lobe
>>will follow the same line and any extra gain provided will have the
>>same effect of adding an amplifier which is minimal compared to the
>>ability of capturing signals that arrive at low angles.
>>I believe it is time for antenna designers to concentrate less on
>>obtaining gain and instead concentrate more on lowering the TOA.
>>without the need of excessive real estate requirements.
>>What say ?
>>Art
>
>
> I have always thought that if one changed the azimuth angle of a beam
> it would improve a number of contact signals, pending the angle they
> are reflected from the atmosphere.
>
>
> --
> Buck
> N4PGW
>

1603. Re: HAMSTIK DIPOLE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-28 23:23:35 UTC
From: "Russ J." <amservice@sbcglobal.net>
Message-ID: <XPzKd.24337$by5.5710@newssvr19.news.prodigy.com>
Source record: 82841

I received 2 75 meter Hamsticks today. I
ll let the group know how it goes.

RHJ

--
Russell Jankowski
amservice@sbcglobal.net

A.M. SERVICE
440-333-4923

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41d45d9b$1_2@127.0.0.1...
> Russ J. wrote:
>> Has anyone used these mobile antennas in the dipole mode? How about a
>> design for a multiband array on a small rotor?
>
> Hamstick dipoles work pretty well for 20m-10m. Not well for 40m
> and terrible for 75m (unless the application is a special one
> like the portable NVIS application in the latest QST).
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> -----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
> News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000
> Newsgroups
> ---= East/West-Coast Server Farms - Total Privacy via Encryption =---
>

1604. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 01:45:44 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <pj6rc2-396.ln1@p400bob.lse.com.au>
Source record: 82842

Hi Art

I'd say that every little bit helps when conditions are marginal. Even 10dB extra mean pretty well nothing in readability when the signal is already 20dB above the noise, but a few dB *can* make a difference when the signal is in noise. Antenna efficiency and gain in the right direction all helps but it is going to be a compromise. I mean if you want to chat to the "locals" 30 degrees takeoff is better again!

I'll admit that I havent done any huge a amount of modelling on this but (IMO) ground conditions and height over are far more important and are very difficult to design an antenna for all situations. Maybe the trick is to design your antenna for free space for "good" gain and then be able to raise and lower it for the best angles..

Cheers Bob VK2YQA

art wrote:
> Most people have added an amplifier only to find out that the
> difference in signal
> was very small. Thus many people deride the value of a 'silly' db gain
> whereas DX'ers say that a single db extra is a lot !
> Fact is that most long distance signals on 20 metres come in at angles
> of 11 degrees or less where as the 'normal' antenna has a TOA of around
> 14 degrees.
> So where a dxer points to the extra 1db gain as being everything in
> fact it is the lowering of the TOA that comes with the extra gain. In
> my opinion if one designs his antenna for a lower TOA say 10 to 11
> degrees then even tho its gain may well be below the dxers choise(a
> very long boom or stacked antennas) the lower TOA with less gain will
> show little difference
> to the antenna of choics because the lower edge of the radiation lobe
> will follow the same line and any extra gain provided will have the
> same effect of adding an amplifier which is minimal compared to the
> ability of capturing signals that arrive at low angles.
> I believe it is time for antenna designers to concentrate less on
> obtaining gain and instead concentrate more on lowering the TOA.
> without the need of excessive real estate requirements.
> What say ?
> Art
>

1605. Re: HAMSTIK DIPOLE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 02:14:06 UTC
From: k9sqg@aol.com
Message-ID: <20050128211406.02088.00000276@mb-m14.aol.com>
Source record: 82843

It will go very, very narrow. 10-25 kc perhaps.

1606. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 04:08:56 UTC
From: "aunwin@insightbb.com"
Message-ID: <s%DKd.33355$IV5.31948@attbi_s54>
Source record: 82844

"Bob Bob" <bcnntp@optusnet.com.au> wrote in message
news:pj6rc2-396.ln1@p400bob.lse.com.au...
> Hi Art
>
> I'd say that every little bit helps when conditions are marginal. Even
> 10dB extra mean pretty well nothing in readability when the signal is
> already 20dB above the noise, but a few dB *can* make a difference when
> the signal is in noise.
I don't see that! would not the S/N stay the same?

Antenna efficiency and gain in the right
> direction all helps but it is going to be a compromise. I mean if you want
> to chat to the "locals" 30 degrees takeoff is better again!

Agreed, that is what Cecil did.

>
> I'll admit that I havent done any huge a amount of modelling on this but
> (IMO) ground conditions and height over are far more important and are
> very difficult to design an antenna for all situations.

For horizontal waves the ground conditions relative to 1 wavelength is of
little concern
Height as always helps with low TOA so one has to determine the average
incoming signal angle
of choice QSO's and design to suit.
Maybe the trick
> is to design your antenna for free space for "good" gain and then be able
> to raise and lower it for the best angles..

Agreed but I would like to see smaller turning radius (moving away from the
boom length mantra ,)
without the necessity for dual driven stacked array This would require a
fixed feed point with
moveable elements for desired TOA to suit desired QSO..
I am sure it can be done, and since 'every thing is
known about antennas' all that is reguired is for a Guru to come forward to
share how it is done.
Regards
Art

>
> Cheers Bob VK2YQA
>
> art wrote:
>> Most people have added an amplifier only to find out that the

>> difference in signal
>> was very small. Thus many people deride the value of a 'silly' db gain
>> whereas DX'ers say that a single db extra is a lot !
>> Fact is that most long distance signals on 20 metres come in at angles
>> of 11 degrees or less where as the 'normal' antenna has a TOA of around
>> 14 degrees.
>> So where a dxer points to the extra 1db gain as being everything in
>> fact it is the lowering of the TOA that comes with the extra gain. In
>> my opinion if one designs his antenna for a lower TOA say 10 to 11
>> degrees then even tho its gain may well be below the dxers choise(a
>> very long boom or stacked antennas) the lower TOA with less gain will
>> show little difference
>> to the antenna of choics because the lower edge of the radiation lobe
>> will follow the same line and any extra gain provided will have the
>> same effect of adding an amplifier which is minimal compared to the
>> ability of capturing signals that arrive at low angles.
>> I believe it is time for antenna designers to concentrate less on
>> obtaining gain and instead concentrate more on lowering the TOA.
>> without the need of excessive real estate requirements.
>> What say ?
>> Art
>>

1607. Re: 2M & Aviation band antenna for pick-up truck.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 05:00:35 UTC
From: Leonard Kubiak <ootman1@earthlink.net>
Message-ID: <TLEKd.687$Ix.276@newsread3.news.atl.earthlink.net>
Source record: 82845

Myself I prefer the Motorola "Spectrum" antenna I have one on a mag mount for V.H.F. and one on the roof on a ground plane as a base antenna.I also have a U.H.F version for base and mobile

1608. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 05:28:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10vm7nn3c54po0e@corp.supernews.com>
Source record: 82846

I say ignore the TOA. (For those unfamiliar with the term, it's the "takeoff angle", which usually means the elevation angle at which the antenna pattern is strongest.)

What counts is the gain at the elevation angle at which you want to communicate. This, in turn, depends on the distance and the propagation conditions. If you need a strong signal at an elevation angle of 15 degrees, it doesn't matter whether the TOA is 10 degrees, 15, or 20 or zero. All that counts is the gain at 15 degrees. And an antenna with TOA of 15 degrees doesn't necessarily have the most gain at 15 degrees of any antenna.

Consider the following three 40 meter antennas: A vertical antenna with about 8 radials (18 ohm ground system resistance), a dipole at 30 feet, and a dipole at 40 feet, all over average ground.

Antenna TOA deg Gain at 26 deg. Gain at 15 deg.

Vert 26 -1.76 dBi -2.72 dBi
Dipole @ 30' 90 (straight up) 2.58 dBi -1.28 dBi
Dipole @ 40' 51 3.9 dBi 0.32 dBi

-- Which one has the lowest takeoff angle?
-- Which one is the best for communicating at 26 deg. elevation angle?
-- Which one is the best for communciating at 15 deg. elevation angle?

What does the takeoff angle have to do with which antenna is best?

Roy Lewallen, W7EL

art wrote:
> Most people have added an amplifier only to find out that the
> difference in signal
> was very small. Thus many people deride the value of a 'silly' db gain
> whereas DX'ers say that a single db extra is a lot !
> Fact is that most long distance signals on 20 metres come in at angles
> of 11 degrees or less where as the 'normal' antenna has a TOA of around
> 14 degrees.
> So where a dxer points to the extra 1db gain as being everything in
> fact it is the lowering of the TOA that comes with the extra gain. In
> my opinion if one designs his antenna for a lower TOA say 10 to 11
> degrees then even tho its gain may well be below the dxers choise(a
> very long boom or stacked antennas) the lower TOA with less gain will
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> to the antenna of choics because the lower edge of the radiation lobe
> will follow the same line and any extra gain provided will have the
> same effect of adding an amplifier which is minimal compared to the

> ability of capturing signals that arrive at low angles.
> I believe it is time for antenna designers to concentrate less on
> obtaining gain and instead concentrate more on lowering the TOA.
> without the need of excessive real estate requirements.
> What say ?
> Art
>

1609. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 06:13:44 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <9amrc2-s79.ln1@p400bob.lse.com.au>
Source record: 82848

Hi Art

>>I'd say that every little bit helps when conditions are marginal. Even
>>10dB extra mean pretty well nothing in readability when the signal is
>>already 20dB above the noise, but a few dB *can* make a difference when
>>the signal is in noise.

> I don't see that! would not the S/N stay the same?

Well to tell you the truth this was one of those "told by someone else" things that I never did get around to proving myself (thinking it was general knowledge) I have of course noticed it on 2M FM where the recovered audio S/N falls off very rapidly as the usable senitivity of the radio is reached. In that case a 1 or 2dB signal increase can make the difference between readable 1 and readable 4. I have a funny feeling the discussion I heard on the topic may have been on front end NF of VHF/UHF receivers where a 1dB lower number there yielded a much larger dB result. Note this was for SSB. I have some work to do here understanding this. When I look at building another preamp for 2/70 I'll do it then!

However if the noise is -110dBm and the signal was -114dBm, the margin (s/n) would become less (of a negative number) when the signal level is increased. You may not be able to resolve it but you can measure the difference. You can of course use DSP techniques to resolve signals weaker than noise. WRSS60 for example will enable you to resolve signals 26dB below the noise level. FSK441/JT44 is another example of signal below noise reception.

> For horizontal waves the ground conditions relative to 1 wavelength is of
> little concern
> Height as always helps with low TOA so one has to determine the average
> incoming signal angle
> of choice QSO's and design to suit.

Something about brewster angles and phase reversal in horizontal but not vertical polarisation? (Note I work in IT, not RF!) I always thought that the poorer the ground (eg sand/clay) the higher the takeoff angle and over seawater was the lowest one could attain. (Keep in mind that VK dropped CW earlier this year and I was one of those that has been playing VHF+ for the last 25 years!)

> Agreed but I would like to see smaller turning radius (moving away
from the
> boom length mantra ,)
> without the necessity for dual driven stacked array This would require a

> fixed feed point with
> moveable elements for desired TOA to suit desired QSO..

I would also expect that F/B & F/S are major contributors to design to. Very handy when you neighbours son a few miles away wants to tune his VW engine! I like the idea of a quad, simply because of its smaller turning radius!

I once had a think about ways to tune a 3 element quad for best F/B. Maybe some way to roll the wire up on a small motor shaft or tune it with some C on the end of some tuned length feeder? Didnt figure out an easy way to change the element spacing though. Maybe bending the spreaders would have a similar effect of changing the feedpoint positions on a stacked array?

You could also change the length of the phasing sections for a dual driven stacked array - rather than moving the feedpoint. If I was experimenting with this idea I'd probably start (modeling) with 3 parallel horizontal dipoles arranged such that when viewed from the ends the (end point) shape was a triangle. All would be fed in parallel but with different phase relationships between them.

> I am sure it can be done, and since 'every thing is
> known about antennas' all that is reguired is for a Guru to come forward to
> share how it is done.

Not me sorry. If however I stumble onto something that defies all the theory and works better than anyone else, this NG will be the first to know - and I'll make the design like GPL software! Free...

Cheers Bob VK2YQA

1610. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 06:37:09 UTC
From: Buck <iam@this.site>
Message-ID: <4kbmv05puuv95o96hak8q5a6l4hs85881v@4ax.com>
Source record: 82847

On Fri, 28 Jan 2005 21:28:20 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>What does the takeoff angle have to do with which antenna is best?

That would depend on the desired contact. If you want 80 meters DX,
you want a very high antenna, if you just want to talk to your local
buddies, a lower antenna provides a better NVIS.

Verticals provide better omni-directional pattern but a slanted dipole
provides better directivity than a vertical.

Beams are obvious.

--
Buck
N4PGW

1611. Re: Ferrite bead impedance at UHF

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 07:15:28 UTC
From: Andrey <a8421@intergate.bc.ca>
Message-ID: <10vmduhcug85db5@corp.supernews.com>
Source record: 82849

Use line of coax appr. 2 m long for 400 Mhz. Power it up from Generator (CV). Attach quarter wave radiator on another end (bare piece of wire).

You expect to have power running back along the outside of the coax shield.

How to see it - make a detector: pick up coil - several turns of wire small radius. Load it on diode (LED works too). Measure voltage across the diode.

when you move detector along the coax, you will see nulls and maximums, approximately half wave length from each other (may vary considerably depending on your setup.)

now add ferrite choke at the antenna end of the cable. Observe change of amplitudes you see with detector. Add more ferrite.Observe how efficiency of your choke improves when it's length increases.

...
it is all fine up to here - you observed operation of the ferrite choke. Is it a good balun - depends. Unlike coaxial sleeve the ferrite choke absorbs the energy - it is not sending it back to the antenna.

Andrey

"MikeN" <mnewman@clear.net.nz> wrote in message
news:m88ev0ljgqotej3orkfnrtkmot3o59k9po@4ax.com...
> How could one measure the effectiveness of a ferrite bead used to
> decouple a feedline from a driven element at 70cms, with simple
> equipment which could be built by a homebrewer, and what would that
> simple equipment be.
>
> Thanks MikeN
>

1612. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 07:25:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10vmej1j7c33397@corp.supernews.com>
Source record: 82850

Sigh

I tried.

Roy Lewallen, W7EL

Buck wrote:
> On Fri, 28 Jan 2005 21:28:20 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
>
>>What does the takeoff angle have to do with which antenna is best?
>
>
>
> That would depend on the desired contact. If you want 80 meters DX,
> you want a very high antenna, if you just want to talk to your local
> buddies, a lower antenna provides a better NVIS.
>
> Verticals provide better omni-directional pattern but a slanted dipole
> provides better directivity than a vertical.
>
> Beams are obvious.
>
>

1613. 30M Jpole and antenna analyser question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 07:56:46 UTC
From: Doug Faunt N6TQS +1-510-655-8604 <faunt@panix.com>
Message-ID: <mfrwttw6535.fsf@panix3.panix.com>
Source record: 82851

Hi All,
I've built a 30M Jpole using dimensions from the Jpole calculator in Hamcalc and using 300 ohm twin lead for the matching section.

It seems to resonate about right, but the SWR is 2.2. I'm using an Autek RF-1 analyser, and want to know if there's any way to determine what changes to make to get a lower SWR? I don't have a lot of the twinlead left, and don't have enough time to get more, so cut-and-try isn't the best solution.

73, doug

1614. Re: Isotron antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 09:43:25 UTC
From: F8BOE <f8boe-8@bluemail.ch>
Message-ID: <41fb5ac0$0$27924$636a15ce@news.free.fr>
Source record: 82854

Hoy!

Thank's for the very interresting link to the isotron reviews. It's nice to see that citizen's band 's still living on...
Everyone decided to buy one and was pleased by the SWR... but none of them seemed concerned about radiation patterns and loss (negative gain?), nor by the classical "how does it work" question.

No they were all happy to kick 50W power in it to make DX with the guy in the village nearby... DX begins at your door... But never heard about ground wave propagation.

Nevermind... As far as everybody's happy, it's all good!

73 de F8BOE Olivier ...-.-

"Caveat Lector" <CL@barahmas.com> a crit dans le message de news:
RsyKd.3404$5t.454@fed1read07...
> 22 reviews from owners of the Isotron antennas at URL:
> http://www.eham.net/reviews/detail/311
>
> --
> Caveat Lector
>
>
>
> Someone wrote
>>> Howdy y'all.
>>>
>>> I had to finally try one. Got a 40meter Isotron, put it up at about 15'.
>>> It
>>> does work.
>>>
>>> Not sure how well, but it sends and hears. Worked a guiy in Cuba from
>>> Awstin, TX and a K6 on CW. Not the greatest reports.
>>>
>>> Anybody else tried them?
>>>
>>> Just curious. Please no flames. This was idle curiosity.
>>>
>>> GeorgeC
>>> W2DB
>
>

1615. Re: HAMSTIK DIPOLE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 12:28:40 UTC
From: W3JXP <jxp16@psu.edu>
Message-ID: <gdedna2pc8_kHGbcRVn-vQ@adelphia.com>
Source record: 82853

Hi All:

Been there, done that. Mine was about 65KHz wide and about 10 to 15db down from the full size 80m dipole I put up to replace it. I had both up at the same time and they were both at about the same height so it was a good comparison. That said the hamstick dipole worked and I did make contacts on it.

--
John Passaneau W3JXP
State College Pa.
W3JXP@adelphia.net

"K9SQG" <k9sqg@aol.com> wrote in message
news:20050128211406.02088.00000276@mb-m14.aol.com...
> It will go very, very narrow. 10-25 kc perhaps.

1616. cast iron ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 12:40:25 UTC
From: ml <m@di.net>
Message-ID: <m-3E9D34.07402129012005@news.verizon.net>
Source record: 82855

soon to put a antenna on my roof (12floors high) i naturally wanted to
put a ground or static discharge up there

seems my only possibility is the cast iron sewer/wast pipe vents

i am guessing these are prob not good for this

is it usable?

m

1617. Re: cast iron ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 12:41:56 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Y4SdnT-Boc0KGWbcRVn-uw@crocker.com>
Source record: 82852

check the building and electrical codes, but it is very unlikely that a
waste pipe vent will suffice.

"ml" <m@di.net> wrote in message
news:m-3E9D34.07402129012005@news.verizon.net...
> soon to put a antenna on my roof (12floors high) i naturally wanted to
> put a ground or static discharge up there
>
>
> seems my only possibility is the cast iron sewer/wast pipe vents
>
> i am guessing these are prob not good for this
>
> is it usable?
>
> m

1618. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 13:11:20 UTC
From: Phil <phil.bradway@verizon.net>
Message-ID: <YXLKd.290$6i4.225@trndny02>
Source record: 82858

Jim Lawson, W2PV, solved the TOA problem on 20 M with a l o n g yagi at
~150' to open the band and his either/or/both stack(top antenna at about
70-80', as I remember) for normal band condition. Oh yes, Alpha 77s on most
bands, too!

Phil, KB2HQ, former neighbor of W2PV

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:ODzKd.33178$IV5.6955@attbi_s54...
> You can move the antenna boom up or down some 10 degrees and you would not
> be able to tell the difference per
> Lawson W2PV
> Art
> "Buck" <iam@this.site> wrote in message
> news:huflv052rdil7fe5pits7jl8uogtjpm2r8@4ax.com...
> > On 28 Jan 2005 12:48:52 -0800, "art" <aunwin@insightbb.com> wrote:
> >
> >>Most people have added an amplifier only to find out that the
> >>difference in signal
> >>was very small. Thus many people deride the value of a 'silly' db gain
> >>whereas DX'ers say that a single db extra is a lot !
> >>Fact is that most long distance signals on 20 metres come in at angles
> >>of 11 degrees or less where as the 'normal' antenna has a TOA of around
> >>14 degrees.
> >>So where a dxer points to the extra 1db gain as being everything in
> >>fact it is the lowering of the TOA that comes with the extra gain. In
> >>my opinion if one designs his antenna for a lower TOA say 10 to 11
> >>degrees then even tho its gain may well be below the dxers choise(a
> >>very long boom or stacked antennas) the lower TOA with less gain will
> >>show little difference
> >>to the antenna of choics because the lower edge of the radiation lobe
> >>will follow the same line and any extra gain provided will have the
> >>same effect of adding an amplifier which is minimal compared to the
> >>ability of capturing signals that arrive at low angles.
> >>I believe it is time for antenna designers to concentrate less on
> >>obtaining gain and instead concentrate more on lowering the TOA.
> >>without the need of excessive real estate requirements.
> >>What say ?
> >>Art
> >
> >
> > I have always thought that if one changed the azimuth angle of a beam
> > it would improve a number of contact signals, pending the angle they
> > are reflected from the atmosphere.
> >

> >
> > --
> > Buck
> > N4PGW
> >
>
>

1619. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 13:25:03 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <41fb8e7f.1070629@news.crosslink.net>
Source record: 82859

On Fri, 28 Jan 2005 21:28:20 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>I say ignore the TOA. (For those unfamiliar with the term, it's the
>"takeoff angle", which usually means the elevation angle at which the
>antenna pattern is strongest.)
>
>What counts is the gain at the elevation angle at which you want to
>communicate. This, in turn, depends on the distance and the propagation
>conditions. If you need a strong signal at an elevation angle of 15
>degrees, it doesn't matter whether the TOA is 10 degrees, 15, or 20 or
>zero. All that counts is the gain at 15 degrees. And an antenna with TOA
>of 15 degrees doesn't necessarily have the most gain at 15 degrees of
>any antenna.
>
>Consider the following three 40 meter antennas: A vertical antenna with
>about 8 radials (18 ohm ground system resistance), a dipole at 30 feet,
>and a dipole at 40 feet, all over average ground.
>
>Antenna TOA deg Gain at 26 deg. Gain at 15 deg.
>
>Vert 26 -1.76 dBi -2.72 dBi
>Dipole @ 30' 90 (straight up) 2.58 dBi -1.28 dBi
>Dipole @ 40' 51 3.9 dBi 0.32 dBi
>
>-- Which one has the lowest takeoff angle?
>-- Which one is the best for communicating at 26 deg. elevation angle?
>-- Which one is the best for communciating at 15 deg. elevation angle?
>
>What does the takeoff angle have to do with which antenna is best?
>
>Roy Lewallen, W7EL

Dear Roy,

3 cheers.

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1620. Re: 30M Jpole and antenna analyser question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 13:29:33 UTC
From: Cecil Moore <w5dxp@totalzone.com>
Message-ID: <41fb913a$1_1@127.0.0.1>
Source record: 82856

Doug Faunt N6TQS +1-510-655-8604 wrote:
> I've built a 30M Jpole using dimensions from the Jpole calculator in
> Hamcalc and using 300 ohm twin lead for the matching section.
> It seems to resonate about right, but the SWR is 2.2.

Probably not a J-pole shorted at the bottom but a J-pole
(Zepp) open at the bottom? The trouble with a Zepp is
there are no adjustments except length. With a J-pole
shorted at the bottom, you move the feedpoint until you
find the 50 ohm point. With the open ended J-pole (Zepp)
the 1/4WL bottom section is a fixed transformer.

Your feedpoint impedance is probably 110 ohms (don't think
it would be 23 ohms but it might be). Installing a 1/4WL
piece of 75 ohm coax between the feedpoint and your 50 ohm
coax should give you a near perfect SWR. For a piece of 75
ohm coax with VF of 0.66 (RG-11) that would be about 12.7
inches.
--
73, Cecil http://www.qsl.net/w5dxp

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1621. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 13:42:50 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <IqGdnQxcnbBED2bcRVn-gw@adelphia.com>
Source record: 82857

Roy Lewallen wrote:

> *Sigh*
>
> I tried.

Let me have a shot at it, Roy.

<possible blather alert!>

Perhaps there is confusion by some people with the idea that the takeoff angle. I suspect that a lot of people think of their RF leaving the antenna as a "blob" that leaps out at some desired or undesired angle.

Instead, the RF is heading off in all directions, with some angles having more relative power.

So even if an antenna has a lower TOA, it might be less gain than an antenna that has a higher TOA has at that angle.

An inefficient antenna with a low TOA can be less efficient at that low TOA than a more efficient antenna with a higher TOA is at that same low TOA.

Oy.

- Mike KB3EIA -

<rest snipped>

1622. 1 to x baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 13:49:27 UTC
From: pegge <pegge.j@DELETEtelia.com>
Message-ID: <HvMKd.129060$dP1.461928@newsc.telia.net>
Source record: 82861

I would like to build baluns with non-conventional ratios, and am sure
I have seen something in HAM RADIO. I have the last abt 20 years of
the mag, but I find nothing in the index-lists . A direction to the article
(or to somewhere on the net!) would be very much appreciated!
As an afterthought, it could be the 73 mag that I have from its start
to -78

TIA / per / sm7aha

1623. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 13:54:16 UTC
From: Cecil Moore <w5dxp@totalzone.com>
Message-ID: <41fb9705$1_1@127.0.0.1>
Source record: 82860

Mike Coslo wrote:
> Perhaps there is confusion by some people with the idea that the
> takeoff angle. I suspect that a lot of people think of their RF leaving
> the antenna as a "blob" that leaps out at some desired or undesired angle.
>
> Instead, the RF is heading off in all directions, with some angles
> having more relative power.
>
> So even if an antenna has a lower TOA, it might be less gain than an
> antenna that has a higher TOA has at that angle.
>
> An inefficient antenna with a low TOA can be less efficient at that
> low TOA than a more efficient antenna with a higher TOA is at that same
> low TOA.

Maybe a picture is worth a thousand words. Here's a comparison
radiation pattern for my 130 ft dipole Vs my 40m vertical with
elevated radials. In the dipole's favored direction, it's TOA
is greater than the vertical's yet the dipole radiates more
power than the vertical even at the vertical's TOA. Here's the
picture: http://www.qsl.net/w5dxp/dipvsver.htm
--
73, Cecil, W5DXP

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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1624. Re: 1 to x baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 14:01:06 UTC
From: Cecil Moore <w5dxp@totalzone.com>
Message-ID: <41fb989f$1_1@127.0.0.1>
Source record: 82862

pegge wrote:
> I would like to build baluns with non-conventional ratios, and am sure
> I have seen something in HAM RADIO.

Jerry Sevick's (W2FMI) books contain some information on
odd ratio transmission line transformers. I think they are
available from the ARRL.
--
73, Cecil http://www.qsl.net/w5dxp

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1625. Re: Isotron antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 14:51:53 UTC
From: Buck <iam@this.site>
Message-ID: <a98nv0t5kohvl1i28upt3vanbh0mg47a9u@4ax.com>
Source record: 82863

On Sat, 29 Jan 2005 10:43:25 +0100, "F8BOE" <f8boe-8@bluemail.ch>
wrote:

>Hoy!
>
>Thank's for the very interresting link to the isotron reviews. It's nice to
>see that citizen's band 's still living on...
>Everyone decided to buy one and was pleased by the SWR... but none of them
>seemed concerned about radiation patterns and loss (negative gain?), nor by
>the classical "how does it work" question.
>
>No they were all happy to kick 50W power in it to make DX with the guy in
>the village nearby... DX begins at your door... But never heard about ground
>wave propagation.
>
>Nevermind... As far as everybody's happy, it's all good!
>
>73 de F8BOE Olivier ...-.-
>
>
>
>"Caveat Lector" <CL@barahmas.com> a ï¿½crit dans le message de news:
>RsyKd.3404$5t.454@fed1read07...
>> 22 reviews from owners of the Isotron antennas at URL:
>> http://www.eham.net/reviews/detail/311
>>
>> --
>> Caveat Lector
>>
>>
>>
>> Someone wrote
>>>> Howdy y'all.
>>>>
>>>> I had to finally try one. Got a 40meter Isotron, put it up at about 15'.
>>>> It
>>>> does work.
>>>>
>>>> Not sure how well, but it sends and hears. Worked a guiy in Cuba from
>>>> Awstin, TX and a K6 on CW. Not the greatest reports.
>>>>
>>>> Anybody else tried them?
>>>>
>>>> Just curious. Please no flames. This was idle curiosity.

>>>>
>>>> GeorgeC
>>>> W2DB
>>
>>
>

When band conditions are excellent, even a dummy load will work. Most non-amateurs and many amateurs don't understand this. In some cases if an antenna works at all, it is great. Anything works better than nothing. However, those of us who experiment with antennas quickly learn that the throw of a switch will tell us how much better one antenna is over another.

To some of us, an economical antenna that doesn't attract attention is better than a more expensive high gain antenna. To some of us, only the best performance antenna will suffice. A QRPp station can not afford to have a high loss antenna where as a QROo station can overcome the losses with power.

--
Buck
N4PGW

1626. Re: cast iron ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 14:59:17 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <41fba403.1374653703@news.galilei.com>
Source record: 82865

Hi m

Don't waste your time!

More often than not there is no continuity in cast iron waste piping.
Joints are packed with Oakum and then lead poured in the bell to seal
out sewer gasses. The Oakum acts as an insulator and the lead is not
much better than a cold solder joint, electrically speaking.

If a vent stack did have a good ground and ever did take a good
lightning hit there would be lead flying all over the place.
You rarely hear of a vent stack being hit BECAUSE it is a very poor
ground, if grounded at all.

TTUL
Gary

1627. Re: HAMSTIK DIPOLE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 15:00:03 UTC
From: Buck <iam@this.site>
Message-ID: <739nv05g3l5k0ggobjbil015o6l69ma9j8@4ax.com>
Source record: 82864

On Fri, 28 Jan 2005 23:23:35 GMT, "Russ J." <amservice@sbcglobal.net>
wrote:

>I received 2 75 meter Hamsticks today. I
>ll let the group know how it goes.
>
>RHJ

Russell,

What are you comparing this to or using it for?

Are you just having fun experimenting or do you have a planned use for
this antenna?

Buck
N4PGW

--
Buck
N4PGW

1628. Re: RFI: 2M & Aviation band antenna for pick-up truck.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 15:21:21 UTC
From: jimbo <jimbo62@spamex.com>
Message-ID: <1107012081.803359.13380@c13g2000cwb.googlegroups.com>
Source record: 82866

I used a mag mount antenna on the right front fender and brought the coax under the hood and then through the firewall into the cab. The hood had enough gap to allow the coax in without kinking or mashing. I secured everything under the hood with cable ties. I used a 1/4 wave (I think) about three feet high. And I have used one of the very short antennas, about 19 inches high with very good results. Comet, Diamond and Hustler all make good antennas.

Good luck, jimbo

1629. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 15:28:43 UTC
From: Buck <iam@this.site>
Message-ID: <2sanv0p89ulkmrk23iu3t942sprn1ihtif@4ax.com>
Source record: 82867

On Sat, 29 Jan 2005 13:11:20 GMT, "Phil" <phil.bradway@verizon.net>
wrote:

>Jim Lawson, W2PV, solved the TOA problem on 20 M with a l o n g yagi at
>~150' to open the band and his either/or/both stack(top antenna at about
>70-80', as I remember) for normal band condition. Oh yes, Alpha 77s on most
>bands, too!
>
>Phil, KB2HQ, former neighbor of W2PV

I imagine that you had an interesting ham life when you shared the
same band and he communicated in your direction.

--
Buck
N4PGW

1630. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 15:52:05 UTC
From: Buck <iam@this.site>
Message-ID: <ltanv05cov13d395kujqoiek40t5uft0co@4ax.com>
Source record: 82868

On 28 Jan 2005 12:48:52 -0800, "art" <aunwin@insightbb.com> wrote:

>Most people have added an amplifier only to find out that the
>difference in signal
>was very small. Thus many people deride the value of a 'silly' db gain
>whereas DX'ers say that a single db extra is a lot !
>Fact is that most long distance signals on 20 metres come in at angles
>of 11 degrees or less where as the 'normal' antenna has a TOA of around
>14 degrees.
>So where a dxer points to the extra 1db gain as being everything in
>fact it is the lowering of the TOA that comes with the extra gain. In
>my opinion if one designs his antenna for a lower TOA say 10 to 11
>degrees then even tho its gain may well be below the dxers choise(a
>very long boom or stacked antennas) the lower TOA with less gain will
>show little difference
>to the antenna of choics because the lower edge of the radiation lobe
>will follow the same line and any extra gain provided will have the
>same effect of adding an amplifier which is minimal compared to the
>ability of capturing signals that arrive at low angles.
>I believe it is time for antenna designers to concentrate less on
>obtaining gain and instead concentrate more on lowering the TOA.
>without the need of excessive real estate requirements.
>What say ?
>Art

Someone correct me if I am wrong, but isn't gain derived by narrowing
focussing all the energy into a more narrow path?

Besides, TOA is important to the location of an antenna in respect to
its relative position to the ground and the surrounding terrain.

I have heard that people surrounded by mountains prefer a 1/4 whip on
their cars for 2 meters and up when trying to hit repeaters due to its
higher angle of radiation, but in the flat areas, the preferred
antennas are the 5/8 wave etc due to its horizontal gain.

Being on the side of a hill, I can't use an antenna at roof-top level
with a low angel of radiation as there isn't enough power to get the
signal through the miles of land mass under my neighbor's houses.

I did an experiment when I first received my General license to see if
I could sign into the GA SSB NTS Net. I rolled out a spool of wire on
the ground approximately 1/4 wave for 3975 kc. Without a tuner I was
able to get acceptable SWR and checked into the net. I wasn't the
strongest signal but I did well enough to hold several QSOs. It
wasn't as good as my dipole when I raised one, but it worked better

than my 40 meter dipole at the time.

I believe that a horizontal dipole will have about the same TOA as a vertical dipole when both are sufficiently high. However, the dipole is more bidirectional and the vertical is omni directional. Therefore the horizontal dipole may display some gain broadside over the vertical.

I believe that Cecil's picture reinforces the idea that on HF especially, the TOA is largely affected by the antenna's elevation above ground.

However, I was reading in CQ or QST last year about a DX operator who uses verticals near the sea and wins his contests because of his antennas. He finds the best location for his antennas near the ocean. I believe he said he had tried beams before but there is an ocean effect that makes the verticals better suited for his operations.

That same vertical would be lousy for me as my house is on a hill that forms a very close valley.

I used a Taylor Radio vertical years ago in this yard and it sucked. However, when I used it in Charleston and Jacksonville, it was fantastic (not near the ocean).

Another DX operator suggests that most people will have a better chance of communicating with him if they use a slanted dipole pointed in the direction of their QTH. The angle of radiation and gain make it a great DX antenna.

Different antennas work differently depending on their locations. I think your better question would be, what is the best antenna for my QTH and operating style?

--
Buck
N4PGW

1631. Re: Isotron antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 16:19:28 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <lIOKd.937$1O2.42@fed1read05>
Source record: 82869

Oh gee all the guy wanted was some opinions which I gave him at
http://www.eham.net/reviews/detail/311

From here he gets all this ranting about CBers and 50 kW
--
Caveat Lector

> On Sat, 29 Jan 2005 10:43:25 +0100, "F8BOE" <f8boe-8@bluemail.ch>
> wrote:
>
>>Hoy!
>>
>>Thank's for the very interresting link to the isotron reviews. It's nice
>>to
>>see that citizen's band 's still living on...
>>Everyone decided to buy one and was pleased by the SWR... but none of them
>>seemed concerned about radiation patterns and loss (negative gain?), nor
>>by
>>the classical "how does it work" question.
>>
>>No they were all happy to kick 50W power in it to make DX with the guy in
>>the village nearby... DX begins at your door... But never heard about
>>ground
>>wave propagation.
>>
>>Nevermind... As far as everybody's happy, it's all good!
>>
>>73 de F8BOE Olivier ...-.-
>>
>>

1632. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 17:04:14 UTC
From: "aunwin@insightbb.com"
Message-ID: <imPKd.34730$IV5.6368@attbi_s54>
Source record: 82870

Buck, in my posting I refered to 20 meters and also the incoming angles and
average signals thereof coming from Europe. Thus my interest was in the
lower half of the main lobe. The thickness of the lobe of the lobe would
thus not be important,
only the contour of the underside of the lobe. It is this portion of the
lobe where a DXer referers to the fact that a db means a lot as opposed to
adding a db gain to angles contained within a lobe. Note that the thickness
of the lobe can vary even tho both anternnas may have the same take of angle
as can be seen by comparing a monster boom length antenna to that of a
stacked beam which admittedly has a feed point which is very high. When
comparing these two types an optimum would be a low feed point (1 WL) with a
small turning radius with means to compress the main lobe downwards for
those DX
signals arrive and where the 'silly' db becomes everything
Regards
Art.

"Buck" <iam@this.site> wrote in message
news:ltanv05cov13d395kujqoiek40t5uft0co@4ax.com...
> On 28 Jan 2005 12:48:52 -0800, "art" <aunwin@insightbb.com> wrote:
>
>>Most people have added an amplifier only to find out that the
>>difference in signal
>>was very small. Thus many people deride the value of a 'silly' db gain
>>whereas DX'ers say that a single db extra is a lot !
>>Fact is that most long distance signals on 20 metres come in at angles
>>of 11 degrees or less where as the 'normal' antenna has a TOA of around
>>14 degrees.
>>So where a dxer points to the extra 1db gain as being everything in
>>fact it is the lowering of the TOA that comes with the extra gain. In
>>my opinion if one designs his antenna for a lower TOA say 10 to 11
>>degrees then even tho its gain may well be below the dxers choise(a
>>very long boom or stacked antennas) the lower TOA with less gain will
>>show little difference
>>to the antenna of choics because the lower edge of the radiation lobe
>>will follow the same line and any extra gain provided will have the
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>>ability of capturing signals that arrive at low angles.
>>I believe it is time for antenna designers to concentrate less on
>>obtaining gain and instead concentrate more on lowering the TOA.
>>without the need of excessive real estate requirements.
>>What say ?
>>Art
>

> Someone correct me if I am wrong, but isn't gain derived by narrowing
> focussing all the energy into a more narrow path?
>
> Besides, TOA is important to the location of an antenna in respect to
> its relative position to the ground and the surrounding terrain.
>
> I have heard that people surrounded by mountains prefer a 1/4 whip on
> their cars for 2 meters and up when trying to hit repeaters due to its
> higher angle of radiation, but in the flat areas, the preferred
> antennas are the 5/8 wave etc due to its horizontal gain.
>
> Being on the side of a hill, I can't use an antenna at roof-top level
> with a low angel of radiation as there isn't enough power to get the
> signal through the miles of land mass under my neighbor's houses.
>
> I did an experiment when I first received my General license to see if
> I could sign into the GA SSB NTS Net. I rolled out a spool of wire on
> the ground approximately 1/4 wave for 3975 kc. Without a tuner I was
> able to get acceptable SWR and checked into the net. I wasn't the
> strongest signal but I did well enough to hold several QSOs. It
> wasn't as good as my dipole when I raised one, but it worked better
> than my 40 meter dipole at the time.
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> vertical dipole when both are sufficiently high. However, the dipole
> is more bidirectional and the vertical is omni directional. Therefore
> the horizontal dipole may display some gain broadside over the
> vertical.
>
> I believe that Cecil's picture reinforces the idea that on HF
> especially, the TOA is largely affected by the antenna's elevation
> above ground.
>
> However, I was reading in CQ or QST last year about a DX operator who
> uses verticals near the sea and wins his contests because of his
> antennas. He finds the best location for his antennas near the ocean.
> I believe he said he had tried beams before but there is an ocean
> effect that makes the verticals better suited for his operations.
>
> That same vertical would be lousy for me as my house is on a hill that
> forms a very close valley.
>
> I used a Taylor Radio vertical years ago in this yard and it sucked.
> However, when I used it in Charleston and Jacksonville, it was
> fantastic (not near the ocean).
>
> Another DX operator suggests that most people will have a better
> chance of communicating with him if they use a slanted dipole pointed
> in the direction of their QTH. The angle of radiation and gain make
> it a great DX antenna.

> Different antennas work differently depending on their locations. I
> think your better question would be, what is the best antenna for my
> QTH and operating style?
>
>
>
>
> --
> Buck
> N4PGW
>

1633. Re: Is BPL going to take up more spectrum?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 18:04:41 UTC
From: Cecil Moore <w5dxp@totalzone.com>
Message-ID: <41fbd1b5$1_1@127.0.0.1>
Source record: 82774
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.radio.amateur.dx

Mark Zenier wrote:
> With BPL they can set up in the business to compete with the cable and
> telephone companies. So what if the stuff doesn't work, they can replace
> it later with the same hardware the cable company uses. BAIT AND SWITCH.

Maybe some good news - I hear that BPL is showing up as
blips on radars.
--
73, Cecil http://www.qsl.net/w5dxp

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1634. Re: 1 to x baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 18:08:29 UTC
From: "aunwin@insightbb.com"
Message-ID: <xiQKd.25971$yY6.18057@attbi_s02>
Source record: 82773

If you obtain a normal toroid type transformer with say 6 connections
(female connection)
for various so called standard ratios you can connect these to a rotary
switch which then allows you
to obtain multiple ratios over and above those listed on the transformer.
One of these at the top of the tower and driven by a stepping motor should
cover all your needs.
Regards
Art

"Cecil Moore" <w5dxp@totalzone.com> wrote in message
news:41fb989f$1_1@127.0.0.1...
> pegge wrote:
>> I would like to build baluns with non-conventional ratios, and am sure
>> I have seen something in HAM RADIO.
>
> Jerry Sevick's (W2FMI) books contain some information on
> odd ratio transmission line transformers. I think they are
> available from the ARRL.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
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> News==----
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> Newsgroups
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1635. Re: Is BPL going to take up more spectrum?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 18:08:36 UTC
From: CW <cmagers@earthlink.net>
Message-ID: <qK6dnaH2P9MfTWbcRVn-vw@comcast.com>
Source record: 82772
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.radio.amateur.dx

I would say this whole idea has been sold by people more interested in getting the money of ignorant investors that building a workable system. BPL will likely die shortly after implemenation if it ever gets off the grond at all. The cost is just to high for it to be viable.

"King Zulu" <KingZulu123@msn.com> wrote in message
news:177Kd.31343$IV5.22958@attbi_s54...
>
> Nothing like trying to use something intended for one use for some other
> unrelated use. Why would any fool want to put high-speed transmission
data
> on an unshielded single wire feedline that travels for miles in a hostile
> communications environment? One would think the idea wouldn't get off the
> professor's desk. Maybe PhD's should harvest rice six months each year to
> find out what the real world is all about?
>
> ak
>
>
>
>
>

1636. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 18:37:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <n0jnv0dbne30od00n31i7uthcj8q785lsa@4ax.com>
Source record: 82775

On Sat, 29 Jan 2005 10:52:05 -0500, Buck <iam@this.site> wrote:

>Someone correct me if I am wrong, but isn't gain derived by narrowing
>focussing all the energy into a more narrow path?

Hi Buck,

Thanks for the invitation (but we are a rabble of party crashers anyway). What you say about narrowing to achieve gain is a useful analogy, but there are some problems on down the line:

>Besides, TOA is important to the location of an antenna in respect to
>its relative position to the ground and the surrounding terrain.

True, except to invert the inference: location and terrain is important to the TOA (put the horse before the cart, in other words).

>I have heard that people surrounded by mountains prefer a 1/4 whip on
>their cars for 2 meters and up when trying to hit repeaters due to its
>higher angle of radiation, but in the flat areas, the preferred
>antennas are the 5/8 wave etc due to its horizontal gain.

This reveals the problem with testimonial in place of measurement. Unless you are in the Grand Canyon, you stand a chance of communication at a very much greater distance to a mountain than you are to another rig on the same plain. Even an HT has enough power to communicate with a sattelite (or space shuttle). This reveals that power is not the problem for considerable distance. However, at this frequency (2M) line of sight on the plains is not that very far away (less than 5 miles with your HT in your hand). On the other hand, if on the plains you can see a mountain 50 miles away, you are as likely as not to be able to talk to it to (presuming a repeater inhabits its peak).

Hence the gain differential of quarterwave and 5/8ths is not necessarily required for the Power nor the TOA - other issues are at work. When the issues are not discussed, nor investigated, then changing the antenna system from one to the other may resolve that hidden issue and the difference attributed to the antenna - voila! testimony offered.

>I did an experiment when I first received my General license to see if
>I could sign into the GA SSB NTS Net. I rolled out a spool of wire on
>the ground approximately 1/4 wave for 3975 kc. Without a tuner I was
>able to get acceptable SWR and checked into the net. I wasn't the
>strongest signal but I did well enough to hold several QSOs. It
>wasn't as good as my dipole when I raised one, but it worked better

>than my 40 meter dipole at the time.

You have a bad habit of comparing the qualities of one antenna on one band to the qualities of a second antenna on another band. This is called testimonial, and it is not very useful in demonstrating correlations. Trying to draw two different observations under the same umbrella of discussion does not lead to any general conclusion.

Your 80M antenna on the ground would match, certainly when so obviously in the grip of ground. You could have probably qualified that installation to match at nearly any frequency - if we confine the goal of matching to present no reflected power. A ground hugger so qualifies and the ground is content to absorb (without reflecting) all the power you pour into it.

What you fail to compare is how it worked "better" than your elevated 40M: how far were you working 80M contacts? The ground laid antenna was used in Desert Storm for just this quality and it provided useful contacts in missions there, but they were not interested in skip.

>However, I was reading in CQ or QST last year about a DX operator who
>uses verticals near the sea and wins his contests because of his
>antennas. He finds the best location for his antennas near the ocean.
>I believe he said he had tried beams before but there is an ocean
>effect that makes the verticals better suited for his operations.

This, again, is testimonial. However, it is often attended with compelling testing and theory that dovetail. The simple explanation is that the vertical's radiation is constructively reinforced at low angles by the sea, a horizontal's radiation is destructively combined by the sea at low take off angles. The difference at very low angles is far in excess of a 'little' db.

If you look over your shoulder to all that sand behind you, then that same vertical becomes a miserable performer in comparison to those beams turned to follow your eye.

>Another DX operator suggests that most people will have a better
>chance of communicating with him if they use a slanted dipole pointed
>in the direction of their QTH. The angle of radiation and gain make
>it a great DX antenna.

It's surprising how many Hams have missed this gem of wisdom. It must mean that
1. We are a particularly dull and stupid lot;
or
2. It doesn't really offer all that much for the effort.

73's
Richard Clark, KB7QHC

1637. Re: Is BPL going to take up more spectrum?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 18:52:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <m4mnv0lm9tqkp3ejlcqn5057t9di6em49c@4ax.com>
Source record: 82776
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.radio.amateur.dx

On Sat, 29 Jan 2005 10:08:36 -0800, "CW" <cmagers@earthlink.net>
wrote:
>The cost is just to high for it to be viable.

Hi OM,

BPL suffers the same problem: "The Last Mile." However, in rural
America it is not 1000 customers in the last mile, it is the 3
customers in the last 10 miles.

BPL has all the smoke and mirror investment potential as a new
millennium dot.com. WiMax will bury this fizzling comedy.

For a disparaging view of WiMax:
http://www.eweek.com/article2/0,1759,1668327,00.asp?kc=EWYH104039TX1B0000665
It is obvious that even the most restrained and pulled back design
wins hands down over BPL for BPL's proposed customer base.

73's
Richard Clark, KB7QHC

1638. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 20:35:21 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10vnsse7plsed34@corp.supernews.com>
Source record: 82777

Amen.
Let us use TOA for the elevation angle where an antenna's pattern is
strongest and ATOA for the actual elevation angle used over a long HF path.

At least from 7 MHz to 21 MHz, when DX ionosphere propagation is likely
the ATOA is between about 12 degrees and about 2 degrees. When comparing
antennas to be used for HF DX contacts, it is appropriate to note the gain
at 3, 6, and 9 degrees as being the numbers to compare. The actual TOA (as
defined above) is only interesting.

That said, it is possible to have a single horizontally polarized
antenna that is so high that it suffers in comparison to a lower antenna for
ATOAs of about 10 degrees (by more than the one db that is being talked
about). For one horizontally polarized antenna to be used for DX contacts
the desired heights are two to three wavelengths above earth.

If one can use a plurality of horizontally polarized antennas,
interesting results are possible. For instance: on receive, combining a
lower second antenna with a tall first antenna can effect the approximate
cancellation of the second lobe. The second lobe has a high TOA and can
contribute significantly to the noise and interference received from
relatively short distances. Nulling the second lobe can significantly
increase the received SNR.
For closer spacing of multiple antennas, one can effect more gain than
that of one antenna - with trade-offs.

I emphasize what has been said by Roy and others: TOA (as defined
above) is interesting, but it is not the most important number for DX
contacts.

73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10vm7nn3c54po0e@corp.supernews.com...
> I say ignore the TOA. (For those unfamiliar with the term, it's the
> "takeoff angle", which usually means the elevation angle at which the
> antenna pattern is strongest.)
>
> What counts is the gain at the elevation angle at which you want to
> communicate. This, in turn, depends on the distance and the propagation
> conditions. If you need a strong signal at an elevation angle of 15
> degrees, it doesn't matter whether the TOA is 10 degrees, 15, or 20 or
> zero. All that counts is the gain at 15 degrees. And an antenna with TOA

> of 15 degrees doesn't necessarily have the most gain at 15 degrees of
> any antenna.
>
> Consider the following three 40 meter antennas: A vertical antenna with
> about 8 radials (18 ohm ground system resistance), a dipole at 30 feet,
> and a dipole at 40 feet, all over average ground.
>
> Antenna TOA deg Gain at 26 deg. Gain at 15 deg.
>
> Vert 26 -1.76 dBi -2.72 dBi
> Dipole @ 30' 90 (straight up) 2.58 dBi -1.28 dBi
> Dipole @ 40' 51 3.9 dBi 0.32 dBi
>
> -- Which one has the lowest takeoff angle?
> -- Which one is the best for communicating at 26 deg. elevation angle?
> -- Which one is the best for communciating at 15 deg. elevation angle?
>
> What does the takeoff angle have to do with which antenna is best?
>
> Roy Lewallen, W7EL
>

1639. another antenna in a tree ? from a rookie

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 20:42:01 UTC
From: jcooper874@webtv.net
Message-ID: <22492-41FBF519-556@storefull-3273.bay.webtv.net>
Source record: 82778

i am going to put my solarcon a99 in an 80 ft oak tree i no the fcc rule
about ant hight i live in the country and my lot is very privite .
what is the best coax should i use helix cable did i spell that right
lol or rg 213 i need about 100ft . thanks guys 73s from alabama
ps by the way i am study for my ham ticket

1640. Re: Short lot 80 and possible 160 antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 21:40:59 UTC
From: Bill <ojiisan@bellsouth.net>
Message-ID: <EoTKd.161$P87.137@bignews6.bellsouth.net>
Source record: 82779

Rick Scott wrote:
> Without dropping 200 or so on Commercial. Im in the process of trying
> to find a better 80 and possible 160 antenna for a short lot. Right
> now I have a G5RV that goes from corner to corner. I have just about
> 110ft from corner to corner on the long side.
>
>
> Ive been looking at Windoms, but would have to modify it, and Im not
> sure.
>
> SOOO, what other antennas are I missing. Warc, plus 40/80 are definite
> but would like to play with Top Band too.
>
>
> BEAR in mind, I dont have a big tower to put a sloper or other on to.
> This is from a tree (50Ft) to a Mast I put up (20ft)
> Thanks Scotty N7HJ
>
Rick, I put up a B&W End Fed Inverted V which needs about 105 feet and
it loads on all bands from 160 throgh ten meters with swr less than 1.5
The center is on a 30 foot push up mast.

1641. · · · Have You Heard The Good News? · · ·

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 22:46:55 UTC
From: Google_Usenet_USA@yahoo.com
Message-ID: <1107038815.836413.277780@f14g2000cwb.googlegroups.com>
Source record: 82780

Good News!

Do you know how simple it is to go to Heaven after this life has ended?

Some people believe that belonging to a local church, temple, mosque or synagogue will get them to Heaven.

Others believe that water baptism, obeying the ten commandments or just being a good person will get them to Heaven.

There are many other beliefs as well, but the good news about God's way to Heaven is found in the Holy Bible.

The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our sins(misdeeds). He was born in the land of Israel supernaturally to a virgin Jewish woman named Mary. He lived a sinless life for thirty-three years and then sacrificed His sinless blood and died on a cross to pay the death penalty for our sins. After Jesus was placed in a tomb He rose from the dead three days later as He said He would. The Holy Bible also tells us that Jesus Christ ascended into Heaven and that all who accept Him as their Lord and Saviour will live forever with Him in Heaven where there is no more death, sorrow, sickness and pain.

The Bible says, "For the wages of sin is death, but the gift of God is eternal life through Christ Jesus our Lord." (Romans 6:23)

This verse in the Bible says, "For ALL HAVE SINNED, and come short of the glory of God." (Romans 3:23)

This verse says, "But God demonstrates his own love for us in this: While we were still sinners, Christ died for us." (Romans 5:8)

In this passage the Bible clearly explains how simple it is to be saved and on your way to Heaven, "For if you confess with your mouth, "Jesus is Lord," and believe in your heart that God raised him from the dead, you WILL BE SAVED." (Romans 10:9)

You can be saved right now and on your way to Heaven if you will open your heart to Jesus and pray the following prayer:

Dear Jesus Christ, I want to be saved so that I can have a home in Heaven when I die. I agree with You that I am a sinner. I believe You love me and want to save me. I believe that You bled and died on the cross to pay the penalty for my sins. I believe that You rose from the dead. Please forgive my sins and come into my heart and be my Lord and Saviour. Thank You Lord Jesus Christ for forgiving me and saving me through Your merciful grace. Amen.

You are now a Christian if you said the prayer and allowed God to save you. Welcome to the family of God.

Salvation is not a reward but a gift. The Bible says it this way, "For it is by GRACE you have been SAVED, through FAITH and this not from yourselves, it is the GIFT of God." (Ephesians 2:8)

Nothing in the world is more important than your eternal destiny.

The Bible says, "In Him(Jesus) we have redemption through His blood, the forgiveness of sins..." (Ephesians 1:7)

If you have not yet made a decision to be saved, please do so now before it is too late. The reason why it is so important to be saved now is because you do not know exactly when you will die. You may die prematurely in a traffic accident, terrorist attack or some other way before you get another chance to be saved.

The Bible tells us that we will spend eternity in Heaven or a place of eternal torment called Hell. It would be terrible to die and go to Hell when all you have to do is accept Jesus Christ as your personal Lord and Saviour.

Some people that have already made Jesus Christ their Lord and Saviour worry about losing their salvation. The Bible teaches Christians that we can never lose our salvation no matter what happens.

The Bible says it this way, "My dear children, I write this to you so that you will not sin. But if anybody does sin, we have one who speaks to the Father in our defense Jesus Christ, the Righteous One." (1John 2:1)

Yes my friend, Jesus Christ is able to save you and keep you saved.

Please tell your family and friends, thanks!

Have a great day!
Internet Evangelist R.L. Grossi

1. http://www.biblegateway.com << Free Online Bible
2. http://www.tbn.org/index.php/8/1.html << Free Online Movies
3. http://www.carm.org/cults/cultlist.htm << Beware Of Cults
4. http://www.equip.org/free/DH198.htm << About Hell
5. http://www.powertochange.com/questions/qna2.html << Is Jesus God?

1642. Coax Antenna Lead

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 23:00:05 UTC
From: jimbo <jimbo62@spamex.com>
Message-ID: <1107039605.842893.193840@z14g2000cwz.googlegroups.com>
Source record: 82781

I am building a new house. I need two coax runs inside the house for two uses. First, for 2 meter, 440 MHz dual band. Second for 2-30 MHz HF. I am considering using RG213/U for both runs. I know this coax is suitable for 440 MHz on runs less than 100 feet. Would there be any problems for the 2 meter or HF using this coax? Or are there any suggestions for this project?

Thanks, jimbo

1643. Re: Coax Antenna Lead

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 23:27:56 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10vo70o8tb358e2@news.supernews.com>
Source record: 82782

Yes I just installed a 100' run and a 50' of 9914F "direct bury" coax for VHF and HF respectively. This coax is lower loss than 214 and much more robust in it's environmental qualities and can be buried directly. I purchased ready made coax assemblies with silver-plated Amphenol PL259's attached from RadioBooks Radio Ware

1. http://radiobooks.com/products/ca9914f.htm

9914F is very nearly as lossless as 9913 but is more flexible and can be directly buried.

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"jimbo" <jimbo62@spamex.com> wrote in message
news:1107039605.842893.193840@z14g2000cwz.googlegroups.com...
>I am building a new house. I need two coax runs inside the house for
> two uses. First, for 2 meter, 440 MHz dual band. Second for 2-30 MHz
> HF. I am considering using RG213/U for both runs. I know this coax is
> suitable for 440 MHz on runs less than 100 feet. Would there be any
> problems for the 2 meter or HF using this coax? Or are there any
> suggestions for this project?
>
> Thanks, jimbo
>

1644. Re: 30M Jpole and antenna analyser question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 23:42:52 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <cth71u021fq@enews4.newsguy.com>
Source record: 82783

"Cecil Moore" <w5dxp@totalzone.com> wrote in message
news:41fb913a$1_1@127.0.0.1...
> Doug Faunt N6TQS +1-510-655-8604 wrote:
>> I've built a 30M Jpole using dimensions from the Jpole calculator in
>> Hamcalc and using 300 ohm twin lead for the matching section.
>> It seems to resonate about right, but the SWR is 2.2.
>
> Probably not a J-pole shorted at the bottom but a J-pole
> (Zepp) open at the bottom? The trouble with a Zepp is
> there are no adjustments except length. With a J-pole
> shorted at the bottom, you move the feedpoint until you
> find the 50 ohm point. With the open ended J-pole (Zepp)
> the 1/4WL bottom section is a fixed transformer.
>
> Your feedpoint impedance is probably 110 ohms (don't think
> it would be 23 ohms but it might be). Installing a 1/4WL
> piece of 75 ohm coax between the feedpoint and your 50 ohm
> coax should give you a near perfect SWR. For a piece of 75
> ohm coax with VF of 0.66 (RG-11) that would be about 12.7
> inches.
> --
> 73, Cecil http://www.qsl.net/w5dxp

Hey, Cecil -

Did you slip a digit or two? 1/4WL at 30 meters with .66 V is just shy of 5
meters, no? I get about 16 feet.

John
KD5YI

1645. Re: Isotron antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-29 23:49:28 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <cth7ee0224c@enews4.newsguy.com>
Source record: 82784

"Caveat Lector" <CL@barahmas.com> wrote in message
news:lIOKd.937$1O2.42@fed1read05...
> Oh gee all the guy wanted was some opinions which I gave him at
> http://www.eham.net/reviews/detail/311
>
> From here he gets all this ranting about CBers and 50 kW
> --
> Caveat Lector
>
>
>
>> On Sat, 29 Jan 2005 10:43:25 +0100, "F8BOE" <f8boe-8@bluemail.ch>
>> wrote:
>>
>>>Hoy!
>>>
>>>Thank's for the very interresting link to the isotron reviews. It's nice
>>>to
>>>see that citizen's band 's still living on...
>>>Everyone decided to buy one and was pleased by the SWR... but none of
>>>them
>>>seemed concerned about radiation patterns and loss (negative gain?), nor
>>>by
>>>the classical "how does it work" question.
>>>
>>>No they were all happy to kick 50W power in it to make DX with the guy
>>>in
>>>the village nearby... DX begins at your door... But never heard about
>>>ground
>>>wave propagation.
>>>
>>>Nevermind... As far as everybody's happy, it's all good!
>>>
>>>73 de F8BOE Olivier ...-.-
>>>
>>>

That's similar to "Statistics show Xnprtd products work better! (This study
sponsored by Xnprtd products)".

John

1646. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 00:22:12 UTC
From: Buck <iam@this.site>
Message-ID: <cv1ov0585imk6edlfbcdgqd12rmpejuii4@4ax.com>
Source record: 82785

On Sat, 29 Jan 2005 17:04:14 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>Buck, in my posting I refered to 20 meters and also the incoming angles and
>average signals thereof coming from Europe. Thus my interest was in the
>lower half of the main lobe. The thickness of the lobe of the lobe would
>thus not be important,
>only the contour of the underside of the lobe. It is this portion of the
>lobe where a DXer referers to the fact that a db means a lot as opposed to
>adding a db gain to angles contained within a lobe. Note that the thickness
>of the lobe can vary even tho both anternnas may have the same take of angle
>as can be seen by comparing a monster boom length antenna to that of a
>stacked beam which admittedly has a feed point which is very high. When
>comparing these two types an optimum would be a low feed point (1 WL) with a
>small turning radius with means to compress the main lobe downwards for
>those DX
>signals arrive and where the 'silly' db becomes everything
>Regards
>Art.
>
>
>
>
>"Buck" <iam@this.site> wrote in message
>news:ltanv05cov13d395kujqoiek40t5uft0co@4ax.com...
>> On 28 Jan 2005 12:48:52 -0800, "art" <aunwin@insightbb.com> wrote:
>>
>>>Most people have added an amplifier only to find out that the
>>>difference in signal
>>>was very small. Thus many people deride the value of a 'silly' db gain
>>>whereas DX'ers say that a single db extra is a lot !
>>>Fact is that most long distance signals on 20 metres come in at angles
>>>of 11 degrees or less where as the 'normal' antenna has a TOA of around
>>>14 degrees.
>>>So where a dxer points to the extra 1db gain as being everything in
>>>fact it is the lowering of the TOA that comes with the extra gain. In
>>>my opinion if one designs his antenna for a lower TOA say 10 to 11
>>>degrees then even tho its gain may well be below the dxers choise(a
>>>very long boom or stacked antennas) the lower TOA with less gain will
>>>show little difference
>>>to the antenna of choics because the lower edge of the radiation lobe
>>>will follow the same line and any extra gain provided will have the
>>>same effect of adding an amplifier which is minimal compared to the
>>>ability of capturing signals that arrive at low angles.

>>>I believe it is time for antenna designers to concentrate less on
>>>obtaining gain and instead concentrate more on lowering the TOA.
>>>without the need of excessive real estate requirements.
>>>What say ?
>>>Art
>>
>> Someone correct me if I am wrong, but isn't gain derived by narrowing
>> focussing all the energy into a more narrow path?
>>
>> Besides, TOA is important to the location of an antenna in respect to
>> its relative position to the ground and the surrounding terrain.
>>
>> I have heard that people surrounded by mountains prefer a 1/4 whip on
>> their cars for 2 meters and up when trying to hit repeaters due to its
>> higher angle of radiation, but in the flat areas, the preferred
>> antennas are the 5/8 wave etc due to its horizontal gain.
>>
>> Being on the side of a hill, I can't use an antenna at roof-top level
>> with a low angel of radiation as there isn't enough power to get the
>> signal through the miles of land mass under my neighbor's houses.
>>
>> I did an experiment when I first received my General license to see if
>> I could sign into the GA SSB NTS Net. I rolled out a spool of wire on
>> the ground approximately 1/4 wave for 3975 kc. Without a tuner I was
>> able to get acceptable SWR and checked into the net. I wasn't the
>> strongest signal but I did well enough to hold several QSOs. It
>> wasn't as good as my dipole when I raised one, but it worked better
>> than my 40 meter dipole at the time.
>>
>> I believe that a horizontal dipole will have about the same TOA as a
>> vertical dipole when both are sufficiently high. However, the dipole
>> is more bidirectional and the vertical is omni directional. Therefore
>> the horizontal dipole may display some gain broadside over the
>> vertical.
>>
>> I believe that Cecil's picture reinforces the idea that on HF
>> especially, the TOA is largely affected by the antenna's elevation
>> above ground.
>>
>> However, I was reading in CQ or QST last year about a DX operator who
>> uses verticals near the sea and wins his contests because of his
>> antennas. He finds the best location for his antennas near the ocean.
>> I believe he said he had tried beams before but there is an ocean
>> effect that makes the verticals better suited for his operations.
>>
>> That same vertical would be lousy for me as my house is on a hill that
>> forms a very close valley.
>>
>> I used a Taylor Radio vertical years ago in this yard and it sucked.
>> However, when I used it in Charleston and Jacksonville, it was

>> fantastic (not near the ocean).
>>
>> Another DX operator suggests that most people will have a better
>> chance of communicating with him if they use a slanted dipole pointed
>> in the direction of their QTH. The angle of radiation and gain make
>> it a great DX antenna.
>>
>> Different antennas work differently depending on their locations. I
>> think your better question would be, what is the best antenna for my
>> QTH and operating style?
>>
>>
>>
>>
>> --
>> Buck
>> N4PGW
>>
>

Ok, Art,

I think I am with you now. I just re-read all the previous posts. Roy Lewallen first referred to the 40 meters and I think he introduced the picture of the angles from a vertical and a dipole.

Sorry to have been so slow picking up on this, and thank you all for your patience with me. With all this discussion, I am learning. I echo back my thoughts at the time that may be subject to change upon correction or even possibly due to misinformation, hihi.

I have been studying antenna theory for a while now, off and on. Not like a college professor, just on my own. Let's start by getting back to your original post.

You are interested in DXing on 20 meters in which most signals come in at 11 degrees or less. Therefore antenna designers should focus their attention, not on antenna gain, but on getting the gain to the incident angle of radiation. You mentioned that Amps turn out to be of little help if the antenna angle is wrong. (I'll save the amp for another discussion and deal with the antennas.)

I have been studying about antennas for a while now. (not like a college professor, probably more accurately I have been reading a lot.) I understand what you are saying about the amplifier. From my experience I have learned a simple truth. Either one has the propagation to make a contact, or one doesn't make contact. Last year I totally surprised myself when I called a DX station in a pileup and he answered. I was running an FT-817 into a dipole about 65 feet high. There have been times I couldn't break a pileup with a 400 watt Swan on the same antenna.

Getting back to your topic, from what I understand, the terrain and antenna elevation are as, or more, important in establishing the angle of incidence as the antenna is. IIRC, a Yagi has a recommended minimum height above terrain for optimum operation. I believe that 20 meters is 125 feet.

BTW, I am curious to know, from where did you get the information that the incoming signals are at 11 degrees?

Speaking of Yagi's and gain, I know that the gain (and inversely the bandwidth) of a yagi is increased by extending the spacing between elements. A wide spaced gives a little more gain than narrow spaced elements. I believe it also narrows the beam width of the signal. I don't think it affects that TOA, though, except maybe by its relationship to the ground and its surrounding terrain.

--
Buck
N4PGW

1647. Re: Isotron antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 00:24:30 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <1PVKd.24$bu.4@fed1read06>
Source record: 82786

The original poster asked for opinions from those that owned the isotron antenna -- we gave him that.

Now if he had asked for antenna measurements on an antenna range and comparisons to other antennas -- that is a different question. And I don't know where he would have found that answer.

As far as statistics -- fact is 3 out of 10 accidents are caused by drunk drivers -- thus 7 out of 10 are caused by sober drivers - guess we ought to get em off the road - huh

--
Caveat Lector

"John Smith" <kd5yikes@mindspring.com> wrote in message
news:cth7ee0224c@enews4.newsguy.com...
>
> "Caveat Lector" <CL@barahmas.com> wrote in message
> news:lIOKd.937$1O2.42@fed1read05...
>> Oh gee all the guy wanted was some opinions which I gave him at
>> http://www.eham.net/reviews/detail/311
>>
>> From here he gets all this ranting about CBers and 50 kW
>> --
>> Caveat Lector
>>
>>
>>
>>> On Sat, 29 Jan 2005 10:43:25 +0100, "F8BOE" <f8boe-8@bluemail.ch>
>>> wrote:
>>>
>>>>Hoy!
>>>>
>>>>Thank's for the very interresting link to the isotron reviews. It's nice
>>>>to
>>>>see that citizen's band 's still living on...
>>>>Everyone decided to buy one and was pleased by the SWR... but none of
>>>>them
>>>>seemed concerned about radiation patterns and loss (negative gain?), nor
>>>>by
>>>>the classical "how does it work" question.
>>>>
>>>>No they were all happy to kick 50W power in it to make DX with the guy
>>>>in
>>>>the village nearby... DX begins at your door... But never heard about

>>>>ground
>>>>wave propagation.
>>>>
>>>>Nevermind... As far as everybody's happy, it's all good!
>>>>
>>>>73 de F8BOE Olivier ...-.-
>>>>
>>>>
>
>
> That's similar to "Statistics show Xnprtd products work better! (This
> study sponsored by Xnprtd products)".
>
>
> John
>

1648. Re: Coax Antenna Lead

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 00:27:24 UTC
From: pfriedmanNoSpam <p.paulfriedmanNoSpam@comcast.net>
Message-ID: <W4qdnYdIPoZ3tGHcRVn-1w@comcast.com>
Source record: 82787

"jimbo" <jimbo62@spamex.com> wrote in message
news:1107039605.842893.193840@z14g2000cwz.googlegroups.com...
>I am building a new house. I need two coax runs inside the house for
> two uses. First, for 2 meter, 440 MHz dual band. Second for 2-30 MHz
> HF. I am considering using RG213/U for both runs. I know this coax is
> suitable for 440 MHz on runs less than 100 feet. Would there be any
> problems for the 2 meter or HF using this coax? Or are there any
> suggestions for this project?
>
> Thanks, jimbo
>

It sort of depends on how much loss is acceptable to you. 9913, for example, will have about 50% of the loss that 213 gives you at VHF/UHF frequencies. Remember, that the worse the mismatch (SWR) the higher the loss -- the tables you see assume a 1:1 SWR, so real world losses are always higher than what the tables show.

To directly answer your question -- if you are happy with 213 for 440, you will be happy with it at 144 since the losses will be lower at a lower frequency.

Not that it is likely to be relevant, but I use 9914 BuryFlex here since to make my wife happy, I run the coax underground. It should be pointed out that I don't have an antenna for anything above 6m.

Good luck

Paul AB0SI

1649. Re: Coax Antenna Lead

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 00:27:50 UTC
From: jimbo <jimbo62@spamex.com>
Message-ID: <1107044869.992081.241170@z14g2000cwz.googlegroups.com>
Source record: 82788

Hey Charlie, thanks for your reply. Well, my cable will be inside
walls, not buried in the ground. So, it seems that the RG213 will have
a little less loss and be a little less expensive?

Thanks, jimbo

1650. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 00:45:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <66bov0d25qbhlo8o3btddemeaa93n9t5b1@4ax.com>
Source record: 82789

On Sat, 29 Jan 2005 19:22:12 -0500, Buck <iam@this.site> wrote:

>Speaking of Yagi's and gain, I know that the gain (and inversely the
>bandwidth) of a yagi is increased by extending the spacing between
>elements. A wide spaced gives a little more gain than narrow spaced
>elements. I believe it also narrows the beam width of the signal.

Hi Buck,

This is fine.

> I don't think it affects that TOA, though, except maybe by its
>relationship to the ground and its surrounding terrain.

It is unlikely that anything you do in such a small footprint will bring any geometric change that brings even a perceptible change to the TOA. However, by simply increasing gain, the entire lobe structure of the antenna increases (same shape balloon, but now a larger balloon) which does impact the TOA; but not its angle, instead more its magnitude. This, in a sense, was the comparison Roy was drawing upon with the different examples.

In a sense, increasing the antenna gain (all other factors held constant) would be indistinguishable from simply boosting the transmitter gain (or adding an Amp).

73's
Richard Clark, KB7QHC

1651. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 00:50:51 UTC
From: Buck <iam@this.site>
Message-ID: <oaaov0h3r41qgvc92eplnu78563cs5hjf4@4ax.com>
Source record: 82790

On Sat, 29 Jan 2005 15:35:21 -0500, "J. Mc Laughlin"
<jcm@power-net.net> wrote:

> 73 Mac N8TT

Let me re-iterate what you said, assuming I understand it.

Art is saying that it is better to have a more accurate TOA than the last db of antenna gain, but you are saying that a better s/n ratio (as handled by the antenna) is better than the last db of gain.

Of course, Art started his statement with something about a person turning up their amplifier and having no better results. Therefore he must also be considering being heard as well as hearing. I would think that an amplifier will, for the most part, increase the radiation strength of every angle radiated at all by the antenna. If the amp represents a 6dB gain over the radio, it will represent a 6 dB gain in the any direction in which the lobe points. At least for the transmission, that should provide the 1 db difference we are talking about.

This doesn't address that time of day in which the west hears from the east in one way propagation.

Correct me if I am wrong here.

--
Buck
N4PGW

1652. Re: cast iron ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 01:15:41 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <2zWKd.23106$B95.3483@lakeread02>
Source record: 82791

"ml" <m@di.net> PREVIOUSLY wrote in message
news:m-5D7D54.19461226012005@news.verizon.net...
>
> 14story building i am on 4thfl

"ml" <m@di.net> wrote in message
news:m-3E9D34.07402129012005@news.verizon.net...
>
> soon to put a antenna on my roof (12floors high) i naturally wanted to
> put a ground or static discharge up there
>
> m

Since you're still serious about this, if possibly from a lower floor....

The waste-vents, if cast iron, will have steel pipe hangers clamped to the building's structural steel at every floor, with the first one being right under the roof. It might very well be an excellent static ground. Without meggering the vent, you could still determine DC resistance by running an extension cord from the rooftop utility room outlet to a vent pipe, and measure resistance between the electrical ground and the vent.

Jack Painter
Virginia Beach, Virginia

1653. Re: 1 to x baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 01:26:29 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cthd45$f9q$1@hercules.btinternet.com>
Source record: 82792

Baluns, in general, are the least important component in HF antenna systems.

The first question to ask yourself is why do you think you need a balun?

If you can't think of a reason then you don't need one.

If you CAN think of a specific reason then ask yourseslf, or somebody, what type of balun do you want. There's very little to choose between them.

But to get anywhere at all you MUST decide in terms of numerical and statistical quantities.

Please be specific. Or just copy the widely distributed, plagiarised, old wives, average recommendations.

And beware of balun salesmen and sales ladies. There are more than one means of making a living in our capitalist system. And everybody has a human right, irregular or not, to make a living. Thus confusing baluns. ;o)

In conclusion - what's your numerical problem?

Reg, G4FGQ

1654. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 01:26:30 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cthd46$f9q$2@hercules.btinternet.com>
Source record: 82793

Just to clarify -

The angle of elevation of the radio path between points A and B on the Earth's surface is always a constant which depends purely on the Earth's geometry and the number of hops.

It has nothing to do with the radiation patterns, beam widths of either the receiving or transmitting antennas, vary as they may.

There may of course be short term variations due to ionospheric effects.

Reg

1655. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 01:35:56 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10voeg1mclrngd1@corp.supernews.com>
Source record: 82794

Dear Buck (N4PGW):

I am having a difficult time finding what I thought that I said in your paraphrasing. Your bio on QRZ.COM does not indicate an interest in DX, so it is possible that all of my comments were misdirected.

Perhaps the essence of what I was trying to say, in addition to agreeing with Roy, is that it is desirable with (single) horizontally polarized antennas at HF to have as much gain as possible appear in the direction that is expected to be used for DX contacts. In turn, that suggests that it is desirable to have a height above ground (or above the applicable "refection" area) be between 2 and 3 wavelengths.

I do not recall writing anything about power amplifiers or something called "one way propagation."

73 Mac N8TT
--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Buck" <iam@this.site> wrote in message
news:oaaov0h3r41qgvc92eplnu78563cs5hjf4@4ax.com...
> On Sat, 29 Jan 2005 15:35:21 -0500, "J. Mc Laughlin"
> <jcm@power-net.net> wrote:
>
> > 73 Mac N8TT
>
>
> Let me re-iterate what you said, assuming I understand it.
>
> Art is saying that it is better to have a more accurate TOA than the
> last db of antenna gain, but you are saying that a better s/n ratio
> (as handled by the antenna) is better than the last db of gain.
>

<snip>>
> Correct me if I am wrong here.
>
>
> --
> Buck
> N4PGW
>

1656. Re: Short lot 80 and possible 160 antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 01:44:55 UTC
From: Dan Richardson <dwr@mailinator.net>
Message-ID: <tueov09clajijupfedfbsbs3ka2qp42pep@4ax.com>
Source record: 82795

On Sat, 29 Jan 2005 16:40:59 -0500, Bill <ojiisan@bellsouth.net>
wrote:

>Rick, I put up a B&W End Fed Inverted V which needs about 105 feet and
>it loads on all bands from 160 throgh ten meters with swr less than 1.5
>The center is on a 30 foot push up mast.

That is, of course, if you don't mind that the antenna efficiency
sucks.

Danny, K6MHE

1657. Re: Coax Antenna Lead

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 01:52:08 UTC
From: pfriedmanNoSpam <p.paulfriedmanNoSpam@comcast.net>
Message-ID: <7LadnSuYK5ZboGHcRVn-qA@comcast.com>
Source record: 82796

"jimbo" <jimbo62@spamex.com> wrote in message
news:1107044869.992081.241170@z14g2000cwz.googlegroups.com...
> Hey Charlie, thanks for your reply. Well, my cable will be inside
> walls, not buried in the ground. So, it seems that the RG213 will have
> a little less loss and be a little less expensive?
>
> Thanks, jimbo
>

Jimbo:

More loss but less expensive. If the run is short and the mismatch is not too bad, you can save a few dollars by going with the 213 and accepting slightly higher losses. Just talk louder.:)

Paul AB0SI

1658. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 01:57:28 UTC
From: Buck <iam@this.site>
Message-ID: <l0cov0dqjhqg1oonn597d7ajmetcfge2v8@4ax.com>
Source record: 82797

On Sat, 29 Jan 2005 16:45:29 -0800, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Sat, 29 Jan 2005 19:22:12 -0500, Buck <iam@this.site> wrote:
>
>>Speaking of Yagi's and gain, I know that the gain (and inversely the
>>bandwidth) of a yagi is increased by extending the spacing between
>>elements. A wide spaced gives a little more gain than narrow spaced
>>elements. I believe it also narrows the beam width of the signal.
>
>Hi Buck,
>
>This is fine.
>
>> I don't think it affects that TOA, though, except maybe by its
>>relationship to the ground and its surrounding terrain.
>
>It is unlikely that anything you do in such a small footprint will
>bring any geometric change that brings even a perceptible change to
>the TOA. However, by simply increasing gain, the entire lobe
>structure of the antenna increases (same shape balloon, but now a
>larger balloon) which does impact the TOA; but not its angle, instead
>more its magnitude. This, in a sense, was the comparison Roy was
>drawing upon with the different examples.
>
>In a sense, increasing the antenna gain (all other factors held
>constant) would be indistinguishable from simply boosting the
>transmitter gain (or adding an Amp).
>
>73's
>Richard Clark, KB7QHC

I think you and I are in agreement except for what Art believes. (see
his statement below:)

>I believe it is time for antenna designers to concentrate less on
>obtaining gain and instead concentrate more on lowering the TOA.
>without the need of excessive real estate requirements.

He agrees that the antenna is better as it improves receive as well as
transmit, but I can't see the TOA being more important than the gain
unless it is really off by a long way. An NVIS antenna has a
different purpose than a DX antenna so he would need an antenna that
fits his needs. I am not sure what would reduce the TOA over a Yagi
unless it is a Yagi pointed downward.

Maybe what we need to be doing is asking Art what his situation is and trying to find the antenna that best fits his needs. I can't help but think that this question arose because he can't seem to find the antenna that helps him make successful DX contacts.

I used a TA-33JR for years. It was a fantastic 3 element beam. It was small, fit on my roof and could be turned by a RadShak TV Rotor. Even though it wasn't the ideal height above ground, it made a world of difference chasing mobiles for the WA counties award.

I try to learn a lot about antennas. I don't claim to be an expert and certainly don't want anyone to think I am trying to make Art (or anyone else) look like they don't know what they are talking about.

BTW, Art, have you looked at the N4GG antenna? It is on the ARRL site for members. I built one and didn't understand it so I took it down and made a new antenna. Then I got the details of it, but it was promoted as being a low angle of radiation. I don't know the degrees, though. It was certainly a much quieter antenna than the dipole.

I talked to N4GG by email. He is a real nice person.

Good luck,

Buck

--
Buck
N4PGW

1659. Vertical vs Horizontal

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 02:04:23 UTC
From: Buck <iam@this.site>
Message-ID: <eofov0dv0doh78qlssda8bhcsk5l9ha5g2@4ax.com>
Source record: 82798

I occasionally chase counties when I am sitting at my desk doing other things and have the radio available. Right now I am using a horizontal dipole antenna to make contacts. The downside of this is that many times I can't hear the mobiles or they can't hear me.

I am thinking that I might be able to improve my contacts by using a vertical antenna since most mobiles use vertical antennas. I have heard that once the signal bounces off the ionosphere, polarity isn't as important as it is for local communications. However, when I was assembling a 2 meter dipole antenna, I held it horizontal and turned it vertical. I saw the s-meter go from nothing to s-7 and the repeater go from silent to full quieting when I did this. I can't help but wonder how much difference it will make with the mobiles.

Thanks for the comments.

Buck
N4PGW

--
Buck
N4PGW

1660. 93 ohm coax

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 02:07:05 UTC
From: David McBeth <damarg@ihug.co.nz>
Message-ID: <cthfg5$h9e$1@lust.ihug.co.nz>
Source record: 82799

I have been given 300mtrs of 93 ohm coax.Can this be used in pair to give 46 ohms? Thankyou, David ZL2DG

1661. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 02:09:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10vogflccvb50af@corp.supernews.com>
Source record: 82800

Yes, you've got it. Hopefully some of the folks who didn't understand my explanation will understand yours.

Roy Lewallen, W7EL

Mike Coslo wrote:
>
> Let me have a shot at it, Roy.
>
> <possible blather alert!>
>
> Perhaps there is confusion by some people with the idea that the
> takeoff angle. I suspect that a lot of people think of their RF leaving
> the antenna as a "blob" that leaps out at some desired or undesired angle.
>
> Instead, the RF is heading off in all directions, with some angles
> having more relative power.
>
> So even if an antenna has a lower TOA, it might be less gain than an
> antenna that has a higher TOA has at that angle.
>
> An inefficient antenna with a low TOA can be less efficient at that
> low TOA than a more efficient antenna with a higher TOA is at that same
> low TOA.
>
> Oy.
>
> - Mike KB3EIA -
>
> <rest snipped>
>

1662. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 02:10:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10vogginjbg2ec5@corp.supernews.com>
Source record: 82801

Thanks, Cecil.

Roy Lewallen, W7EL

Cecil Moore wrote:
>
> Maybe a picture is worth a thousand words. Here's a comparison
> radiation pattern for my 130 ft dipole Vs my 40m vertical with
> elevated radials. In the dipole's favored direction, it's TOA
> is greater than the vertical's yet the dipole radiates more
> power than the vertical even at the vertical's TOA. Here's the
> picture: http://www.qsl.net/w5dxp/dipvsver.htm
> --
> 73, Cecil, W5DXP

1663. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 02:19:55 UTC
From: Buck <iam@this.site>
Message-ID: <hmgov0da884mooj8fnads7jcctte43oeq4@4ax.com>
Source record: 82802

On Sat, 29 Jan 2005 20:35:56 -0500, "J. Mc Laughlin"
<jcm@power-net.net> wrote:

> I do not recall writing anything about power amplifiers or something
>called "one way propagation."

The paragraph you quoted is the paragraph I reiterated what I thought
you were saying. All that follows was not from you, but a followup
continuing the topic.

As for DXing. I don't chase it, but I don't turn it down either. We
do seem to be in agreement that TOA isn't the most important factor.

{Break from that}

I have heard where antennas, beams in particular, have been mounted
too high and thus not been as good for the contact. I don't remember
the numbers, two to three wavelengths sounds right, but there seems to
be an optimum height for beam antennas.

Art first mentioned the amps and I threw in the one-way propagation
statement, which probably neither of which really contributes to the
real question for discussion.

--
Buck
N4PGW

1664. speaking of baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 02:29:00 UTC
From: Buck <iam@this.site>
Message-ID: <cchov0psb89gnbb33j6pnvq113t2gp66ro@4ax.com>
Source record: 82803

Here is the URL to a home-brew 4:1 balun that should work from 160-10 meters. I am interested in a 6:1 balun.

Since I have the materials for this balun, is there a similar one for a 6:1 or is there an easy way to convert this to varying ratios of baluns. For example 'double the number of turns for 50% more X:1 ratio'?

Thanks in advance

--
Buck
N4PGW

1665. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 02:32:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10vohqvjr6it1cb@corp.supernews.com>
Source record: 82804

Buck wrote:
> . . .
> He agrees that the antenna is better as it improves receive as well as
> transmit, but I can't see the TOA being more important than the gain
> unless it is really off by a long way. . .

It's important to realize that at HF (where atmospheric rather than receiver noise dominates), different criteria are important for receiving than transmitting antenna improvement.

If you simply increase the gain of an antenna without changing the pattern (by, for example, improving the efficiency of a vertical by adding more radials), it improves the S/N ratio at the station you're talking to, but it doesn't help the S/N ratio at your end. The reason is that both of you are getting noise from elsewhere. When you increase your gain, it improves the signal at the other end, while the noise at the other end stays the same, hence the S/N ratio improvement. But the gain increase causes both the signal and the noise to increase at your end, both in the same proportion. So you've improved your transmit effectiveness but haven't improved your ability to receive. You've done no more than you would by turning up the volume control.

The only way to improve your ability to receive at HF is to improve the directivity of the antenna, so it has less gain in the direction the noise, or some of the noise, is coming from compared to the direction of the station you're talking with. Deep pattern nulls are usually an important factor in doing this. If the signal and bulk of the noise both come from the same direction, you're stuck. The pattern makes no difference for transmitting, only the gain in a single direction. (I'll ignore the possibility of multipath propagation or surface/sky wave interference for this simplified explanation.) But for receiving, the ability to have different gains in different directions is important. Because the absolute gain isn't important, a small and inefficient but rotatable antenna with some good nulls can be an excellent receiving antenna.

At VHF/UHF, where the noise primarily comes from the receiver front end, antenna gain helps the S/N ratio for both transmitting and receiving.

Roy Lewallen, W7EL

1666. Re: Vertical vs Horizontal

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 02:41:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10voib425rdtp78@corp.supernews.com>
Source record: 82805

Let me encourage you to build a vertical antenna and arrage a switch so you can switch back and forth between it and your dipole. Be sure to use a current balun or two in your dipole feedline so it doesn't become part of the test.

Here's what I think you'll find, as I have when comparing a vertical to a horizontal antenna. At times, one antenna will be spectacularly better than the other -- by 20 dB or more. After a while, maybe a minute or so, the signal on the good antenna will fade, and when you switch you'll find that the other antenna is now a lot better than the formerly good one, by about the same amount. This cycle can go on for quite a while. This is likely due to polarization rotation (although multipath can cause a similar effect, if the antennas are spaced far enough apart); whichever antenna has the right polarization for the moment will be much better than the other.

I don't believe you'll find any spectacular overall improvement by using the vertical.

When doing these tests, don't make the mistake of assuming the units on your S-meter are some particular number of dB, unless you have the abililty to actually measure them. Any assumption you make could be WAY off.

Roy Lewallen, W7EL

Buck wrote:
> I occasionally chase counties when I am sitting at my desk doing other
> things and have the radio available. Right now I am using a
> horizontal dipole antenna to make contacts. The downside of this is
> that many times I can't hear the mobiles or they can't hear me.
>
> I am thinking that I might be able to improve my contacts by using a
> vertical antenna since most mobiles use vertical antennas. I have
> heard that once the signal bounces off the ionosphere, polarity isn't
> as important as it is for local communications. However, when I was
> assembling a 2 meter dipole antenna, I held it horizontal and turned
> it vertical. I saw the s-meter go from nothing to s-7 and the
> repeater go from silent to full quieting when I did this. I can't
> help but wonder how much difference it will make with the mobiles.
>
> Thanks for the comments.
>
> Buck
> N4PGW
>

1667. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 03:09:54 UTC
From: "aunwin@insightbb.com"
Message-ID: <6eYKd.26021$P04.12277@attbi_s03>
Source record: 82806

"Buck" <iam@this.site> wrote in message
news:l0cov0dqjhqg1oonn597d7ajmetcfge2v8@4ax.com...
> On Sat, 29 Jan 2005 16:45:29 -0800, Richard Clark <kb7qhc@comcast.net>
> wrote:
>
>>On Sat, 29 Jan 2005 19:22:12 -0500, Buck <iam@this.site> wrote:
>>
>>>Speaking of Yagi's and gain, I know that the gain (and inversely the
>>>bandwidth) of a yagi is increased by extending the spacing between
>>>elements. A wide spaced gives a little more gain than narrow spaced
>>>elements. I believe it also narrows the beam width of the signal.
>>
>>Hi Buck,
>>
>>This is fine.
>>
>>> I don't think it affects that TOA, though, except maybe by its
>>>relationship to the ground and its surrounding terrain.
>>
>>It is unlikely that anything you do in such a small footprint will
>>bring any geometric change that brings even a perceptible change to
>>the TOA. However, by simply increasing gain, the entire lobe
>>structure of the antenna increases (same shape balloon, but now a
>>larger balloon) which does impact the TOA; but not its angle, instead
>>more its magnitude. This, in a sense, was the comparison Roy was
>>drawing upon with the different examples.
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>>In a sense, increasing the antenna gain (all other factors held
>>constant) would be indistinguishable from simply boosting the
>>transmitter gain (or adding an Amp).
>>
>>73's
>>Richard Clark, KB7QHC
>
>
> I think you and I are in agreement except for what Art believes. (see
> his statement below:)
>
>>I believe it is time for antenna designers to concentrate less on
>>obtaining gain and instead concentrate more on lowering the TOA.
>>without the need of excessive real estate requirements.
>
> He agrees that the antenna is better as it improves receive as well as
> transmit, but I can't see the TOA being more important than the gain

> unless it is really off by a long way.
But Buck that is exactly what I am talking about. Just think about what types of antenna
can be considered a band opener. Somebody mentioned a 150 foot boom yagi which tho
it has lots of gain it is at a low height. I suspect the lobe it is projecting will be around 13 degrees
and the lobe will be fat suchg that the lower portion of the main lobe may well encompass a 10 degree
signal. Another band opener will be say a three element antenna at a height of say 150 to 200 feet.
The three element antenna is not a ground shaker but the lobe is made lower than a normal
height antenna thus even tho the antenna is relative low gain this low gain is directed at a low angle
say 10 to 11 degrees that can intercept signals just as the band is opening.
Another band opener is vertically stacked three element beams solely because there is three db
gain to be had purely by stacking that can be added
to the uppermost antenna which also lowers the interception angle area by virtue of a fatter lobe.
Now look at the band when it is well established, most antennas will now intercept a lot of the DX signals
but at the same time many of the band opening antennas may well fail to hear the signals as the signals
may well be coming in at a higher angle which coincides with the null supplied between the first and
second lobe . In all of this you must take note of what Reg said in that communicating signals must have the same hop distance which revolves around lobe interception and not gain. If the lobe intersection of the two stations vary by say a few hundred miles no amount of extra gain is going to make communication possible.
I am a member of the RSGB and not the ARRL.
Regards
Art

snip.
>
> Good luck,
>
> Buck
>
>
> --
> Buck
> N4PGW
>

1668. · · · Have You Heard The Good News? · · ·

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 03:41:04 UTC
From: Google_Usenet_USA@yahoo.com
Message-ID: <1107056464.954436.76390@z14g2000cwz.googlegroups.com>
Source record: 82807

Good News!

Do you know how simple it is to go to Heaven after this life has ended?

Some people believe that belonging to a local church, temple, mosque or synagogue will get them to Heaven.

Others believe that water baptism, obeying the ten commandments or just being a good person will get them to Heaven.

There are many other beliefs as well, but the good news about God's way to Heaven is found in the Holy Bible.

The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our sins(misdeeds). He was born in the land of Israel supernaturally to a virgin Jewish woman named Mary. He lived a sinless life for thirty-three years and then sacrificed His sinless blood and died on a cross to pay the death penalty for our sins. After Jesus was placed in a tomb He rose from the dead three days later as He said He would. The Holy Bible also tells us that Jesus Christ ascended into Heaven and that all who accept Him as their Lord and Saviour will live forever with Him in Heaven where there is no more death, sorrow, sickness and pain.

The Bible says, "For the wages of sin is death, but the gift of God is eternal life through Christ Jesus our Lord." (Romans 6:23)

This verse in the Bible says, "For ALL HAVE SINNED, and come short of the glory of God." (Romans 3:23)

This verse says, "But God demonstrates his own love for us in this: While we were still sinners, Christ died for us." (Romans 5:8)

In this passage the Bible clearly explains how simple it is to be saved and on your way to Heaven, "For if you confess with your mouth, "Jesus is Lord," and believe in your heart that God raised him from the dead, you WILL BE SAVED." (Romans 10:9)

You can be saved right now and on your way to Heaven if you will open your heart to Jesus and pray the following prayer:

Dear Jesus Christ, I want to be saved so that I can have a home in Heaven when I die. I agree with You that I am a sinner. I believe You love me and want to save me. I believe that You bled and died on the cross to pay the penalty for my sins. I believe that You rose from the dead. Please forgive my sins and come into my heart and be my Lord and Saviour. Thank You Lord Jesus Christ for forgiving me and saving me through Your merciful grace. Amen.

You are now a Christian if you said the prayer and allowed God to save you. Welcome to the family of God.

Salvation is not a reward but a gift. The Bible says it this way, "For it is by GRACE you have been SAVED, through FAITH and this not from yourselves, it is the GIFT of God." (Ephesians 2:8)

Nothing in the world is more important than your eternal destiny.

The Bible says, "In Him(Jesus) we have redemption through His blood, the forgiveness of sins..." (Ephesians 1:7)

If you have not yet made a decision to be saved, please do so now before it is too late. The reason why it is so important to be saved now is because you do not know exactly when you will die. You may die prematurely in a traffic accident, terrorist attack or some other way before you get another chance to be saved.

The Bible tells us that we will spend eternity in Heaven or a place of eternal torment called Hell. It would be terrible to die and go to Hell when all you have to do is accept Jesus Christ as your personal Lord and Saviour.

Some people that have already made Jesus Christ their Lord and Saviour worry about losing their salvation. The Bible teaches Christians that we can never lose our salvation no matter what happens.

The Bible says it this way, "My dear children, I write this to you so that you will not sin. But if anybody does sin, we have one who speaks to the Father in our defense Jesus Christ, the Righteous One." (1John 2:1)

Yes my friend, Jesus Christ is able to save you and keep you saved.

Please tell your family and friends, thanks!

Have a great day!
Internet Evangelist R.L. Grossi

1. http://www.biblegateway.com << Free Online Bible
2. http://www.tbn.org/index.php/8/1.html << Free Online Movies
3. http://www.carm.org/cults/cultlist.htm << Beware Of Cults
4. http://www.equip.org/free/DH198.htm << About Hell
5. http://www.powertochange.com/questions/qna2.html << Is Jesus God?

1669. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 03:50:55 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10vomd4p150bt08@corp.supernews.com>
Source record: 82808

Dear Reg:
You may have written the first sentence below towards the end of
engaging in your favorite evening activity of experimental wine evaluation.

As you well know, the ATOA (actual take off angle) of a fixed DX path
varies quite a bit from time to time and frequency to frequency. Indeed,
when clarity returns in the morning, you will recall that the ATOA at A can
be quite a bit different from the ATOA at B.

Truth in wine depends on the amount consumed and the time of day/night.

73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cthd46$f9q$2@hercules.btinternet.com...
> Just to clarify -
>
> The angle of elevation of the radio path between points A and B on the
> Earth's surface is always a constant which depends purely on the Earth's
> geometry and the number of hops.
>
> It has nothing to do with the radiation patterns, beam widths of either
the
> receiving or transmitting antennas, vary as they may.
>
> There may of course be short term variations due to ionospheric effects.
> ---
> Reg
>
>

1670. Re: Vertical vs Horizontal

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 04:16:58 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <ZcZKd.386$bu.99@fed1read06>
Source record: 82809

From URL:
http://www.astronantennas.com/polarization.html

On line-of-sight (LOS) paths, it is most important that the polarization of the antennas at both ends of the path use the same polarization. In a linearly polarized system, a misalignment of polarization of 45 degrees will degrade the signal up to 3 dB and if misaligned 90 degrees the attenuation can be 20 dB or more.

--
Caveat Lector

"Buck" <iam@this.site> wrote in message
news:eofov0dv0doh78qlssda8bhcsk5l9ha5g2@4ax.com...
>I occasionally chase counties when I am sitting at my desk doing other
> things and have the radio available. Right now I am using a
> horizontal dipole antenna to make contacts. The downside of this is
> that many times I can't hear the mobiles or they can't hear me.
>
> I am thinking that I might be able to improve my contacts by using a
> vertical antenna since most mobiles use vertical antennas. I have
> heard that once the signal bounces off the ionosphere, polarity isn't
> as important as it is for local communications. However, when I was
> assembling a 2 meter dipole antenna, I held it horizontal and turned
> it vertical. I saw the s-meter go from nothing to s-7 and the
> repeater go from silent to full quieting when I did this. I can't
> help but wonder how much difference it will make with the mobiles.
>
> Thanks for the comments.
>
> Buck
> N4PGW
>
> --
> Buck
> N4PGW
>

1671. Re: Vertical vs Horizontal

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 04:26:10 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <AIZKd.388$bu.177@fed1read06>
Source record: 82810

For HF work (skip) I use both vertical and horizontal antennas and switch
back and forth for the best signal.

Sometimes it is the vertical antenna -- sometimes the horizontal

As discussed here under "A little dB extra gain" the take off angle enters
into the picture also.

See my previous post for line of sight considerations

--
Caveat Lector

"Caveat Lector" <CL@barahmas.com> wrote in message
news:ZcZKd.386$bu.99@fed1read06...
> From URL:
> http://www.astronantennas.com/polarization.html
>
> On line-of-sight (LOS) paths, it is most important that the polarization
> of the antennas at both ends of the path use the same polarization. In a
> linearly polarized system, a misalignment of polarization of 45 degrees
> will degrade the signal up to 3 dB and if misaligned 90 degrees the
> attenuation can be 20 dB or more.
>
> --
> Caveat Lector
>
>
>
> "Buck" <iam@this.site> wrote in message
> news:eofov0dv0doh78qlssda8bhcsk5l9ha5g2@4ax.com...
>>I occasionally chase counties when I am sitting at my desk doing other
>> things and have the radio available. Right now I am using a
>> horizontal dipole antenna to make contacts. The downside of this is
>> that many times I can't hear the mobiles or they can't hear me.
>>
>> I am thinking that I might be able to improve my contacts by using a
>> vertical antenna since most mobiles use vertical antennas. I have
>> heard that once the signal bounces off the ionosphere, polarity isn't
>> as important as it is for local communications. However, when I was
>> assembling a 2 meter dipole antenna, I held it horizontal and turned
>> it vertical. I saw the s-meter go from nothing to s-7 and the
>> repeater go from silent to full quieting when I did this. I can't
>> help but wonder how much difference it will make with the mobiles.
>>
>> Thanks for the comments.

>>
>> Buck
>> N4PGW
>>
>> --
>> Buck
>> N4PGW
>>
>
>

1672. Re: Coax Antenna Lead

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 04:34:53 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <41fc66d7_1@news1.prserv.net>
Source record: 82811

Ah, shortsighted Jimbo:

Consider these: Damage to one of the coaxes, for example. And what about rotator cable? Or suppose you get interested
in another band or mode? My advice to people building new homes is to run conduit wherever you are going to need it,
and make it as big as practical. Then you can pull whatever coax you need, and upgrade when you feel like it. Or at
least be sure there are accessible pull wires wherever they might be needed. And coax has a limited lifetime anyway.

--
Crazy George
Remove N O and S P A M imbedded in return address
"jimbo" <jimbo62@spamex.com> wrote in message
news:1107039605.842893.193840@z14g2000cwz.googlegroups.com...
> I am building a new house. I need two coax runs inside the house for
> two uses. First, for 2 meter, 440 MHz dual band. Second for 2-30 MHz
> HF. I am considering using RG213/U for both runs. I know this coax is
> suitable for 440 MHz on runs less than 100 feet. Would there be any
> problems for the 2 meter or HF using this coax? Or are there any
> suggestions for this project?
>
> Thanks, jimbo
>

1673. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 04:39:59 UTC
From: Buck <iam@this.site>
Message-ID: <9dnov0tbgriuam6dormlkbuher8qgafg1u@4ax.com>
Source record: 82812

On Sun, 30 Jan 2005 03:09:54 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>But Buck that is exactly what I am talking about. Just think about what
>types of antenna
>can be considered a band opener. Somebody mentioned a 150 foot boom yagi
>which tho
>it has lots of gain it is at a low height. I suspect the lobe it is
>projecting will be around 13 degrees
>and the lobe will be fat suchg that the lower portion of the main lobe may
>well encompass a 10 degree
>signal. Another band opener will be say a three element antenna at a height
>of say 150 to 200 feet.
>The three element antenna is not a ground shaker but the lobe is made lower
>than a normal
> height antenna thus even tho the antenna is relative low gain this low gain
>is directed at a low angle
>say 10 to 11 degrees that can intercept signals just as the band is opening.
>Another band opener is vertically stacked three element beams solely
>because there is three db
>gain to be had purely by stacking that can be added
>to the uppermost antenna which also lowers the interception angle area by
>virtue of a fatter lobe.
>Now look at the band when it is well established, most antennas will now
>intercept a lot of the DX signals
>but at the same time many of the band opening antennas may well fail to hear
>the signals as the signals
>may well be coming in at a higher angle which coincides with the null
>supplied between the first and
>second lobe . In all of this you must take note of what Reg said in that
>communicating signals must have the same hop distance which revolves around
>lobe interception and not gain. If the lobe intersection of the two stations
>vary by say a few hundred miles no amount of extra gain is going to make
>communication possible.
>I am a member of the RSGB and not the ARRL.

Fair enough, I can't know where everyone is on the internet. On the
air, I get the advantage of having their callsign. I'll be glad to
send you the antenna design if you wish. (I see that isn't your
problem here).

>Regards
>Art
>

It appeared to me that you were looking for that lower lobe, not the higher one when the band opens. The longer the beam, the narrower its pattern is, and like better the rejection from other directions (f/b, f/s rejection, etc. I took that as an understood.))While answering both you and in part, Roy,)

from the OP:
>Fact is that most long distance signals on 20 metres come in at angles
>of 11 degrees or less where as the 'normal' antenna has a TOA of around
>14 degrees.
end quote.

I was under the impression that you felt a need for designers to find a lower TOA. closer to ten or eleven degrees. I am confused, there can be no doubt of that in your minds at this point I am sure :). I do realize that at least in a yagi, as you increase the forward gain (f/b and s/b ratios), generally by adding elements that it narrows the forward lobe horizontally and vertically. A 150 foot boom (say 20 elements for example) beam might be perfect for picking up the lower angle, which is what I thought you were looking for. The three element beam will bring in higher angle signals as the lobe will have a higher angle. A dipole will likely have even a higher, possibly a NVIS angle. As for being quieter, I didn't define it but I mentioned that the N4GG antenna was much quieter than my dipoles. It also has a low angle of radiation, which fits very well with what you and Roy are telling me. It doesn't have a high gain, in fact the designer doesn't even try to calculate it except to say it is a little higher than a dipole. He also said it was designed for the DX and not to expect to chat with many nearby stations.

For a small real estate layout, I imagine that the N4GG can be used with a dipole or small beam for continuous DX operation. Of course the N4GG antenna is larger than a dipole. It is one wave long and has quarter wave legs hanging off it.

... from the OP
>I believe it is time for antenna designers to concentrate less on
>obtaining gain and instead concentrate more on lowering the TOA.
>without the need of excessive real estate requirements.

Are you looking for a small antenna that will pick up the DX before the other DX hounds start piling up?

--
Buck
N4PGW

1674. Re: 93 ohm coax

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 04:40:52 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <41fc6898_3@news1.prserv.net>
Source record: 82813

Yes.

If you are going to use it at VHF, match the lengths electrically. At HF mechanical length is good enough. And, you do
understand that they are to be connected in parallel, both centers tied together and both shields, right?

--
Crazy George
Remove N O and S P A M imbedded in return address
"David McBeth" <damarg@ihug.co.nz> wrote in message news:cthfg5$h9e$1@lust.ihug.co.nz...
> I have been given 300mtrs of 93 ohm coax.Can this be used in pair to give 46
> ohms? Thankyou, David ZL2DG
>
>

1675. Re: Vertical vs Horizontal

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 04:50:34 UTC
From: Buck <iam@this.site>
Message-ID: <kbpov0tbik1nr9g9js45rpbcbm5fi1l5p1@4ax.com>
Source record: 82814

On Sat, 29 Jan 2005 18:41:35 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>When doing these tests, don't make the mistake of assuming the units on
>your S-meter are some particular number of dB, unless you have the
>abililty to actually measure them. Any assumption you make could be WAY off.

Thanks. My determining factor will be making the contact when I am up
for it. Too many times I have heard an s5 or better signal but by the
time it was my turn to call, or the pileup dies down, I can't hear the
mobile. That may be the answer.

I once considered phasing the vertical and horizontal together, but
from everything I read, the advantages of one over the other often
have to do with noise not picked up due to polarity. Horizontals have
some noise, and verticals have different noise, but a combination of
the two would have it all.

Since I am dealing with 20 and 40 meters mostly, I would only concern
myself with the 20 meter vertical. 40 doesn't seem to have the
problem. It seems that if I hear them on 40 I can work them. On 20 I
might get a 5-7 reply to a 22 report or vice-versa.

If I hang the vertical here, the top will be about 65 feet above
ground. The dipole feedline will be about 15 feet away and the center
of the dipole about 50-55 feet high. I doubt they will interact with
each other.

Thanks for your comments.

--
Buck
N4PGW

1676. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 05:10:09 UTC
From: restamp@hotmail.com
Message-ID: <R_ZKd.7363$i42.3624@fe1.columbus.rr.com>
Source record: 82815

In article <10vd28fc38a79ee@corp.supernews.com>,
David G. Nagel <nagel@core.com> wrote:
>stryped@hotmail.com wrote:
>
>> When looking for a power supply for my Alinco dr-590, what type of
>> power supply would I look for? The radio says 13.8 v dc but if I get a
>> 12 volt power supply will it put out the same wattage at the radio?
>>
>12 VDC to 13.8 VDC are nominal voltages. Very few radios are sensitive
>to variation of voltage as long as the power supply can supply the amps.
>The Icom 706 series seem to be sensitive to .LT. 12 VDC. I can't speak
>to the Alinco.
>Generally the front of any given power supply will say 12 VDC but the
>specs will indicate 13.8 VDC.
>No, if you provide 12 VDC you will output a lower wattage regardless of
> the capacity to provide adequate amperage.

OK. When the meter lamp in my Kenwood TS-430S burned out recently,
I substituted a 12V replacement from Radio Shack. So, are bulbs
rated the same way? Certainly, it would appear auto bulbs are,
but what about wheat lamps?

Rob

1677. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 05:29:13 UTC
From: "aunwin@insightbb.com"
Message-ID: <Jg_Kd.7517$C24.5454@attbi_s52>
Source record: 82816

"Buck" <iam@this.site> wrote in message
news:9dnov0tbgriuam6dormlkbuher8qgafg1u@4ax.com...
> On Sun, 30 Jan 2005 03:09:54 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>
snip>>Art
>>
>
> It appeared to me that you were looking for that lower lobe, not the
> higher one when the band opens. The longer the beam, the narrower its
> pattern is, and like better the rejection from other directions (f/b,
> f/s rejection, etc. I took that as an understood.))While answering
> both you and in part, Roy,)
>
> from the OP:
>>Fact is that most long distance signals on 20 metres come in at angles
>>of 11 degrees or less where as the 'normal' antenna has a TOA of around
>>14 degrees.
> end quote.
>
> I was under the impression that you felt a need for designers to find
> a lower TOA. closer to ten or eleven degrees.

Yes, that is exactly what I said and what I mean.We need to get away from
the long boom high gain aproach which cannot be used in many places and
look at other aproaches to getting a lower lobe trajectory with a small
turning radius.
Some will say that is impossible where as I would say it is possible when
open minds
are turned to the task.
Just think of what I could be describing, a 20 metre antenna with a
ten to eleven degree TOA, turning radius of a conventional dipole and a
feed point
of something less than 75 foot high. Now thats good for small real estate
and a light duty rotor
tho the U.K. authority may baulk at the height. I have built very long boom
yagi.s. for 20 M
some with a couple of reflectors and some with as many as 13 elements but
this direction is limited
by minimal advances compared to complexity, thus my statement as to what the
hobby needs
for it to grow
Regards

Art KB9MZ.....XG

I am confused, there
> can be no doubt of that in your minds at this point I am sure :). I
> do realize that at least in a yagi, as you increase the forward gain
> (f/b and s/b ratios), generally by adding elements that it narrows the
> forward lobe horizontally and vertically. A 150 foot boom (say 20
> elements for example) beam might be perfect for picking up the lower
> angle, which is what I thought you were looking for. The three
> element beam will bring in higher angle signals as the lobe will have
> a higher angle. A dipole will likely have even a higher, possibly a
> NVIS angle. As for being quieter, I didn't define it but I mentioned
> that the N4GG antenna was much quieter than my dipoles. It also has a
> low angle of radiation, which fits very well with what you and Roy are
> telling me. It doesn't have a high gain, in fact the designer doesn't
> even try to calculate it except to say it is a little higher than a
> dipole. He also said it was designed for the DX and not to expect to
> chat with many nearby stations.
>
> For a small real estate layout, I imagine that the N4GG can be used
> with a dipole or small beam for continuous DX operation. Of course
> the N4GG antenna is larger than a dipole. It is one wave long and has
> quarter wave legs hanging off it.
>
> ... from the OP
>>I believe it is time for antenna designers to concentrate less on
>>obtaining gain and instead concentrate more on lowering the TOA.
>>without the need of excessive real estate requirements.
>
> Are you looking for a small antenna that will pick up the DX before
> the other DX hounds start piling up?
>
>
> --
> Buck
> N4PGW
>

1678. Re: Vertical vs Horizontal

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 05:51:58 UTC
From: nm5k@wt.net
Message-ID: <1107064318.555058.319430@c13g2000cwb.googlegroups.com>
Source record: 82817

Roy Lewallen wrote:
> Let me encourage you to build a vertical antenna and arrage a switch
so
> you can switch back and forth between it and your dipole. Be sure to
use
> a current balun or two in your dipole feedline so it doesn't become
part
> of the test.
>
> Here's what I think you'll find, as I have when comparing a vertical
to
> a horizontal antenna. At times, one antenna will be spectacularly
better
> than the other -- by 20 dB or more. After a while, maybe a minute or
so,
> the signal on the good antenna will fade, and when you switch you'll
> find that the other antenna is now a lot better than the formerly
good
> one, by about the same amount. This cycle can go on for quite a
while.
> This is likely due to polarization rotation (although multipath can
> cause a similar effect, if the antennas are spaced far enough apart);

> whichever antenna has the right polarization for the moment will be
much
> better than the other.

Thats pretty close...They flip flop back and forth...
>
> I don't believe you'll find any spectacular overall improvement by
using
> the vertical.

Depends on the length of the path, and the frequency. On 40m at night,
the
improvement using the vertical is spectacular *if* the path is long
enough.
But that will vary. At 500 miles, usually the dipole will win.
At 1000 miles, usually they will be about even. At 1500 miles the usual
amount
on the S meter is about 2 s units in favor of the vertical. At 4000+
miles,
can be 4 s units.
But of course, this will vary to the quality of the vertical.
In my case, was a full size ground plane, 4 radials, up 36 feet at the

base.
The dipole was at 36 feet. Same height as the base of the GP.
My 40 meter mobile antenna is almost always better than my 36 ft high
dipole
to either of the coasts. I've tested that many times to Fla.
On say a 1500 mile path, usually the vertical will hold the best
overall,
maybe 90 percent of the time, but you will see the shift where they
flip flop
for a short time, and then flip back...
Sometimes the flop will leave them about equal. When back to "normal",
the vertical will be noticably better..2 s units in that 1500 mile
case...The vertical will be better a lot larger percentage of the time,
than
the dipole. I've seen many cases where the dipole never is as loud as
the
vertical, no matter what the shift...But thats usually on the longer
paths.
The longer the path, the larger the vertical advantage. To say VK land,
I've
never seen the vertical less than 3-4 s units better than the dipole at
36 ft.
And I was on about 3 times a week to check at that time. That dipole
would have
to be a whole lot higher than 36 ft to even come close to the ground
plane I ran.
>
> When doing these tests, don't make the mistake of assuming the units
on
> your S-meter are some particular number of dB, unless you have the
> abililty to actually measure them. Any assumption you make could be
WAY off.

True...I make no claim to actual db increase....But I do use switches,
and get
a good A/B comparison...BTW...I think the vertical advantage on long
paths
decreases as you go higher in frequency...Maybe cuz the dipoles are
higher in
wavelength??? Not sure...Seems to be more a lower band, nighttime
thing...The
types of propagation at night vs day may be a factor...MK

1679. Re: Vertical vs Horizontal

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 05:56:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10votoo4e2jkl92@corp.supernews.com>
Source record: 82818

Buck wrote:
> . . .
> If I hang the vertical here, the top will be about 65 feet above
> ground. The dipole feedline will be about 15 feet away and the center
> of the dipole about 50-55 feet high. I doubt they will interact with
> each other.

The dipole feedline and the vertical will interact a great deal unless you take steps to prevent it. That would be to insert one or more "current baluns" (otherwise known as choke baluns and common mode chokes) in the dipole feedline.

Roy Lewallen, W7EL

1680. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 05:57:40 UTC
From: nm5k@wt.net
Message-ID: <1107064660.674207.310080@z14g2000cwz.googlegroups.com>
Source record: 82819

A 150 foot boom (say 20
elements for example) beam might be perfect for picking up t he lower
angle, which is what I thought you were looking for. The t hree
element beam will bring in higher angle signals as the lobe will
have
a higher angle. A dipole will likely have even a higher, po ssibly a
NVIS angle. .....

Dunno...I've never compared super long yagi's vs short ones, but I
don't
think boom length has a drastic effect on the takeoff angle...The
height above
ground is what really determines that...Same for a dipole...A dipole
has a very
low takeoff angle *if* it's high enough..The various yagi's takeoff
angles *should*
be about the same as a dipole at that same height...Or seems to me,
without
looking into it farther. MK

1681. Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 06:01:26 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns95EDE00E7E724spectrumhogstarbandn@207.106.93.175>
Source record: 82820

What characteristics would a 1/2 wave dipole have if one side was near vertical, and the other side buried along the ground? Would it act like a poorly counterpoised groundplane vertical, or something else? Any redeeming qualities?

Ed

1682. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 06:06:13 UTC
From: nm5k@wt.net
Message-ID: <1107065173.570805.83950@f14g2000cwb.googlegroups.com>
Source record: 82821

In radio shacks case, I think they may mean 12 actual volts, being as
their
bulbs usually don't last very long when used with a 13-14 v supply...:(

Add a resister to lower the voltage, if you want it to last
longer...better yet..
convert to white LEDs...My 706 has those things...Maybe changing those
dang bulbs
will become a thing of the past...MK

1683. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 06:11:37 UTC
From: nm5k@wt.net
Message-ID: <1107065497.574299.46390@z14g2000cwz.googlegroups.com>
Source record: 82722

1. Does that efficiency increase come at the cost of bandwidth?

Not sure...Never tested that...But it wouldn't suprise me if it did a
little..

2. Does having the load closer to the base increase the band width, if

all other numbers (coil diameter, coil length, etc) are the same?

Ditto....Not sure....But again, probably a bit...
3. Would getting the loading coil above the "steel" increase my
chances
of making a usable antenna with the bandwidth and efficiency I desire?

Yes, as far as efficiency.

Also using a hat would help a lot, although I know you may not be able
to.
But if you could design a hat, that would help current distribution a
lot.
Take a few turns off the coil too...But the more linear current
distribution
is the main benefit, I think more than any decrease in coil losses....
MK

1684. Re: 160M Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 06:12:53 UTC
From: nm5k@wt.net
Message-ID: <1107065573.423239.51110@z14g2000cwz.googlegroups.com>
Source record: 82723

2. Does having the load closer to the base increase the band width, if all other numbers (coil diameter, coil length, etc) are the same?
.....

P.S...One reason I've never tested this, is because I've never base fed my
antenna...MK

1685. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 06:15:46 UTC
From: nm5k@wt.net
Message-ID: <1107065746.541255.120800@f14g2000cwb.googlegroups.com>
Source record: 82724

You guessed it...It's a vertical with one radial...
Qualities? Hummmm....It's a subpar dipole...
Hummmm....it's a subpar vertical too...:/
Any redeeming qualities would have to be in the eye of the beholder..MK

1686. Re: 93 ohm coax

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 07:36:18 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <E60Ld.3081$E.671@bignews4.bellsouth.net>
Source record: 82725

"Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message
news:41fc6898_3@news1.prserv.net...
> Yes.
>
> If you are going to use it at VHF, match the lengths electrically. At HF
mechanical length is good enough. And, you do
> understand that they are to be connected in parallel, both centers tied
together and both shields, right?
>
Right you are -
If hooked up the other way it would effectively be 186-ohm shielded balanced
cable.

1687. Re: 93 ohm coax

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 07:48:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <e74pv0t18oaaqlqahelovsrdqeklb2vrqq@4ax.com>
Source record: 82726

On Sun, 30 Jan 2005 02:36:18 -0500, "Hal Rosser"
<hmrosser@bellsouth.net> wrote:
>Right you are -
>If hooked up the other way it would effectively be 186-ohm shielded balanced cable.
And if you hooked it up both ways, it would be a 4:1 BalUn. -kinda-

73's
Richard Clark, KB7QHC

1688. · · · Have You Heard The Good News? · · ·

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 07:59:38 UTC
From: Google_Usenet_USA@yahoo.com
Message-ID: <1107071978.641107.185100@f14g2000cwb.googlegroups.com>
Source record: 82727

Good News!

Do you know how simple it is to go to Heaven after this life has ended?

Some people believe that belonging to a local church, temple, mosque or synagogue will get them to Heaven.

Others believe that water baptism, obeying the ten commandments or just being a good person will get them to Heaven.

There are many other beliefs as well, but the good news about God's way to Heaven is found in the Holy Bible.

The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our sins(misdeeds). He was born in the land of Israel supernaturally to a virgin Jewish woman named Mary. He lived a sinless life for thirty-three years and then sacrificed His sinless blood and died on a cross to pay the death penalty for our sins. After Jesus was placed in a tomb He rose from the dead three days later as He said He would. The Holy Bible also tells us that Jesus Christ ascended into Heaven and that all who accept Him as their Lord and Saviour will live forever with Him in Heaven where there is no more death, sorrow, sickness and pain.

The Bible says, "For the wages of sin is death, but the gift of God is eternal life through Christ Jesus our Lord." (Romans 6:23)

This verse in the Bible says, "For ALL HAVE SINNED, and come short of the glory of God." (Romans 3:23)

This verse says, "But God demonstrates his own love for us in this: While we were still sinners, Christ died for us." (Romans 5:8)

In this passage the Bible clearly explains how simple it is to be saved and on your way to Heaven, "For if you confess with your mouth, "Jesus is Lord," and believe in your heart that God raised him from the dead, you WILL BE SAVED." (Romans 10:9)

You can be saved right now and on your way to Heaven if you will open your heart to Jesus and pray the following prayer:

Dear Jesus Christ, I want to be saved so that I can have a home in Heaven when I die. I agree with You that I am a sinner. I believe You love me and want to save me. I believe that You bled and died on the cross to pay the penalty for my sins. I believe that You rose from the dead. Please forgive my sins and come into my heart and be my Lord and Saviour. Thank You Lord Jesus Christ for forgiving me and saving me through Your merciful grace. Amen.

You are now a Christian if you said the prayer and allowed God to save you. Welcome to the family of God.

Salvation is not a reward but a gift. The Bible says it this way, "For it is by GRACE you have been SAVED, through FAITH and this not from yourselves, it is the GIFT of God." (Ephesians 2:8)

Nothing in the world is more important than your eternal destiny.

The Bible says, "In Him(Jesus) we have redemption through His blood, the forgiveness of sins..." (Ephesians 1:7)

If you have not yet made a decision to be saved, please do so now before it is too late. The reason why it is so important to be saved now is because you do not know exactly when you will die. You may die prematurely in a traffic accident, terrorist attack or some other way before you get another chance to be saved.

The Bible tells us that we will spend eternity in Heaven or a place of eternal torment called Hell. It would be terrible to die and go to Hell when all you have to do is accept Jesus Christ as your personal Lord and Saviour.

Some people that have already made Jesus Christ their Lord and Saviour worry about losing their salvation. The Bible teaches Christians that we can never lose our salvation no matter what happens.

The Bible says it this way, "My dear children, I write this to you so that you will not sin. But if anybody does sin, we have one who speaks to the Father in our defense Jesus Christ, the Righteous One." (1John 2:1)

Yes my friend, Jesus Christ is able to save you and keep you saved.

Please tell your family and friends, thanks!

Have a great day!
Internet Evangelist R.L. Grossi

1. http://www.biblegateway.com << Free Online Bible
2. http://www.tbn.org/index.php/8/1.html << Free Online Movies
3. http://www.carm.org/cults/cultlist.htm << Beware Of Cults
4. http://www.equip.org/free/DH198.htm << About Hell
5. http://www.powertochange.com/questions/qna2.html << Is Jesus God?

1689. Re: 1 to x baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 08:48:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <45EQnQFA9J$BFACp@ifwtech.co.uk>
Source record: 82728

Reg Edwards wrote:
>
>If you CAN think of a specific reason then ask yourseslf, or somebody,
>what type of balun do you want. There's very little to choose between
>them.
>
>But to get anywhere at all you MUST decide in terms of numerical and
>statistical quantities.
>
>Please be specific. Or just copy the widely distributed, plagiarised,
>old wives, average recommendations.
>

Looked in a mirror this morning, Reg? You're doing exactly what you condemn - except that your widely distributed, old wife's, average recommendations are ones you made up all by yourself.

The middle paragraph is the part that's right. But everything else that you wrote either misses that point or flatly contradicts it.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1690. · · · Have You Heard The Good News? · · ·

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 12:18:02 UTC
From: Google_Usenet_USA@yahoo.com
Message-ID: <1107087482.699011.163030@f14g2000cwb.googlegroups.com>
Source record: 82731

Good News!

Do you know how simple it is to go to Heaven after this life has ended?

Some people believe that belonging to a local church, temple, mosque or synagogue will get them to Heaven.

Others believe that water baptism, obeying the ten commandments or just being a good person will get them to Heaven.

There are many other beliefs as well, but the good news about God's way to Heaven is found in the Holy Bible.

The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our sins(misdeeds). He was born in the land of Israel supernaturally to a virgin Jewish woman named Mary. He lived a sinless life for thirty-three years and then sacrificed His sinless blood and died on a cross to pay the death penalty for our sins. After Jesus was placed in a tomb He rose from the dead three days later as He said He would. The Holy Bible also tells us that Jesus Christ ascended into Heaven and that all who accept Him as their Lord and Saviour will live forever with Him in Heaven where there is no more death, sorrow, sickness and pain.

The Bible says, "For the wages of sin is death, but the gift of God is eternal life through Christ Jesus our Lord." (Romans 6:23)

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You can be saved right now and on your way to Heaven if you will open your heart to Jesus and pray the following prayer:

Dear Jesus Christ, I want to be saved so that I can have a home in Heaven when I die. I agree with You that I am a sinner. I believe You love me and want to save me. I believe that You bled and died on the cross to pay the penalty for my sins. I believe that You rose from the dead. Please forgive my sins and come into my heart and be my Lord and Saviour. Thank You Lord Jesus Christ for forgiving me and saving me through Your merciful grace. Amen.

You are now a Christian if you said the prayer and allowed God to save you. Welcome to the family of God.

Salvation is not a reward but a gift. The Bible says it this way, "For it is by GRACE you have been SAVED, through FAITH and this not from yourselves, it is the GIFT of God." (Ephesians 2:8)

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The Bible says, "In Him(Jesus) we have redemption through His blood, the forgiveness of sins..." (Ephesians 1:7)

If you have not yet made a decision to be saved, please do so now before it is too late. The reason why it is so important to be saved now is because you do not know exactly when you will die. You may die prematurely in a traffic accident, terrorist attack or some other way before you get another chance to be saved.

The Bible tells us that we will spend eternity in Heaven or a place of eternal torment called Hell. It would be terrible to die and go to Hell when all you have to do is accept Jesus Christ as your personal Lord and Saviour.

Some people that have already made Jesus Christ their Lord and Saviour worry about losing their salvation. The Bible teaches Christians that we can never lose our salvation no matter what happens.

The Bible says it this way, "My dear children, I write this to you so that you will not sin. But if anybody does sin, we have one who speaks to the Father in our defense Jesus Christ, the Righteous One." (1John 2:1)

Yes my friend, Jesus Christ is able to save you and keep you saved.

Please tell your family and friends, thanks!

Have a great day!
Internet Evangelist R.L. Grossi

1. http://www.biblegateway.com << Free Online Bible
2. http://www.tbn.org/index.php/8/1.html << Free Online Movies
3. http://www.carm.org/cults/cultlist.htm << Beware Of Cults
4. http://www.equip.org/free/DH198.htm << About Hell
5. http://www.powertochange.com/questions/qna2.html << Is Jesus God?

1691. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 12:43:55 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <vilpv0d8tmh6qj1opp8fd7lcjc4pvqagm4@4ax.com>
Source record: 82729

On Fri, 28 Jan 2005 23:25:19 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>*Sigh*
>
>I tried.

You can lead a horse to water.....

>
>Roy Lewallen, W7EL
>
>Buck wrote:
>> On Fri, 28 Jan 2005 21:28:20 -0800, Roy Lewallen <w7el@eznec.com>
>> wrote:
>>
>>
>>>What does the takeoff angle have to do with which antenna is best?
>>
>>
>>
>> That would depend on the desired contact. If you want 80 meters DX,
>> you want a very high antenna, if you just want to talk to your local
>> buddies, a lower antenna provides a better NVIS.
>>
>> Verticals provide better omni-directional pattern but a slanted dipole
>> provides better directivity than a vertical.
>>
>> Beams are obvious.
>>
>>

1692. Re: Coax Antenna Lead

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 13:03:25 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <7lmpv050b5ibf9e3stf5cu0asfmvg6dh6j@4ax.com>
Source record: 82730

On Sat, 29 Jan 2005 22:34:53 -0600, "Crazy George"
<muNnscOh@attSglPobaAl.nMet> wrote:

>Ah, shortsighted Jimbo:
>
>Consider these: Damage to one of the coaxes, for example. And what about rotator cable? Or suppose you get interested
>in another band or mode? My advice to people building new homes is to run conduit wherever you are going to need it,
>and make it as big as practical. Then you can pull whatever coax you need, and upgrade when you feel like it. Or at
>least be sure there are accessible pull wires wherever they might be needed. And coax has a limited lifetime anyway.

Excellent point(s). Except, how do you pull 7/8" Heliax through
conduit? Best to lay in 3 or 4 runs ahead of time.

1693. Re: Isotron antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 15:08:28 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <ctit9g0osa@enews1.newsguy.com>
Source record: 82732

"Caveat Lector" <CL@barahmas.com> wrote in message
news:1PVKd.24$bu.4@fed1read06...
> The original poster asked for opinions from those that owned the isotron
> antenna -- we gave him that.
>
> Now if he had asked for antenna measurements on an antenna range and
> comparisons to other antennas -- that is a different question. And I
> don't know where he would have found that answer.
>
> As far as statistics -- fact is 3 out of 10 accidents are caused by drunk
> drivers -- thus 7 out of 10 are caused by sober drivers - guess we ought
> to get em off the road - huh
>
> --
> Caveat Lector

Thanks for helping to make my point.

John

1694. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 16:02:55 UTC
From: Buck <iam@this.site>
Message-ID: <rg0qv09l1f645qj5b2ccnpdo2pm659al20@4ax.com>
Source record: 82733

On 29 Jan 2005 21:57:40 -0800, nm5k@wt.net wrote:

>A 150 foot boom (say 20
>elements for example) beam might be perfect for picking up t he lower
>angle, which is what I thought you were looking for. The t hree
>element beam will bring in higher angle signals as the lobe will
>have
>a higher angle. A dipole will likely have even a higher, po ssibly a
>NVIS angle. ....
>
>
>Dunno...I've never compared super long yagi's vs short ones, but I
>don't
>think boom length has a drastic effect on the takeoff angle...The
>height above
>ground is what really determines that...Same for a dipole...A dipole
>has a very
>low takeoff angle *if* it's high enough..The various yagi's takeoff
>angles *should*
>be about the same as a dipole at that same height...Or seems to me,
>without
>looking into it farther. MK

I believe that the TAO is narrower, but, like you said, it is really affected by height and terrain. The range of the TAO of a short beam might be -25 to +25 and a long beam might be -10 to +10 degrees relative to horizontal (assuming maximum height of the antenna).

We are in agreement here. The author wants a small footprint antenna to have a very low TAO, but I think that elevation has more to say than does the antenna design. A three element beam at 20 feet might have a TAO of 14 degrees, but the only thing you can do is point the antenna in the direction you want. I can see pointing the antenna upwards to get a more vertical TAO, but pointing it down won't give you a lower one. Like you say, it takes elevation for that and then it depends on the frequency. If that elevation is 125 feet for 20 meters how can an antenna change it to a lower elevation?

Thanks for the input. I think I have been confused as to what the OP wanted for an answer and no doubt my answers are confusing too. Strangely enough, I am thinking that except for the desire of the OP for a solution, everyone in here is in agreement with the technology.

73

--
Buck
N4PGW

1695. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 16:45:20 UTC
From: "aunwin@insightbb.com"
Message-ID: <Aa8Ld.37697$eT5.31244@attbi_s51>
Source record: 82734

<nm5k@wt.net> wrote in message
news:1107064660.674207.310080@z14g2000cwz.googlegroups.com...
>A 150 foot boom (say 20
> elements for example) beam might be perfect for picking up t he lower
> angle, which is what I thought you were looking for. The t hree
> element beam will bring in higher angle signals as the lobe will
> have
> a higher angle. A dipole will likely have even a higher, po ssibly a
> NVIS angle. ....
>
>
> Dunno...I've never compared super long yagi's vs short ones, but I
> don't
> think boom length has a drastic effect on the takeoff angle...

Mark I never used the word "drastic" however the long boom antenna
will lower the TOA by around a degree. The reader has to determine
the value of this for himself. If one reviews the incomming signals in the
ARRL literature one can see the percentage of signals that come in from
Europe
at 9 thru 13 degrees.These angles by the way are not to be confused with TOA
and explains exactly why a silly db can mean a lot.
It also shows that the long boom aproach has its limits with respect to
lower
TOA and height certainly changes the TOA more in terms of less complexity.
What I am looking for is the latter method but with less emphasis on feed
point height
which will require a deflection method to achieve lower angles. I am sure
that multiple reflectors
and a single director can be manipulated to do this
Regards
Art

The
> height above
> ground is what really determines that...Same for a dipole...A dipole
> has a very
> low takeoff angle *if* it's high enough..The various yagi's takeoff
> angles *should*
> be about the same as a dipole at that same height...Or seems to me,
> without
> looking into it farther. MK
>

1696. Re: 1 to x baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 17:28:19 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ctj5fj$9ie$1@titan.btinternet.com>
Source record: 82735

Dear Ian,

It's early in the morning. I havn't had time and I don't want to take much time thinking about your rather slightly surprising comments.

You have completely misunderstood, gone off at a tangent, about my motives in my very few writings on the subject of baluns.

I have never made recommendations about old-wives tales, whatever you think they are, except, just in effect, to ignore them.

You, apparently, have now (quite mistakenly I venture to add) included yourself amongst them.

Have you any shares in balun manufacturers? After all baluns are the only thing left for old-wives and salesmen to haggle about. Don't bother answering.

In conclusion, unless people can specify, in numerical terms, what is their problem, then there's no hope of sensibly aquiring a balun of any sort. And I have never yet met anybody who has so specified.

I feel guilty at prolonging such a trivial matter. But it's such an early hour of the day. Havn't had breakfast yet!

A very good morning to you Ian.

Reg, G4FGQ

1697. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 17:30:28 UTC
From: Buck <iam@this.site>
Message-ID: <ec1qv0lv1kf1g5q6nrddnphd8v1kkundei@4ax.com>
Source record: 82736

On Sun, 30 Jan 2005 05:29:13 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

> Just think of what I could be describing, a 20 metre antenna with a
> ten to eleven degree TOA, turning radius of a conventional dipole and a
>feed point
>of something less than 75 foot high. Now thats good for small real estate
>and a light duty rotor
>tho the U.K. authority may baulk at the height. I have built very long boom
>yagi.s. for 20 M
>some with a couple of reflectors and some with as many as 13 elements but
>this direction is limited
>by minimal advances compared to complexity, thus my statement as to what the
>hobby needs
>for it to grow

I see what you are asking for. I would definitely want one myself,
but the problem I see with your theory is that the antenna can't
change the earth's effect on electromagnetic waves.

I have never had a beam up 75 feet. I had a TA-33 JR up 35 feet,
about half of the height you recommend. I can't say I had the perfect
TAO, but compared to the dipole and a vertical I was using before I
got it, the beam significantly improved my operating. I was county
hunting at the time (operating with mobiles in each US county) and the
short beam made the difference between not hearing a car and
exchanging 5-9 signal reports. While it wasn't perfect or optimum, it
was an improvement. I guess that is the best we can hope for. A
better antenna for the same space.

I like building mostly wire antennas and I have a few designs in mind
and in the works. There are many to choose from to try. Maybe one of
them will be an improvement.

When it comes to making a contact, I have resigned myself to this one
fact: If there is no propagation between two points, there is no
communications. If there is enough propagation, even the poorest of
stations can communicate.

I wish you the best on your DXing and antennas. I've enjoyed the
topic.

73 for now.

Buck
N4PGW

--
Buck
N4PGW

1698. Re: Vertical vs Horizontal

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 17:40:24 UTC
From: Buck <iam@this.site>
Message-ID: <hn6qv0ti4t21glup6cm47nok580kboppa5@4ax.com>
Source record: 82737

On Sat, 29 Jan 2005 21:56:36 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Buck wrote:
>> . . .
>> If I hang the vertical here, the top will be about 65 feet above
>> ground. The dipole feedline will be about 15 feet away and the center
>> of the dipole about 50-55 feet high. I doubt they will interact with
>> each other.
>
>The dipole feedline and the vertical will interact a great deal unless
>you take steps to prevent it. That would be to insert one or more
>"current baluns" (otherwise known as choke baluns and common mode
>chokes) in the dipole feedline.
>
>Roy Lewallen, W7EL

Would the 'ugly balun' be suitable? (wrap 8-10 turns of coax in an 8
inch diameter loop)

That is the standard 1:1 balun I use.

Thanks.

I did see a difference with my two 20 meter dipoles. I had one
stretched, say, due north (0 deg) about 55 feet and another about 45
feet stretched about 75 degrees off. The shield side of both antennas
is where they crossed. I noticed that when I lowered one antenna the
signals seemed stronger from other directions. It didn't make either
unusable though and after Francis hit Florida, I took down the lower
20 to take with me in case I needed it and never put it back up.

--
Buck
N4PGW

1699. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 17:43:22 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns95EE62ED39515spectrumhogstarbandn@207.106.93.175>
Source record: 82738

> You guessed it...It's a vertical with one radial...
> Qualities? Hummmm....It's a subpar dipole...
> Hummmm....it's a subpar vertical too...:/
> Any redeeming qualities would have to be in the eye of the beholder..MK
>

In what manner would this vertical be "subpar? "If one were looking for
for a vertical with more radiation in one direction, would this be
something to consider?

Ed

1700. Re: Vertical vs Horizontal

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 17:44:26 UTC
From: Buck <iam@this.site>
Message-ID: <s57qv0999sobisg6muuk5r5vefneujcau7@4ax.com>
Source record: 82739

On 29 Jan 2005 21:51:58 -0800, nm5k@wt.net wrote:

>
>Roy Lewallen wrote:
>> Let me encourage you to build a vertical antenna and arrage a switch
>so
>> you can switch back and forth between it and your dipole. Be sure to
>use
>> a current balun or two in your dipole feedline so it doesn't become
>part
>> of the test.
>>
>> Here's what I think you'll find, as I have when comparing a vertical
>to
>> a horizontal antenna. At times, one antenna will be spectacularly
>better
>> than the other -- by 20 dB or more. After a while, maybe a minute or
>so,
>> the signal on the good antenna will fade, and when you switch you'll
>> find that the other antenna is now a lot better than the formerly
>good
>> one, by about the same amount. This cycle can go on for quite a
>while.
>> This is likely due to polarization rotation (although multipath can
>> cause a similar effect, if the antennas are spaced far enough apart);
>
>> whichever antenna has the right polarization for the moment will be
>much
>> better than the other.
>
>Thats pretty close...They flip flop back and forth...
>>
>> I don't believe you'll find any spectacular overall improvement by
>using
>> the vertical.
>
>Depends on the length of the path, and the frequency. On 40m at night,
>the
>improvement using the vertical is spectacular *if* the path is long
>enough.
>But that will vary. At 500 miles, usually the dipole will win.
>At 1000 miles, usually they will be about even. At 1500 miles the usual
>amount
>on the S meter is about 2 s units in favor of the vertical. At 4000+

>miles,
>can be 4 s units.
>But of course, this will vary to the quality of the vertical.
>In my case, was a full size ground plane, 4 radials, up 36 feet at the
>base.
>The dipole was at 36 feet. Same height as the base of the GP.
>My 40 meter mobile antenna is almost always better than my 36 ft high
>dipole
>to either of the coasts. I've tested that many times to Fla.
>On say a 1500 mile path, usually the vertical will hold the best
>overall,
>maybe 90 percent of the time, but you will see the shift where they
>flip flop
>for a short time, and then flip back...
>Sometimes the flop will leave them about equal. When back to "normal",
>the vertical will be noticably better..2 s units in that 1500 mile
>case...The vertical will be better a lot larger percentage of the time,
>than
>the dipole. I've seen many cases where the dipole never is as loud as
>the
>vertical, no matter what the shift...But thats usually on the longer
>paths.
>The longer the path, the larger the vertical advantage. To say VK land,
>I've
>never seen the vertical less than 3-4 s units better than the dipole at
>36 ft.
>And I was on about 3 times a week to check at that time. That dipole
>would have
>to be a whole lot higher than 36 ft to even come close to the ground
>plane I ran.
>>
>> When doing these tests, don't make the mistake of assuming the units
>on
>> your S-meter are some particular number of dB, unless you have the
>> abililty to actually measure them. Any assumption you make could be
>WAY off.
>
>True...I make no claim to actual db increase....But I do use switches,
>and get
>a good A/B comparison...BTW...I think the vertical advantage on long
>paths
>decreases as you go higher in frequency...Maybe cuz the dipoles are
>higher in
>wavelength??? Not sure...Seems to be more a lower band, nighttime
>thing...The
>types of propagation at night vs day may be a factor...MK

Thanks, that was interesting. How well do you think a 40 meter
vertical dipole will fare vs one 36 feet up with radials? The lower
end of the dipole will likely be near the ground.

--
Buck
N4PGW

1701. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 17:57:15 UTC
From: Buck <iam@this.site>
Message-ID: <gl7qv0lii9l4b4dim8a2v8c885uuh1fstb@4ax.com>
Source record: 82740

On Sun, 30 Jan 2005 06:01:26 GMT, Ed
<Huckleberry_REMOVE_@bigvalley.net> wrote:

>
>
> What characteristics would a 1/2 wave dipole have if one side was near
>vertical, and the other side buried along the ground? Would it act like a
>poorly counterpoised groundplane vertical, or something else? Any
>redeeming qualities?
>
>
>
> Ed

It would fit on your real estate. If you add three radials you would
have a good ground plane.

I have had in the past the Taylor Radio 4 band vertical and the
Hustler 5 band vertical. I ran both of them with only a 6 foot ground
rod in the ground with no radials. They worked. I doubt that they
worked as well as my dipoles at 65 feet or so, but they did work.

Why do you want the antenna? That may determine how good it is. If
you want a 'money is no object super duper DX antenna', then it won't
be worth the time of day. But if you need an antenna to fit precisely
where that antenna is so you can occasionally rag chew and not spend
any more money for an antenna, it will be perfect.

--
Buck
N4PGW

1702. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 18:02:41 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <198qv0df1cup390teh7f6rf8qon9i9m4sc@4ax.com>
Source record: 82741

On Sat, 29 Jan 2005 07:54:16 -0600, Cecil Moore <w5dxp@totalzone.com>
wrote:

>Maybe a picture is worth a thousand words. Here's a comparison
>radiation pattern for my 130 ft dipole Vs my 40m vertical with
>elevated radials. In the dipole's favored direction, it's TOA
>is greater than the vertical's yet the dipole radiates more
>power than the vertical even at the vertical's TOA. Here's the
>picture: http://www.qsl.net/w5dxp/dipvsver.htm

Exactly!

1703. · · · Have You Heard The Good News? · · ·

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 18:43:21 UTC
From: Google_Usenet_USA@yahoo.com
Message-ID: <1107110601.874044.210360@c13g2000cwb.googlegroups.com>
Source record: 82742

.

1704. Re: 30M Jpole and antenna analyser question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 18:45:38 UTC
From: Cecil Moore <w5dxp@totalzone.com>
Message-ID: <41fd2cd1$1_1@127.0.0.1>
Source record: 82743

John Smith wrote:
> Hey, Cecil -
>
> Did you slip a digit or two? 1/4WL at 30 meters with .66 V is just shy of 5
> meters, no? I get about 16 feet.

Egads John, I thought this was a J-Pole for 146 MHz. You are
certainly correct for 30m. The principle still applies but
the fact that it is for 30m may mean the feedpoint impedance
is indeed 23 ohms and the 75 ohm coax solution won't work.
If it is 23 ohms, one would need 34 ohm coax and I don't
have any. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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1705. Re: Coax Antenna Lead

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 18:49:20 UTC
From: Cecil Moore <w5dxp@totalzone.com>
Message-ID: <41fd2daf$1_1@127.0.0.1>
Source record: 82744

jimbo wrote:
> Hey Charlie, thanks for your reply. Well, my cable will be inside
> walls, not buried in the ground. So, it seems that the RG213 will have
> a little less loss and be a little less expensive?

Please take a look at LMR-400, another possibility.
--
73, Cecil http://www.qsl.net/w5dxp

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1706. Re: Coax Antenna Lead

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 18:55:42 UTC
From: jimbo <jimbo62@spamex.com>
Message-ID: <1107111342.687746.265940@c13g2000cwb.googlegroups.com>
Source record: 82745

Conduit sounds like a good idea. Would you use metal or PVC?

jimbo

Crazy George wrote:
> Ah, shortsighted Jimbo:
>
> Consider these: Damage to one of the coaxes, for example. And what
about rotator cable? Or suppose you get interested
> in another band or mode? My advice to people building new homes is
to run conduit wherever you are going to need it,
> and make it as big as practical. Then you can pull whatever coax you
need, and upgrade when you feel like it. Or at
> least be sure there are accessible pull wires wherever they might be
needed. And coax has a limited lifetime anyway.
>
> --
> Crazy George
> Remove N O and S P A M imbedded in return address
> "jimbo" <jimbo62@spamex.com> wrote in message
news:1107039605.842893.193840@z14g2000cwz.googlegroups.com...
> > I am building a new house. I need two coax runs inside the house
for
> > two uses. First, for 2 meter, 440 MHz dual band. Second for 2-30
MHz
> > HF. I am considering using RG213/U for both runs. I know this coax
is
> > suitable for 440 MHz on runs less than 100 feet. Would there be any
> > problems for the 2 meter or HF using this coax? Or are there any
> > suggestions for this project?
> >
> > Thanks, jimbo
> >

1707. Re: Vertical vs Horizontal

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 18:56:05 UTC
From: Cecil Moore <w5dxp@totalzone.com>
Message-ID: <41fd2f44$1_1@127.0.0.1>
Source record: 82746

Buck wrote:
> I am thinking that I might be able to improve my contacts by using a
> vertical antenna since most mobiles use vertical antennas. I have
> heard that once the signal bounces off the ionosphere, polarity isn't
> as important as it is for local communications. However, when I was
> assembling a 2 meter dipole antenna, I held it horizontal and turned
> it vertical. I saw the s-meter go from nothing to s-7 and the
> repeater go from silent to full quieting when I did this. I can't
> help but wonder how much difference it will make with the mobiles.

2m signals don't bounce off the ionosphere. It is not clear what
band you are talking about. For sky wave communications on HF, the
polarization doesn't much matter. For ground wave communications,
polarization matters.
--
73, Cecil http://www.qsl.net/w5dxp

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1708. Re: 93 ohm coax

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 19:00:07 UTC
From: Cecil Moore <w5dxp@totalzone.com>
Message-ID: <41fd3036$1_1@127.0.0.1>
Source record: 82747

David McBeth wrote:
> I have been given 300mtrs of 93 ohm coax.Can this be used in pair to give 46
> ohms? Thankyou, David ZL2DG

Not only will paralleling result in Z0=46 ohms but series'ing
them will result in Z0=186 ohms which will, for non-resonant
antennas, lower the I^2*R losses.
--
73, Cecil http://www.qsl.net/w5dxp

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1709. Re: speaking of baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 19:02:08 UTC
From: Cecil Moore <w5dxp@totalzone.com>
Message-ID: <41fd30af$1_1@127.0.0.1>
Source record: 82748

Buck wrote:
> Here is the URL to a home-brew 4:1 balun that should work from 160-10
> meters. I am interested in a 6:1 balun.

Could you tell us why you are interested in a 6:1 balun?
--
73, Cecil http://www.qsl.net/w5dxp

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1710. "Compound" SWR question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 19:12:42 UTC
From: Jaggy Taggy <outhouse@midcoast.com>
Message-ID: <BE229BE1.1247%outhouse@midcoast.com>
Source record: 82749

I am trying to learn more about antennas and transmission lines and am currently reading through the transmission line chapter of a recent ARRL Handbook.

There is a calculated example for a load with a certain SWR connected to a transmission line with certain losses and the author states:

"Because of losses in a transmission line, the measured SWR at the input of the line is less than the SWR measured at the load end of the line."

My first reaction was Oh my God, I am soo proud of my decent SWR at the input of my antenna feedline and in reality I could have a really bad mismatch between the antenna and the transmission line and wouldn't even know about it.

And my second thought was what is happening to the energy, since an SWR gives me an indication of how much power reaches the antenna and how much is either radiated from the feedline or lost as heat and here I have two different SWR in the system, one at the antenna and one for the antenna/feedline system.

I think it can't be that I would loose a whole lot at the antenna (high SWR) but then wouldn't loose all that much for the system since the overall SWR is lower.

Where do I go wrong??

Uwe

1711. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 19:20:35 UTC
From: Cecil Moore <w5dxp@totalzone.com>
Message-ID: <41fd3502$1_2@127.0.0.1>
Source record: 82752

Ed wrote:
> What characteristics would a 1/2 wave dipole have if one side was near
> vertical, and the other side buried along the ground? Would it act like a
> poorly counterpoised groundplane vertical, or something else? Any
> redeeming qualities?

When two radials are 180 degrees apart and elevated, they tend
to cancel the radiation from each other. When you bury one
radial, you ensure that ~half your RF energy is lost. If you
bury that one radial vertically, you do indeed lose half your
signal since you have put half of your dipole underground.
Ground mounted verticals give up approximately half their
power to ground losses. Then they give up approximately another
3 dB to a rotatable dipole. Approximately 10 ohms of the feedpoint
impedance for mobile antennas is ground losses. (Please note that
everything I said is approximate. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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1712. Re: Isotron antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 19:20:46 UTC
From: George Csahanin <george@dyb.com>
Message-ID: <isaLd.11988$2e7.1949@newssvr12.news.prodigy.com>
Source record: 82750

Sheesh, you're right. I was just idly curious about the antenna. I know it isn't the same as 3 elements at 120'. And I did find that it "gets out". But was wondering what results others had, like how is the 80 or 160 version. Those bands may be "pushing it" a bit. But maybe not. It certainly had me grinning, just like when I first built a W5QJR loop years ago and worked JA on 40 CW with 579, loop next to me, ground floor in house...

But thanks for the additional amusement along the way.

-GeorgeC
W2DB
Awstin, TX

"Caveat Lector" <CL@barahmas.com> wrote in message
news:1PVKd.24$bu.4@fed1read06...
> The original poster asked for opinions from those that owned the isotron
> antenna -- we gave him that.
>
> Now if he had asked for antenna measurements on an antenna range and
> comparisons to other antennas -- that is a different question. And I don't
> know where he would have found that answer.
>
> As far as statistics -- fact is 3 out of 10 accidents are caused by drunk
> drivers -- thus 7 out of 10 are caused by sober drivers - guess we ought
to
> get em off the road - huh
>
> --
> Caveat Lector
>
>
>
> "John Smith" <kd5yikes@mindspring.com> wrote in message
> news:cth7ee0224c@enews4.newsguy.com...
> >
> > "Caveat Lector" <CL@barahmas.com> wrote in message
> > news:lIOKd.937$1O2.42@fed1read05...
> >> Oh gee all the guy wanted was some opinions which I gave him at
> >> http://www.eham.net/reviews/detail/311
> >>
> >> From here he gets all this ranting about CBers and 50 kW
> >> --
> >> Caveat Lector
> >>
> >>

> >>
> >>> On Sat, 29 Jan 2005 10:43:25 +0100, "F8BOE" <f8boe-8@bluemail.ch>
> >>> wrote:
> >>>
> >>>>Hoy!
> >>>>
> >>>>Thank's for the very interresting link to the isotron reviews. It's
nice
> >>>>to
> >>>>see that citizen's band 's still living on...
> >>>>Everyone decided to buy one and was pleased by the SWR... but none of
> >>>>them
> >>>>seemed concerned about radiation patterns and loss (negative gain?),
nor
> >>>>by
> >>>>the classical "how does it work" question.
> >>>>
> >>>>No they were all happy to kick 50W power in it to make DX with the guy
> >>>>in
> >>>>the village nearby... DX begins at your door... But never heard about
> >>>>ground
> >>>>wave propagation.
> >>>>
> >>>>Nevermind... As far as everybody's happy, it's all good!
> >>>>
> >>>>73 de F8BOE Olivier ...-.-
> >>>>
> >>>>
> >>>
> >>
> >> That's similar to "Statistics show Xnprtd products work better! (This
> >> study sponsored by Xnprtd products)".
> >>
> >>
> >> John
> >>
>
>

1713. Re: NEW RADIO HOBBY FOR 2005

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 19:22:01 UTC
From: George Csahanin <george@dyb.com>
Message-ID: <ttaLd.11999$2e7.7865@newssvr12.news.prodigy.com>
Source record: 82751

"Free radio" <dx440@webtv.net> wrote in message
news:20650-41DCE80A-653@storefull-3277.bay.webtv.net...
> 10 METER FREE BAND IS HOTTER THAN EVER SO PASS IT OWN
>

I bet you beat wasps nests with a stick, right?

-G

1714. Re: · · · Have You Heard The Good News? · · ·

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 19:26:39 UTC
From: Cecil Moore <w5dxp@totalzone.com>
Message-ID: <41fd366e$1_2@127.0.0.1>
Source record: 82753

Google_Usenet_USA@yahoo.com wrote:

> .

From you, no news is good news.

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1715. Re: "Compound" SWR question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 19:34:17 UTC
From: Cecil Moore <w5dxp@totalzone.com>
Message-ID: <41fd3838$1_2@127.0.0.1>
Source record: 82754

Jaggy Taggy wrote:
> My first reaction was Oh my God, I am soo proud of my decent SWR at the
> input of my antenna feedline and in reality I could have a really bad
> mismatch between the antenna and the transmission line and wouldn't even
> know about it.

Yep, 200 ft. of RG-58 used on 440 MHz will result in an SWR close
to 1:1 whether the antenna is attached or not. :-)

> And my second thought was what is happening to the energy, since an SWR
> gives me an indication of how much power reaches the antenna and how much is
> either radiated from the feedline or lost as heat and here I have two
> different SWR in the system, one at the antenna and one for the
> antenna/feedline system.

The RF can indeed be lost as heat in the transmission line. The
maximum current in a feedline depends upon the SWR. The losses
in the feedline depend upon the current. The maximum voltage
in a feedline depends upon the SWR. The losses in a feedline
depend upon the voltage. At HF, the current losses tend to
dominate.
--
73, Cecil http://www.qsl.net/w5dxp

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1716. Re: 30M Jpole and antenna analyser question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 19:45:00 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <wuMJ7xA8kT$BFwyh@g3ohx.demon.co.uk>
Source record: 82755

In message <41fd2cd1$1_1@127.0.0.1>, Cecil Moore <w5dxp@totalzone.com>
writes
>John Smith wrote:
>> Hey, Cecil -
>> Did you slip a digit or two? 1/4WL at 30 meters with .66 V is just
>>shy of 5 meters, no? I get about 16 feet.
>
>Egads John, I thought this was a J-Pole for 146 MHz. You are
>certainly correct for 30m. The principle still applies but
>the fact that it is for 30m may mean the feedpoint impedance
>is indeed 23 ohms and the 75 ohm coax solution won't work.
>If it is 23 ohms, one would need 34 ohm coax and I don't
>have any. :-)

2 x 75ohm in parallel?
Ian.
--

1717. Re: Coax Antenna Lead

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 19:45:04 UTC
From: Howard <mensch90249@yahoo.com>
Message-ID: <imdqv0533dm6gn053cpdah90gspohhgfp3@4ax.com>
Source record: 82756

On Sun, 30 Jan 2005 12:49:20 -0600, Cecil Moore <w5dxp@totalzone.com>
wrote:

>jimbo wrote:
>> Hey Charlie, thanks for your reply. Well, my cable will be inside
>> walls, not buried in the ground. So, it seems that the RG213 will have
>> a little less loss and be a little less expensive?
>
>Please take a look at LMR-400, another possibility.

When I upgraded my antennas (6 and 2 meter) I also upgraded the coax
from 213 to LMR-400-flex due to the lower loss. At 70 cm the 213 is
~6dB of loss and that is rather significant in my estimation,
especially when LMR-400 or 9913 is ~ 3dB. Considering the effort and
dollars that goes into putting up a decent antenna I feel the extra
cost of the coax is worth it.

1718. Re: another antenna in a tree ? from a rookie

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 19:47:44 UTC
From: richardharrison@webtv.net
Message-ID: <913-41FD39E0-4@storefull-3258.bay.webtv.net>
Source record: 82760

Jcoopert wrote:
"---did I spell that right?"

Right! Heliax is the Andrew Corporation brand name for some of the world`s best coax cable. Their related products are tops too. Sometimes you can`t afford less.

Best regards, Richard Harrison, KB5WZI

1719. Re: 1 to x baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 19:51:46 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <rO3PDjBSrT$BFwSC@g3ohx.demon.co.uk>
Source record: 82757

In message <ctj5fj$9ie$1@titan.btinternet.com>, Reg Edwards
<g4fgq.regp@ZZZbtinternet.com> writes
>Dear Ian,
>
>It's early in the morning. I havn't had time and I don't want to take much
>time thinking about your rather slightly surprising comments.
>
>
>You have completely misunderstood, gone off at a tangent, about my motives
>in my very few writings on the subject of baluns.
>
>
>I have never made recommendations about old-wives tales, whatever you think
>they are, except, just in effect, to ignore them.
>
>
>You, apparently, have now (quite mistakenly I venture to add) included
>yourself amongst them.
>
>
>Have you any shares in balun manufacturers? After all baluns are the only
>thing left for old-wives and salesmen to haggle about. Don't bother
>answering.
>
>
>In conclusion, unless people can specify, in numerical terms, what is their
>problem, then there's no hope of sensibly aquiring a balun of any sort. And
>I have never yet met anybody who has so specified.
>
>I feel guilty at prolonging such a trivial matter. But it's such an early
>hour of the day. Havn't had breakfast yet!
>
>A very good morning to you Ian.
>---
>Reg, G4FGQ
>
>
Evenin' Reg.
Not disagreeing with you at all. Just nit-picking about your less than
immaculate grammar!

My only problem with baluns is not understanding the obsession with the
4:1 or 9:1 transformation ratio.

73, Ian.
--

1720. Re: 93 ohm coax

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 19:54:42 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <XOzADGCCuT$BFw1y@g3ohx.demon.co.uk>
Source record: 82758

In message <41fd3036$1_1@127.0.0.1>, Cecil Moore <w5dxp@totalzone.com>
writes
>David McBeth wrote:
>> I have been given 300mtrs of 93 ohm coax.Can this be used in pair to
>>give 46 ohms? Thankyou, David ZL2DG
>
>Not only will paralleling result in Z0=46 ohms but series'ing
>them will result in Z0=186 ohms which will, for non-resonant
>antennas, lower the I^2*R losses.
>--
>73, Cecil http://www.qsl.net/w5dxp
>
>
186 ohms? You are joking (aren't you?).
Ian.
--

1721. Re: 93 ohm coax

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 19:58:05 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <f+wC$aDNxT$BFwXg@g3ohx.demon.co.uk>
Source record: 82759

In message <41fd3036$1_1@127.0.0.1>, Cecil Moore <w5dxp@totalzone.com>
writes
>David McBeth wrote:
>> I have been given 300mtrs of 93 ohm coax.Can this be used in pair to
>>give 46 ohms? Thankyou, David ZL2DG
>
>Not only will paralleling result in Z0=46 ohms but series'ing
>them will result in Z0=186 ohms which will, for non-resonant
>antennas, lower the I^2*R losses.
>--
>73, Cecil http://www.qsl.net/w5dxp
>
OK. I have just realised what you mean. Use two cables as 186 ohm
screened twin.
Sorrrry!
Ian.
--

1722. Re: 93 ohm coax

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 20:14:03 UTC
From: Cecil Moore <w5dxp@totalzone.com>
Message-ID: <41fd418b$1_2@127.0.0.1>
Source record: 82762

Ian Jackson wrote:

> Cecil Moore <w5dxp@totalzone.com> writes:
>> Not only will paralleling result in Z0=46 ohms but series'ing
>> them will result in Z0=186 ohms which will, for non-resonant
>> antennas, lower the I^2*R losses.
>>
> OK. I have just realised what you mean. Use two cables as 186 ohm
> screened twin.
> Sorrrry!

What I said was confusing. Sorry about that. What I meant was
that using twin runs of 93 ohm coax as parallel transmission
lines would result in lower losses than using a single run of
similar 50 ohm coax for non-resonant antennas. That was just an
observation, not an approach that I would recommend. Sorry
for the confusion.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1723. Re: NEW RADIO HOBBY FOR 2005

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 20:14:48 UTC
From: richardharrison@webtv.net
Message-ID: <911-41FD4038-50@storefull-3258.bay.webtv.net>
Source record: 82765

Geprge Cshanin wrote:
"I bet you beat wasps with a dtick, right?"

I think we`ve found a replacement for Johnny Carson!

Best regards, Richard Harrison, KB5WZI

1724. Re: Vertical vs Horizontal

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 20:16:44 UTC
From: Buck <iam@this.site>
Message-ID: <m4gqv0dupnonl70umv9t14tap4g4481p1v@4ax.com>
Source record: 82761

On Sun, 30 Jan 2005 12:56:05 -0600, Cecil Moore <w5dxp@totalzone.com>
wrote:

>2m signals don't bounce off the ionosphere. It is not clear what
>band you are talking about. For sky wave communications on HF, the
>polarization doesn't much matter. For ground wave communications,
>polarization matters.
>--
>73, Cecil http://www.qsl.net/w5dxp

Primarily 20 meters, maybe 40 meters.

Thanks

--
Buck
N4PGW

1725. Re: speaking of baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 20:23:08 UTC
From: Buck <iam@this.site>
Message-ID: <u6gqv0hq15926ppgg2bufc30jgfqh3aqgh@4ax.com>
Source record: 82763

On Sun, 30 Jan 2005 13:02:08 -0600, Cecil Moore <w5dxp@totalzone.com>
wrote:

>Buck wrote:
>> Here is the URL to a home-brew 4:1 balun that should work from 160-10
>> meters. I am interested in a 6:1 balun.
>
>Could you tell us why you are interested in a 6:1 balun?

Sure, thanks for the reply.

I have been looking at OCF dipoles and there are some that don't
appear to need a tuner when using a 6:1 balun. I have this dumb
obsession with learning about and working on multiband antennas that
don't need tuners.

I see some of the designs, and I would like to try them. Since the
4:1 is made from material in which I have an abundance, I would like
to know if I can make a 6:1 balun with the same stuff. While I am
thinking about that, if so, I would like to know if there is a rule of
thumb about making baluns like that so I can experiment with various
versions.

One OCF that I looked at showed an acceptable SWR on all bands between
30 and 6 meters with the exception of 17 meters. That's the kind of
thing I like to see and work with.

--
Buck
N4PGW

1726. FS: Radio Shack 21-524

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 20:24:30 UTC
From: ars_wa8mea@netzero.com
Message-ID: <1107116670.364423.50040@z14g2000cwz.googlegroups.com>
Source record: 82764

For Sale: Radio Shack "SWR/Power Tester". HF. 2000/200/20 watt settings. Average AND P.E.P power settings. Almost MINT! Comes with jumber. $19.95 and I'll pay for the shipping.
First e-mail gets it!

73, Bill - WA8MEA - ars_wa8mea@netzero.com
REALLY COOL STUFF at: http://qth.com/dwm

1727. Re: Antennas vs Antennae

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 20:33:03 UTC
From: "Percival P. Cassidy" <Nobody@NotMyISP.net>
Message-ID: <YybLd.21322$AS2.18283@fe03.lga>
Source record: 82766

The only version I've ever seen or heard is "Non carborundum
illegitimi," but IMO the "non" should be "ne" because the verb is
imperative or subjunctive (or ought to be, anyway).

Perce

On 12/23/04 07:59 pm W4JLE tossed the following ingredients into the
ever-growing pot of cybersoup:

> No it is Illegitimus non carborundum

>>>Illegitimi noncarborundum
>>
>>It is Non Illegitimus Carborundum

1728. · · · Have You Heard The Good News? · · ·

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 20:34:00 UTC
From: Google_Usenet_USA@yahoo.com
Message-ID: <1107117240.160311.317670@f14g2000cwb.googlegroups.com>
Source record: 82767

.

1729. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 21:01:30 UTC
From: richardharrison@webtv.net
Message-ID: <911-41FD4B2A-67@storefull-3258.bay.webtv.net>
Source record: 82768

Roy, W7EL wrote:
"So you`ve improved your transmit effectiveness but haven`t improved your ability to receive."

Exactly, for Roy`s mpre radials under a vertical antenna.

For horizontal antennas, it`s another matter. The horizontal discriminates against vertically polarized signals. Both polarizations result from ionospheric reflection of a signal of either polarization. The most annoying noise usually originates locally and travels to the receibver by a vertically polarized wave, the only polarization propagated by a ground wave.

A horizontal antenna is insensitive to vertically polarized waves, so improving its efficiency possibly improves reception of horizontally polarized waves without a corresponding increase in noise reception.

I worked for years in a system which relayed its broadcast programs by HF radio. This was before satellites, jets, and great recording quality. We also needed immediate relay capability for breaking news. All HF relay systems were horizontally polarized.

Best regards, Richard Harrison, KB5WZI

1730. Re: 1 to x baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 21:23:17 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <781A2siFBV$BFADj@ifwtech.co.uk>
Source record: 82769

Ian Jackson wrote:
>Evenin' Reg.
>Not disagreeing with you at all. Just nit-picking about your less than
>immaculate grammar!
>
>My only problem with baluns is not understanding the obsession with the
>4:1 or 9:1 transformation ratio.

Reg was relying to a different Ian :-)

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1731. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 21:43:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10vql8o3mucgq13@corp.supernews.com>
Source record: 82770

Compared to a vertical with more ground radials, I believe you'd have less radiation in other directions rather than more in the desired direction.

Roy Lewallen, W7EL

Ed wrote:
>
> In what manner would this vertical be "subpar? "If one were looking for
> for a vertical with more radiation in one direction, would this be
> something to consider?
>
>
> Ed

1732. Re: 1 to x baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 21:45:49 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <C7gV+yMNWV$BFwU0@g3ohx.demon.co.uk>
Source record: 82771

In message <781A2siFBV$BFADj@ifwtech.co.uk>, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> writes
>Ian Jackson wrote:
>>Evenin' Reg.
>>Not disagreeing with you at all. Just nit-picking about your less than
>>immaculate grammar!
>>
>>My only problem with baluns is not understanding the obsession with
>>the 4:1 or 9:1 transformation ratio.
>
>Reg was relying to a different Ian :-)
>

I suspected as much when I then spotted the thread to which I was
replying in another newsgroup. Put it down to crossmodulation, or maybe
old age.
Ian.
--

1733. Re: "Compound" SWR question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 21:48:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10vqlhj5k0iv1ae@corp.supernews.com>
Source record: 82672

Jaggy Taggy wrote:
> . . .
> And my second thought was what is happening to the energy, since an SWR
> gives me an indication of how much power reaches the antenna

It does not.

> and how much is
> either radiated from the feedline or lost as heat

It does not.

and here I have two
> different SWR in the system, one at the antenna and one for the
> antenna/feedline system.
>
> I think it can't be that I would loose a whole lot at the antenna (high SWR)

The SWR has nothing to do with how much power is being lost.

> but then wouldn't loose all that much for the system since the overall SWR
> is lower.

The SWR has nothing to do with how much is lost.
>
> Where do I go wrong??

In all the above. You need to go back and read again just what SWR is
and what it means.

Roy Lewallen, W7EL

1734. Panasonic RF-2800

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 21:49:05 UTC
From: ai8o <ai8o@LexComInc.net>
Message-ID: <ctjkoj$bqtf$1@news3.infoave.net>
Source record: 82673

Does anyone out there in radioland know where I can get an OEM or exact replacement telescoping antenna for this radio?

TIA
Dan
AI8O at Yemiola.net

1735. Re: 93 ohm coax

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 21:58:20 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncvqm3s.len.bit-bucket@shell.config.com>
Source record: 82674

On Sat, 29 Jan 2005 23:48:13 -0800, Richard Clark wrote:
> On Sun, 30 Jan 2005 02:36:18 -0500, "Hal Rosser"
><hmrosser@bellsouth.net> wrote:
>>Right you are -
>>If hooked up the other way it would effectively be 186-ohm
>>shielded balanced cable.

> And if you hooked it up both ways, it would be a 4:1 BalUn. -kinda-

And, if you solder _everything_ together, they make great radials.

Long story (sort of) short: Back in the early 90's when the U.S.
building and/or fire codes outlawed the material then used as the
outer jackets on RG-62 and the such, a large bank where I was
consulting had to rip out a gazillion furlongs of it from up in
the ceilings of the building. (Probably A Real Good Thing -- if
for no other reason than they always put in "new stuff" for each
new generation of terminal/monitor/display that came along. The
ceilings were overdue for a complete colapse...)

I hauled off as much as I could load into my trunk each day.

By fabricating 1/4 wave lengths of the stuff paralleled in sets of
2, 3, and 4, I built matching sections for various Field Day verticals.
I used the "worst" of it for radials on a 2-element, phased 40M
vertical -- and used 2-pair paralled runs for the phasing section(s)
between the 2 elements.

Used a grid dip meter and receiver to cut the stuff to length.

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

1736. Re: Coax Antenna Lead

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 22:12:24 UTC
From: Bill <ojiisan@bellsouth.net>
Message-ID: <XUcLd.3988$qJ3.3594@bignews1.bellsouth.net>
Source record: 82675

jimbo wrote:
> I am building a new house. I need two coax runs inside the house for
> two uses. First, for 2 meter, 440 MHz dual band. Second for 2-30 MHz
> HF. I am considering using RG213/U for both runs. I know this coax is
> suitable for 440 MHz on runs less than 100 feet. Would there be any
> problems for the 2 meter or HF using this coax? Or are there any
> suggestions for this project?
>
> Thanks, jimbo
>
I did the same thing when I put in the ham shack but I ran 8 runs of
LMR400 cable and also two runs of 8 conductor cable for rotor's.
The outside panel is under the eve of the house and I have another
panel on the wall of the shack.
Tye LMR 400 Ultra Flex is what I used.

1737. Re: another antenna in a tree ? from a rookie

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 22:17:52 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10vqn8kcdq67f34@corp.supernews.com>
Source record: 82676

I am compelled to add to what the well respected and experienced Richard has said. I have never seen a failure with Andrew products. When supplementing a system some thirty years after installation, I found from measurement that the very long run (about 450 feet) of Heliax put in 30 years earlier was indistinguishable from the new run added along side.

I own no part of the company.

Do it right - do it once.
73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:913-41FD39E0-4@storefull-3258.bay.webtv.net...
> Jcoopert wrote:
> "---did I spell that right?"
>
> Right! Heliax is the Andrew Corporation brand name for some of the
> world`s best coax cable. Their related products are tops too. Sometimes
> you can`t afford less.
>
> Best regards, Richard Harrison, KB5WZI
>

1738. Re: Coax Antenna Lead

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 22:33:45 UTC
From: jimbo <jimbo62@spamex.com>
Message-ID: <1107124425.214930.192370@c13g2000cwb.googlegroups.com>
Source record: 82677

How many of the eight runs do you use at one time? And I guess the other runs are spares? Did you consider conduit, so you could replace cables if required rather than spare runs?

Thanks, jimbo

Bill wrote:
> jimbo wrote:
> > I am building a new house. I need two coax runs inside the house for
> > two uses. First, for 2 meter, 440 MHz dual band. Second for 2-30 MHz
> > HF. I am considering using RG213/U for both runs. I know this coax is
> > suitable for 440 MHz on runs less than 100 feet. Would there be any
> > problems for the 2 meter or HF using this coax? Or are there any
> > suggestions for this project?
> >
> > Thanks, jimbo
> >
> I did the same thing when I put in the ham shack but I ran 8 runs of
> LMR400 cable and also two runs of 8 conductor cable for rotor's.
> The outside panel is under the eve of the house and I have another
> panel on the wall of the shack.
> Tye LMR 400 Ultra Flex is what I used.

1739. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 22:41:26 UTC
From: nm5k@wt.net
Message-ID: <1107124886.450872.184890@f14g2000cwb.googlegroups.com>
Source record: 82678

It would be subpar because of excess ground losses #1. You only have one radial,
and the antenna is low to the ground.
As far as radiation in one direction, I agree with Roy. It would probably be
about the same in that direction as another "poorly grounded" antenna, except
that in the other directions, it would be even worse. I think in the real world,
you will find it to be hardly directive at all. Or at least enough to be useful
anyway...To be really directive, a vertical system needs multi elements.
IE: phased verticals, bobtail curtains, etc...A bobtail curtain is a mean antenna
on 40m at night. Only the curtains, and the few lucky dogs running yagi's could
beat my elevated ground plane to VK land late at night. A friend of mine across
town ran a bobtail curtain. He could dog my GP most every night. But he's got
three elements compared to my one... MK

1740. FA TR DIP METER WAVEMETER MAPLIN PRECISION GOLD,rec.radio.amateur.equipment

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 22:46:18 UTC
From: "old.pc" <old.pc@ntlworld.com>
Message-ID: <_sdLd.1252$q22.599@newsfe1-gui.ntli.net>
Source record: 82679
Cross-posted to: uk.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.antenna

DIP METER WAVEMETER ++ MAPLIN PRECISION GOLD

http://cgi.ebay.co.uk/ws/eBayISAPI.dll?ViewItem&rd=1&item=5748363228&ssPageName=STRK:MESE:IT

1741. FA YAESU remote antenna switch FAS-1-4R

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 22:46:30 UTC
From: "old.pc" <old.pc@ntlworld.com>
Message-ID: <atdLd.1253$q22.3@newsfe1-gui.ntli.net>
Source record: 82680
Cross-posted to: uk.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.antenna

YAESU remote antenna switch FAS-1-4R

http://cgi.ebay.co.uk/ws/eBayISAPI.dll?ViewItem&rd=1&item=5748343914&ssPageName=STRK:MESE:IT

1742. Mag Mount 2 Meter for Stealth?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 22:50:34 UTC
From: jimbo <jimbo62@spamex.com>
Message-ID: <1107125434.768662.259290@c13g2000cwb.googlegroups.com>
Source record: 82681

I read a thread recently about "Loft Antennas". And I will most likely be facing a similar situation, putting antennas in my attic because of HOA restrictions. I wonder how a mag mount would work installed in an attic with a lead to my shack? How about if I placed a four foot diameter piece of sheet metal on the attic floor and put the mag mount in the center? Any other thoughts would be appreciated.

jimbo

1743. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 23:00:33 UTC
From: nm5k@wt.net
Message-ID: <1107126033.091696.54230@z14g2000cwz.googlegroups.com>
Source record: 82682

Thing is....So did my model when using "medium" ground quality.
But I know in the real world, my vertical smoked the dipole on long
haul/low angles. I'm almost positive that the verticals are
"underpowered" when
modeling, unless you bump up the ground quality. Or at least when used
on the low bands at night. To make the model of my dipole vs vertical
actually pan out as in real life, I had to bump up the ground quality
to
"excellent". Even then, it might have been a bit lower than real life.
I'm not sure what to make if this....
I'm not the only one to notice this also.... Talk to W8JI about his
nearly
300 ft dipole vs his verticals on 160m...He always thought the dipole
would be
better. After all, modeling says it should be. But it didn't quite pan
out...
I basically ignore Cecils bad experience, because #1, his vertical
needed more radials,
and he never used it for long haul paths. So of course, the vertical
should
have lost in his case. Heck, even with my vertical, that was a bit
better than his,
I had to get over 1000 miles to start seeing the vertical overtake the
dipole.
Those dipole vs vertical modeling plots are *very* misleading. Or to me
anyway...
Myself, I think the ground qualities applied are in error for some
reason..
They overly stunt the vertical when modeling...Either that, or my
ground here is
really good...My ground quality is pretty good, but it's not *great*,
being I'm
in the city cement jungle of Houston. MK

1744. Re: Mag Mount 2 Meter for Stealth?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 23:29:42 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <13rqv0t61t3udn34c6gdkfrtrabpicm4cn@4ax.com>
Source record: 82683

On 30 Jan 2005 14:50:34 -0800, "jimbo" <jimbo62@spamex.com> wrote:

>I read a thread recently about "Loft Antennas". And I will most likely
>be facing a similar situation, putting antennas in my attic because of
>HOA restrictions. I wonder how a mag mount would work installed in an
>attic with a lead to my shack? How about if I placed a four foot
>diameter piece of sheet metal on the attic floor and put the mag mount
>in the center? Any other thoughts would be appreciated.
>
>jimbo

Should work okay -- I've used a metal serving platter on the floor
with a mag mount dual bander and it hit local repeaters fine.

Could also try your refrigerator, stove, or perhaps a furnace/central
air system in your attic.

bob
k5qwg

1745. Re: Mag Mount 2 Meter for Stealth?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 23:46:18 UTC
From: artie <artie.m@gmail.com>
Message-ID: <300120051546188426%artie.m@gmail.com>
Source record: 82684

In article <1107125434.768662.259290@c13g2000cwb.googlegroups.com>,
jimbo <jimbo62@spamex.com> wrote:

> I read a thread recently about "Loft Antennas". And I will most likely
> be facing a similar situation, putting antennas in my attic because of
> HOA restrictions. I wonder how a mag mount would work installed in an
> attic with a lead to my shack? How about if I placed a four foot
> diameter piece of sheet metal on the attic floor and put the mag mount
> in the center? Any other thoughts would be appreciated.
>
> jimbo
>

I seem to recall a gadget called a "ventenna" or something similar
disguised to look like a standard vent pipe -- look in the back of QST.

--
Namaste--

1746. Re: Mag Mount 2 Meter for Stealth?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 23:55:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fdsqv01q9nqua5ovl1v99lhnv29u70qi4v@4ax.com>
Source record: 82685

On 30 Jan 2005 14:50:34 -0800, "jimbo" <jimbo62@spamex.com> wrote:
>How about if I placed a four foot
>diameter piece of sheet metal on the attic floor and put the mag mount
>in the center? Any other thoughts would be appreciated.

Hi OM,

Simple enough to do. But if it doesn't work, shuck the mag-mount;
punch a hole in the sheet metal and attach a real antenna mount. I've
heard the hosannahs sung for thru-glass and mag-mounts, complete with
mumble and jive talk about how they work, but when I can hit my
buddy's 2M repeater 5 Miles away from my basement with a 0.5W HT, it
simply says almost anything can do the job.

73's
Richard Clark, KB7QHC

1747. · · · Have You Heard The Good News? · · ·

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-30 23:55:24 UTC
From: Google_Usenet_USA@yahoo.com
Message-ID: <1107129324.620315.195200@c13g2000cwb.googlegroups.com>
Source record: 82686

.

1748. Re: Vertical vs Horizontal

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 00:06:24 UTC
From: Gary Schafer <gaschafer@comcast.net>
Message-ID: <bjtqv0dk544ib2s0aegk5j5ns46e9gtmbu@4ax.com>
Source record: 82687

On Sun, 30 Jan 2005 12:56:05 -0600, Cecil Moore <w5dxp@totalzone.com>
wrote:

>Buck wrote:
>> I am thinking that I might be able to improve my contacts by using a
>> vertical antenna since most mobiles use vertical antennas. I have
>> heard that once the signal bounces off the ionosphere, polarity isn't
>> as important as it is for local communications. However, when I was
>> assembling a 2 meter dipole antenna, I held it horizontal and turned
>> it vertical. I saw the s-meter go from nothing to s-7 and the
>> repeater go from silent to full quieting when I did this. I can't
>> help but wonder how much difference it will make with the mobiles.
>
>2m signals don't bounce off the ionosphere. It is not clear what
>band you are talking about. For sky wave communications on HF, the
>polarization doesn't much matter. For ground wave communications,
>polarization matters.

A couple of years ago I was keeping a sked with a friend on 10 meters.
The path was about 1800 miles. I mounted a vertical element on the end
of the 3 element beams boom. I wanted to try circular polarization. By
using proper feed line lengths and switches I could switch between
right or left hand circular polarization. The beam had a little more
gain than the single vertical element but the effects were dramatic at
times.

Sometimes right hand was best sometimes left hand was best.

But what turned out to be interesting was when both vertical and
horizontal where in phase and connected together. It lowered overall
signal strength a little but the fading was much less.

At times signals would fade deeply on either vertical or horizontal
polarization. Circular helped a lot but the signal kept changing
between left hand and right hand so you had to keep flipping the
switch.

With both antennas in phase it would receive vertical or horizontal
without changing anything. Very smooth constant signal.

At other times just the beam was better alone.

Transmit appeared to benefit the same. He could hear me with less
fading with the in phase antennas as well. My friend on the other end
only had horizontal polarization. He was going to try a vertical
element too but never got to do it before 10 meters died.

73
Gary k4FMX

1749. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 00:17:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8utqv0tp60cr0aqprj1mbu9e0fhcbe1in0@4ax.com>
Source record: 82688

On 30 Jan 2005 15:00:33 -0800, nm5k@wt.net wrote:

>Either that, or my ground here is
>really good...My ground quality is pretty good, but it's not *great*,
>being I'm in the city cement jungle of Houston. MK

Hi Mark,

Actually, according to the FCC ground conductivity map, you are very
well situated sitting on very good to exceptionally good soil (as you
look towards the Gulf) which is 4 to 16 times better than my own here
in Rain City.

73's
Richard Clark, KB7QHC

1750. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 00:47:06 UTC
From: nm5k@wt.net
Message-ID: <1107132426.092562.166500@z14g2000cwz.googlegroups.com>
Source record: 82689

All HF relay systems were horizontally polarized.....

I wonder about the time of day and freq? I'd almost bet many were in
the daytime,
and using fairly high frequencies as far as HF. IE: 31,25,19 m, etc...
Seems the choice was as much a receiving/noise consideration rather
than absolute
signal strength.
I think the choice is much more complex than any theoretical gains seen
in modeling,
ect. In the daytime, I don't think it really matters much. So in that
case, it
would probably make sense to use horizontal to reduce local noise
pickup. That
would improve the receive s/n. As far as transmit strength, probably
not a whole
lot of difference either way.
But at night, it seems to be a different ballgame. I think the
differences in
propagation skew things towards the vertical on the low bands at night.

The farther the path, the better the advantage.
It could be stated that most horizontal wire antennas are lower to the
ground in
terms of wavelength on those bands. This is true. But you still have
cases where
people have tried the high antennas on the low bands, and still see the
verticals
usually win on long paths.
I've never tried it, but any interested could model my 36 ft high
dipole, and then
model my 10 ft center loaded mobile whip, on a ford truck.
I'd almost bet the dipole creams the mobile antenna in the model at low
angles
as far as the gain numbers shown.
But I know in the real world, that mobile beats the 36 ft high dipole
from Houston
to Jacksonville Fla at 2 AM. Yes, even I was surprised the first time I
saw it.
But I tried it over, and over again, and it was not a fluke of nature.
If you could have two 160/80/40 m antennas at 1 wave up, both with the
same exact
gain, IE: one a 1/2 wave vertical with any radials needed to equal the
ground loss
of a horizontal dipole, I'd bet money the vertical would win on long

paths 95% of
the time. It's not just a pure "gain" thing.... I think even verticals
with less gain
will win over the dipoles once the path becomes long enough. Note my
mobile...
I know for a fact from real life, if you are going to run a dipole, and
expect to
equal my 36 ft high ground plane, you better plant that puppy *WAY*
high, or you won't
have a chance. I'm talking over a 1/2 wave up. More like a full wave,
and even then
you might lose, once the path gets to about 4k or so...
BTW, these days in Houston, local noise has just as good a chance being
horizontal
as vertical...Most is powerline noise...So with my vertical, I never
really noticed
any extra noise. The s/n ratio was always better on the vertical, for
long haul.
IE: if the noise comes up 1 s unit, but the desired signal 2 s units,
the noise
is a non factor...Many times I saw no extra noise on the vertical.
MK

1751. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 00:51:17 UTC
From: nm5k@wt.net
Message-ID: <1107132677.741720.52850@f14g2000cwb.googlegroups.com>
Source record: 82690

Well...Depends on what part of town...On the coast, it's great. A 30...
But in town, they rate it as about a 15. But that would vary greatly
I'm
sure...I'm in a suburban area, so I might be maybe a "20" ???
I know that I had very mediocre results using ground mounted verticals.
I had one with 32 full length radials, and it was poor compared to my
ground plane at 36 ft, with 4 radials. It was probably about as good as
Cecils vertical he ran....LOL...:/ MK

1752. Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 01:14:42 UTC
From: bradmanz@comcast.net
Message-ID: <1107134082.290149.188480@c13g2000cwb.googlegroups.com>
Source record: 82691

I want to build a fat dipole antenna for FM listening for my brother-in-law, who refuses to get an antenna rotator.

He is located with antenna's all around him but not on top of him.

I would of course orient it vertically and use 75 ohm coax from where it is mounted to his tuner.

Does the ARRL Antenna Handbook have directions on building one of these?

I would be using 8 inches as the diameter. Is the math to figure out the length gonna get me - I've been out of college for 30 years and have only done business math since....

Thanks,

Brad

1753. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 01:37:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <a62rv099e05mjrq4u8u0m5fdblgm4j4le1@4ax.com>
Source record: 82692

On 30 Jan 2005 16:51:17 -0800, nm5k@wt.net wrote:

>Well...Depends on what part of town...On the coast, it's great. A 30...
>But in town, they rate it as about a 15. But that would vary greatly
>I'm
>sure...I'm in a suburban area, so I might be maybe a "20" ???
>I know that I had very mediocre results using ground mounted verticals.
>I had one with 32 full length radials, and it was poor compared to my
>ground plane at 36 ft, with 4 radials. It was probably about as good as
>Cecils vertical he ran....LOL...:/ MK

Hi Mark,

You have to think deeper into the ground than the thickness of concrete or asphalt. Unless the project developer scraped off the top 6 feet and dumped it into Galveston Bay for fill, and then backfilled your neighborhood with industrial waste.... RF and your antenna is looking at a BIG foot print below it from your antenna's elevation (probably a greater boon than ground mounted - your experience seems to support this).

This means that when your RF first strikes earth at a DX angle of 5 to 10 degrees, it is a vastly bigger surface than that seen with a ground mount because that ray strikes further away. (About half a mile away, if I did my Trig right.) Instead of illuminating your driveway and street, the elevated vertical is lighting up 100s of acres that averages the ground conductivity over lawns, streets, gardens, homes, lots....

Off hand, I would say the modeler with higher ground settings is validated by your experience and conforms to your environment.

73's
Richard Clark, KB7QHC

1754. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 01:51:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <m33rv0p6h4r6fbi4qo44src1gls3doqbld@4ax.com>
Source record: 82693

On 30 Jan 2005 17:14:42 -0800, bradmanz@comcast.net wrote:
>I would be using 8 inches as the diameter.

Hi Brad,

Well, you sure pegged it down for being Fat. However, this is not particularly useful for just the FM Band. A fat antenna has useful properties as being wide banded (which means you suffer nothing from it being obese), and this would roughly equate to many times as wide as the FM band. (Another)However, receive antennas are not particularly demanding as long as they are high enough to see the antenna that is transmitting. In that regard, and as a rule of thumb, your antenna can see as far in miles as the square root of twice its height in feet (hope that is not too alien from business math). If you figure how high the other (transmitting) antenna is, you can add those two mileages to compute your listening range.

Example: your Fat vertical antenna is 25 feet high (above the ground - on the peak of your roof for instance) and the transmitter antenna is on a hill 250 feet high. That computes to your antenna being able to see about 7 miles and the transmitter being able to see 22 miles. Hence you would be able to hear that program being broadcast from as far as 29 miles out (barring obstructions like mountains in the way).

73's
Richard Clark, KB7QHC

1755. mag mount Impedance changes?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 02:12:18 UTC
From: ml <m@di.net>
Message-ID: <m-519F33.21121230012005@news.verizon.net>
Source record: 82694

I was planning on using a mobile 2/440 antenna either w/a mag mount or thru hole on some sheet metal , on my roof .

naturally unlike in a car the coax run will be rather longer than is typically used in a car , i presume therefore this might change to the point where using this set up might be 'useless'??

are they particularly sensitive to say impedance changes or such?

100ft run of lmr400 or 1/2'' heliax will be used

thanks

1756. Re: Coax Antenna Lead

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 03:38:34 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <41fdab1e_2@news1.prserv.net>
Source record: 82695

"jimbo" <jimbo62@spamex.com> wrote in message
news:1107111342.687746.265940@c13g2000cwb.googlegroups.com...
> Conduit sounds like a good idea. Would you use metal or PVC?
>
> jimbo
>
Well, it depends on a lot of factors. You have to use lubricant to pull long runs of PVC insulated coax through PVC
conduit, while metal is slicker, and sometimes it will pull without. Metal will provide little additional shielding,
and bending big stuff requires special benders, while PVC can be formed with a heat gun and a lot of care. For
individual runs, you could use this corrugated PVC stuff which has become very popular for pulling fiber optics, but I
have never seen it in real large sizes, and it will need to be held down more if it has a lot of turns.

--
Crazy George
Remove N O and S P A M imbedded in return address

1757. Re: speaking of baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 04:24:00 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41fdb461$1_2@127.0.0.1>
Source record: 82696

Buck wrote:
> I have been looking at OCF dipoles and there are some that don't
> appear to need a tuner when using a 6:1 balun.

I ran an OCF in college with a 6:1 air core balun from
Heathkit. It worked well but my transmitter had a
built in adjustable pi-net tuner. What are the dimensions
of the above OCF that you have described? Most OCF's that
I have modeled work just as well with a 4:1 balun as they
do with a 6:1 balun.

Jerry Sevick, W2FMI, describes a 6.25:1 balun in "Building
and Using Baluns and Ununs". It is a 1:1.56 UNUN followed
by a 1:4 BALUN.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1758. Re: Vertical vs Horizontal

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 04:41:17 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41fdb86e$1_1@127.0.0.1>
Source record: 82697

Gary Schafer wrote:
> Sometimes right hand was best sometimes left hand was best.

Indicating that, for a single antenna, polarization doesn't
much matter for HF skip since it is continuously changing.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1759. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 04:56:55 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41fdbc19$1_1@127.0.0.1>
Source record: 82698

nm5k@wt.net wrote:
> It would be subpar because of excess ground losses #1. You only have
> one radial, and the antenna is low to the ground.
> As far as radiation in one direction, I agree with Roy. It would
> probably be about the same in that direction as another "poorly
> grounded" antenna, except that in the other directions, it would
> be even worse.

EZNEC agrees. With four radials one foot above ground the gain
is -0.53 dBi. With one radial one foot above ground the gain
is -1.62 dBi in the direction of the one radial and - 6 dBi
in the opposite direction.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1760. Re: mag mount Impedance changes?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 05:20:26 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <uejLd.10680$JF2.7139@tornado.tampabay.rr.com>
Source record: 82699

why are you spending more on coax than you are on an antenna?
why dont you use a base antenna rather than a mobile on a plate?
a VENTENNA would do you just as well and be hidden a WeatherVane antenna
would do the same and have better gain than the dualband mobile
either of these antennas can be found online using a google search and
are both stealthy the neighboors would never know what you have up
if that isnt the issue i would suggest a Comet GP6 or GP9 both are great
antennas
and the performance would be a lot better than the mobile whip

ml wrote:

> I was planning on using a mobile 2/440 antenna either w/a mag mount or
> thru hole on some sheet metal , on my roof .
>
>
> naturally unlike in a car the coax run will be rather longer than is
> typically used in a car , i presume therefore this might change to the
> point where using this set up might be 'useless'??
>
>
> are they particularly sensitive to say impedance changes or such?
>
>
> 100ft run of lmr400 or 1/2'' heliax will be used
>
> thanks

1761. Re: Mag Mount 2 Meter for Stealth?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 05:29:41 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <9njLd.11732$Q72.11344@tornado.tampabay.rr.com>
Source record: 82700

hey jimbo
what about trying this antenna your HOA would never know its an antenna
http://www.angelfire.com/biz/AntVentures/baseants.html
or this one they would never see it its the Ventenna
http://www.garlic.com/~m4bz/ventham.htm

jimbo wrote:

> I read a thread recently about "Loft Antennas". And I will most likely
> be facing a similar situation, putting antennas in my attic because of
> HOA restrictions. I wonder how a mag mount would work installed in an
> attic with a lead to my shack? How about if I placed a four foot
> diameter piece of sheet metal on the attic floor and put the mag mount
> in the center? Any other thoughts would be appreciated.
>
> jimbo
>

1762. Re: mag mount Impedance changes?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 05:32:43 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <%pjLd.11751$Q72.6358@tornado.tampabay.rr.com>
Source record: 82701

here are the links to the two antennas i suggested
this link is for the weathervane
http://www.angelfire.com/biz/AntVentures/baseants.html
this link is for the Ventenna
http://www.garlic.com/~m4bz/ventham.htm

ml wrote:

> I was planning on using a mobile 2/440 antenna either w/a mag mount or
> thru hole on some sheet metal , on my roof .
>
>
> naturally unlike in a car the coax run will be rather longer than is
> typically used in a car , i presume therefore this might change to the
> point where using this set up might be 'useless'??
>
>
> are they particularly sensitive to say impedance changes or such?
>
>
> 100ft run of lmr400 or 1/2'' heliax will be used
>
> thanks

1763. Re: "Compound" SWR question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 06:56:55 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <XEkLd.122520$w62.46453@bgtnsc05-news.ops.worldnet.att.net>
Source record: 82702

I strongly suggest that you invest in "Reflections II" by Walt Maxwell, W2DU
and sleep with it a few nights.

No offense, but the tone of your questions and comments indicates that you
are working with a number of highly erroneous misconceptions. The sooner you
iron out these kinks, the better you will understand and enjoy your
antennas.

Walt is working on "Reflections III" but it may be this Fall before it
publishes, so the current edition is more than adequate.

However, don't feel bad - the notion of SWR (its causes and effects) is
probably one of the most widely misunderstood concepts in amateur radio.
Walt can help a lot . . .

--
73, George W5YR
Fairview, TX
w5yr@att.net
http://www.w5yr.com

"Jaggy Taggy" <outhouse@midcoast.com> wrote in message
news:BE229BE1.1247%outhouse@midcoast.com...
> I am trying to learn more about antennas and transmission lines and am
> currently reading through the transmission line chapter of a recent ARRL
> Handbook.
>
> There is a calculated example for a load with a certain SWR connected to a
> transmission line with certain losses and the author states:
>
> "Because of losses in a transmission line, the measured SWR at the input
of
> the line is less than the SWR measured at the load end of the line."
>
>
>
> My first reaction was Oh my God, I am soo proud of my decent SWR at the
> input of my antenna feedline and in reality I could have a really bad
> mismatch between the antenna and the transmission line and wouldn't even
> know about it.
>
> And my second thought was what is happening to the energy, since an SWR
> gives me an indication of how much power reaches the antenna and how much
is
> either radiated from the feedline or lost as heat and here I have two
> different SWR in the system, one at the antenna and one for the

> antenna/feedline system.
>
> I think it can't be that I would loose a whole lot at the antenna (high
SWR)
> but then wouldn't loose all that much for the system since the overall SWR
> is lower.
>
>
> Where do I go wrong??
>
> Uwe
>

1764. Re: 1 to x baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 07:01:11 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <XIkLd.122538$w62.46418@bgtnsc05-news.ops.worldnet.att.net>
Source record: 82703

It is highly instructive to NOT think of a balun as an impedance
transformation device, but rather as a device which has the ability to steer
r-f currents. Thus viewed, a large amount of confusion melts away.

--
73, George W5YR
Fairview, TX
w5yr@att.net
http://www.w5yr.com

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:ctj5fj$9ie$1@titan.btinternet.com...
> Dear Ian,
>
> It's early in the morning. I havn't had time and I don't want to take
much
> time thinking about your rather slightly surprising comments.
>
>
> You have completely misunderstood, gone off at a tangent, about my motives
> in my very few writings on the subject of baluns.
>
>
> I have never made recommendations about old-wives tales, whatever you
think
> they are, except, just in effect, to ignore them.
>
>
> You, apparently, have now (quite mistakenly I venture to add) included
> yourself amongst them.
>
>
> Have you any shares in balun manufacturers? After all baluns are the only
> thing left for old-wives and salesmen to haggle about. Don't bother
> answering.
>
>
> In conclusion, unless people can specify, in numerical terms, what is
their
> problem, then there's no hope of sensibly aquiring a balun of any sort.
And
> I have never yet met anybody who has so specified.
>
> I feel guilty at prolonging such a trivial matter. But it's such an early
> hour of the day. Havn't had breakfast yet!

>
> A very good morning to you Ian.
> ---
> Reg, G4FGQ
>
>

1765. Re: speaking of baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 07:15:44 UTC
From: Buck <iam@this.site>
Message-ID: <bjmrv05l7kbrbdblqv5npu2l1v9pe80ica@4ax.com>
Source record: 82704

On Sun, 30 Jan 2005 22:24:00 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Buck wrote:
>> I have been looking at OCF dipoles and there are some that don't
>> appear to need a tuner when using a 6:1 balun.
>
>I ran an OCF in college with a 6:1 air core balun from
>Heathkit. It worked well but my transmitter had a
>built in adjustable pi-net tuner. What are the dimensions
>of the above OCF that you have described? Most OCF's that
>I have modeled work just as well with a 4:1 balun as they
>do with a 6:1 balun.
>
>Jerry Sevick, W2FMI, describes a 6.25:1 balun in "Building
>and Using Baluns and Ununs". It is a 1:1.56 UNUN followed
>by a 1:4 BALUN.

This is the antenna I want to copy before I start experimenting:
http://hamcall.net/6bandmegpole.html

I don't have a lot of information about baluns. What I have is mostly
related to Toroid baluns. I like the air coil idea in spite of the
size requirements. If additional turns or less turns change the balun
ratio, I would be interested to know as I can experiment and try
variations.

Thanks.

--
73 for now
Buck
N4PGW

1766. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 07:18:09 UTC
From: Buck <iam@this.site>
Message-ID: <vrmrv0lhre3f9l0oa8p5orfonh9hceg6kn@4ax.com>
Source record: 82705

On 30 Jan 2005 14:41:26 -0800, nm5k@wt.net wrote:

>It would be subpar because of excess ground losses #1. You only have
>one radial,
>and the antenna is low to the ground.
>As far as radiation in one direction, I agree with Roy. It would
>probably be
>about the same in that direction as another "poorly grounded" antenna,
>except
>that in the other directions, it would be even worse. I think in the
>real world,
>you will find it to be hardly directive at all. Or at least enough to
>be useful
>anyway...To be really directive, a vertical system needs multi
>elements.
>IE: phased verticals, bobtail curtains, etc...A bobtail curtain is a
>mean antenna
>on 40m at night. Only the curtains, and the few lucky dogs running
>yagi's could
>beat my elevated ground plane to VK land late at night. A friend of
>mine across
>town ran a bobtail curtain. He could dog my GP most every night. But
>he's got
>three elements compared to my one... MK

Just for information along this line, the N2GG is a form of curtain
antenna. It is only two hanging elements, but apparently a great
little antenna that works better than a dipole.

--
73 for now
Buck
N4PGW

1767. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 07:19:25 UTC
From: Buck <iam@this.site>
Message-ID: <dumrv0d32619r1c6bfg6auj695rdobs8jq@4ax.com>
Source record: 82706

On Sun, 30 Jan 2005 22:56:55 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

>nm5k@wt.net wrote:
>> It would be subpar because of excess ground losses #1. You only have
>> one radial, and the antenna is low to the ground.
>> As far as radiation in one direction, I agree with Roy. It would
>> probably be about the same in that direction as another "poorly
> > grounded" antenna, except that in the other directions, it would
> > be even worse.
>
>EZNEC agrees. With four radials one foot above ground the gain
>is -0.53 dBi. With one radial one foot above ground the gain
>is -1.62 dBi in the direction of the one radial and - 6 dBi
>in the opposite direction.

How does it rate it with that one radial buried in the ground as in
the OP rather than above the ground?

--
73 for now
Buck
N4PGW

1768. Re: Mag Mount 2 Meter for Stealth?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 07:22:47 UTC
From: Buck <iam@this.site>
Message-ID: <e3nrv05pve1ik5e0vgs9nm737fi8j3ndh7@4ax.com>
Source record: 82707

On 30 Jan 2005 14:50:34 -0800, "jimbo" <jimbo62@spamex.com> wrote:

>I read a thread recently about "Loft Antennas". And I will most likely
>be facing a similar situation, putting antennas in my attic because of
>HOA restrictions. I wonder how a mag mount would work installed in an
>attic with a lead to my shack? How about if I placed a four foot
>diameter piece of sheet metal on the attic floor and put the mag mount
>in the center? Any other thoughts would be appreciated.
>
>jimbo

I saw someone who uses a large pizza pan for the radials. The mag
mount sits well on the pan and it was the perfect size for the
radials.

The picture was of the pan on a post outside about roof level, but it
should do as well as the radials inside.

--
73 for now
Buck
N4PGW

1769. Re: Mag Mount 2 Meter for Stealth?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 07:29:15 UTC
From: Buck <iam@this.site>
Message-ID: <89nrv09tuc0jq41tv76ibc5tl6u5uidn2i@4ax.com>
Source record: 82708

On 30 Jan 2005 14:50:34 -0800, "jimbo" <jimbo62@spamex.com> wrote:

>I read a thread recently about "Loft Antennas". And I will most likely
>be facing a similar situation, putting antennas in my attic because of
>HOA restrictions. I wonder how a mag mount would work installed in an
>attic with a lead to my shack? How about if I placed a four foot
>diameter piece of sheet metal on the attic floor and put the mag mount
>in the center? Any other thoughts would be appreciated.
>
>jimbo

My mobile whip is 5/8 wave with a nub about the size of my pinkie in
diameter and two inches long. If I mounted it on a piece of tin
(covered by shingles) on my roof, the neighbors would never know it
was there even if they looked for it. Chances are that wx won't
bother it in any way either. This antenna has been with me since
April of 1979 and been over 100 miles per hour. It has killed several
birds that didn't expect it when they flew over the car, but it is
still working well to this day. (I used it less than an hour ago.)

the stainless steel whip, especially if painted flat black, will be
extremely difficult to spot if you know to look for it and even harder
if you aren't looking for it.

--
73 for now
Buck
N4PGW

1770. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 07:35:51 UTC
From: Buck <iam@this.site>
Message-ID: <hknrv0pmfqlklg6v1t5oj15183vio29b6k@4ax.com>
Source record: 82709

On 30 Jan 2005 17:14:42 -0800, bradmanz@comcast.net wrote:

>I want to build a fat dipole antenna for FM listening for my
>brother-in-law, who refuses to get an antenna rotator.
>
>He is located with antenna's all around him but not on top of him.
>
>I would of course orient it vertically and use 75 ohm coax from where
>it is mounted to his tuner.
>
>Does the ARRL Antenna Handbook have directions on building one of
>these?
>
>I would be using 8 inches as the diameter. Is the math to figure out
>the length gonna get me - I've been out of college for 30 years and
>have only done business math since....
>
>Thanks,
>
>Brad

I don't know why you want FAT. It will give you lower gain. However,
you might consider building a dipole out of 1/2 copper tubing. A
piece of PVC T connector and two elements about 2.4 feet long each can
be connected to the coax, painted (if desired) and mounted inside the
attic or outside if desired.

The formula for a dipole is 234/frequency in Mhz = 1 leg of a dipole
or 1/4 wave length approximately. (Each dipole needs two legs.)

the copper pipe will give plenty of band width and do as well or
better than three inches.

You don't have to be worried about perfect dimensions as you aren't
worried about SWR so the elements I showed you will work very well.

Someone correct me, but don't FM stations transmit both vertical and
horizontal?

I hope this helps.

--
73 for now
Buck
N4PGW

1771. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 08:20:40 UTC
From: richardharrison@webtv.net
Message-ID: <22524-41FDEA58-55@storefull-3254.bay.webtv.net>
Source record: 82711

Mark, NM5K has raised some interesting questions. Time of day and frequewncy?

We operated almost around the clock with both broadcasting and program relay. For broadcast, the schedules are based on propagation predictions and must be published far in advance. The schedule must be followed no matter how propagation actually turns out. The best likely frequency is picked for the path. Also scheduled is something in the next lower frequency band and something in the next higher frequency band. For program relay, you can make unscheduled frequency adjustments at any time it is convenient to do so.

Triple space diversity was the method we mostly used. (3) separate receiving antennas, spaced about 10 wavelengths apart laterally at 40-meters (400 meters) were used to receive all relayed programs. Each antenna fed a multicoupler so that receivers could be connected without interaction.

The three receivers tuned to a particular program (not necessarily the same frequency) had their outputs fed to a single TDR combiner (Crosby or Pioneer). The combiner accepted the best output of the three receivers and rejected the other two. An operator checked the reception regularly to see if the signal could be improved by selection of either the upper or lower sideband, or other means.

The height of the antennas was about 20 meters. High enough for single-hop propagation over the path at midday on the 20-meter band. We had fixed height so it had to serve from 5 MHz to 18 MHz at all hours. For relay, we adjusted frequencies almost 24-hours to pick those frequencies which were working best at the time and might also be transmitting in the next higher and/or lower band during changing conditions For relay we used 3 to 5 KW. For broadcast we used 50 KW and 100 KW. Antennas had about 15 dBd gain on both relay path ends. For broadcast we used 15 dBd gain on the transmitter. The receiver may have had a wet noodle for an antenna. If it was good enough for the jammers it was probably good enough to receive us too.

Mark also wrote:
"I`d bet money the vertical would win on the long paths 95% of the time."

The vertical has its null directly overhead, and it has its maximum radiation at low vertical angles from the horizontal. A hazard for the vertical is low uncorrected soil conductivity beneath the antenna.

Put the horizontal antenna up high and it works with either low conductivity or high conductivity soils. Low height is the hazard for the horizontal antenna if you want DX.

Best regards, Richard Harrison, KB5WZI

1772. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 08:24:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5oqrv055ct2sk9m5p06jdbqn4ve49b00tf@4ax.com>
Source record: 82710

On Mon, 31 Jan 2005 02:35:51 -0500, Buck <iam@this.site> wrote:

>I don't know why you want FAT. It will give you lower gain.

Hi Buck,

No such thing.

73's
Richard Clark, KB7QHC

1773. vertical with tuner at the rig?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 09:07:50 UTC
From: drbrain@hot.ee
Message-ID: <a4d3b1f9.0501310107.39c5316b@posting.google.com>
Source record: 82712

Hello everyone!

There's now brand-new steel roof over me and time to put up a vertical. Dont want to spent too much time over that slippery and rather high roof messing with traps, so: planning to put up a fishing pole (7 m long) and coil wire around it. Would like to use rig's autotuner and short run of rg6 cable. Dont mind swr 5 or so. Played with EZNEC and found that 12 m long radiator would present reasonable impedances at 40, 30, 20, 17, 15. But, when my mast is 7m long, should I coil 12 m or more wire around it?? Should I use capasitators at the base of the antenna to to tune out reactances? Or can tuner do that on the other side of coax? Anyone done something similar? Any comments?

Andrus

1774. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 09:20:48 UTC
From: Buck <iam@this.site>
Message-ID: <03urv09dvvv0tagu8il18t38isu9jsrntl@4ax.com>
Source record: 82713

On Mon, 31 Jan 2005 00:24:03 -0800, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Mon, 31 Jan 2005 02:35:51 -0500, Buck <iam@this.site> wrote:
>
>>I don't know why you want FAT. It will give you lower gain.
>
>Hi Buck,
>
>No such thing.
>
>73's
>Richard Clark, KB7QHC

No such thing as 'fat' or 'gain'?

--
73 for now
Buck
N4PGW

1775. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 10:21:24 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10vs1l8gmoab0d6@corp.supernews.com>
Source record: 82714

Buck wrote:
>
> I don't know why you want FAT. It will give you lower gain. . .

That's interesting. How much lower? Why?

Roy Lewallen, W7EL

1776. Re: 30M Jpole and antenna analyser question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 13:26:54 UTC
From: Spam Fighter <spamcollector@sympatico.ca>
Message-ID: <pan.2005.01.31.13.26.53.955210@sympatico.ca>
Source record: 82715

On Sat, 29 Jan 2005 02:56:46 -0500, Doug Faunt N6TQS +1-510-655-8604
wrote:

> Autek RF-1 analyser

What does your Autek RF-1 analyser say the resistance and reactance is?

If the reactance is capacitive, lengthen the 1/2 lamba section.

1777. Re: 30M Jpole and antenna analyser question.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 13:39:41 UTC
From: Spam Fighter <spamcollector@sympatico.ca>
Message-ID: <pan.2005.01.31.13.39.40.499469@sympatico.ca>
Source record: 82716

On Sat, 29 Jan 2005 02:56:46 -0500, Doug Faunt N6TQS +1-510-655-8604
wrote:

> Hi All,
> I've built a 30M Jpole using dimensions from the Jpole calculator in
> Hamcalc and using 300 ohm twin lead for the matching section.
>
> It seems to resonate about right, but the SWR is 2.2. I'm using an
> Autek RF-1 analyser, and want to know if there's any way to determine
> what changes to make to get a lower SWR? I don't have a lot of the
> twinlead left, and don't have enough time to get more, so cut-and-try
> isn't the best solution.
>
> 73, doug

Thee are two things you have to take into account:
1. tuning your radiator to resonance (reactance = 0 on Autek)
2. matching to your feedline.

What does your Autek say?

If the reactance is capacitive, lengthen the 1/2 lambda radiator. If it is
inductive, shorten it.

Now that the antenna resonates, you have to match it. The antenna handbook
details calculating the proper length of 75 ohm coax to transform
impedances from 50 to something else. Your Autek will tell you what the
"something else" is.

Why a J-Pole?

Would it not be easier to simply string a vertical dipole? A J-Pole is
merely an end fed vertical dipole with a tapped shorted 1/4 lambda
matching section.

1778. Re: Fat dipole for FM (FM Broadcast Polarization)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 14:28:37 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <pgrLd.4401$bu.1944@fed1read06>
Source record: 82717

From URL:
http://www.astronantennas.com/polarization.html
In the early days of FM radio in the 88-108 MHz spectrum, the radio stations broadcasted horizontal polarization. However, in the 1960's, FM radios became popular in automobiles which used vertical polarized receiving whip antennas. As a result, the FCC modified Part 73 of the rules and regulations to allow FM stations to broadcast RHC or elliptical polarization to improve reception to vertical receiving antennas as long as the horizontal component was dominant.
--
Caveat Lector

> Someone correct me, but don't FM stations transmit both vertical and
> horizontal?
>
> I hope this helps.
>
>
> --
> 73 for now
> Buck
> N4PGW
>

1779. Re: speaking of baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 14:42:30 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41fe4557$1_2@127.0.0.1>
Source record: 82718

Buck wrote:
> This is the antenna I want to copy before I start experimenting:
> http://hamcall.net/6bandmegpole.html

Hi Buck, they don't give exact building information as far
as I can tell. Here's what they say: Inverted V with the
center at 32 ft and ends at 8 ft. Approximately 135 ft
long fed with 100 ft of RG-213.

Why 32 ft with the ends at 8 ft? Because that is the
configuration that gives the advertised values of SWR.
Why 100 ft of RG-213? Because the losses in the coax
results in the advertised values of SWR. If you deviate
from their configuration including having different
ground conditions, you will, no doubt, need an antenna
tuner for some bands. They have probably fine tuned their
configuration so they can make their claims which you
probably will not be able to duplicate. I don't want to
discourage your experimentation - just make a prediction
based on experience.

If you really want an efficient all-eight-HF-band antenna
requiring no tuner, you can find one on my web page at
http://www.qsl.net/w5dxp/notuner.htm
If you don't want to go to the trouble of varying the
length of your feedline, you can at least learn what
you are up against in your quest.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1780. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 14:45:55 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41fe4624$1_1@127.0.0.1>
Source record: 82719

Buck wrote:

> Cecil Moore <w5dxp@hotmail.com> wrote:
>>EZNEC agrees. With four radials one foot above ground the gain
>>is -0.53 dBi. With one radial one foot above ground the gain
>>is -1.62 dBi in the direction of the one radial and - 6 dBi
>>in the opposite direction.
>
> How does it rate it with that one radial buried in the ground as in
> the OP rather than above the ground?

I don't have NEC-4 so I can't bury radials. Perhaps Roy will
do the honors. Incidentally, the above simulation was done
for a 33 ft vertical with 33 ft radials on 40m.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1781. Re: Mag Mount 2 Meter for Stealth?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 14:46:59 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41fe4664$1_1@127.0.0.1>
Source record: 82720

Buck wrote:
> I saw someone who uses a large pizza pan for the radials.

A large metal filing cabinet also works well.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1782. Re: vertical with tuner at the rig?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 15:02:33 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41fe4a0a$1_1@127.0.0.1>
Source record: 82721

DrBrain wrote:
> Played
> with EZNEC and found that 12 m long radiator would present reasonable
> impedances at 40, 30, 20, 17, 15. But, when my mast is 7m long, should
> I coil 12 m or more wire around it??

Did you look at your radiation pattern on 15m with that
12m long radiator? TOA = 41 degrees. To get a 5/8
WL vertical on 15m, it shouldn't be that long.

Also coiling the wire may cause a nasty self-resonance
setting your frequency upper limit lower than you want.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1783. Re: speaking of baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 15:44:14 UTC
From: Buck <iam@this.site>
Message-ID: <clisv0l7ifiv95m9n5ks7m8pb9eod355me@4ax.com>
Source record: 82622

On Mon, 31 Jan 2005 08:42:30 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Buck wrote:
>> This is the antenna I want to copy before I start experimenting:
>> http://hamcall.net/6bandmegpole.html
>
>Hi Buck, they don't give exact building information as far
>as I can tell. Here's what they say: Inverted V with the
>center at 32 ft and ends at 8 ft. Approximately 135 ft
>long fed with 100 ft of RG-213.
>
>Why 32 ft with the ends at 8 ft? Because that is the
>configuration that gives the advertised values of SWR.
>Why 100 ft of RG-213? Because the losses in the coax
>results in the advertised values of SWR. If you deviate
>from their configuration including having different
>ground conditions, you will, no doubt, need an antenna
>tuner for some bands. They have probably fine tuned their
>configuration so they can make their claims which you
>probably will not be able to duplicate. I don't want to
>discourage your experimentation - just make a prediction
>based on experience.
>
>If you really want an efficient all-eight-HF-band antenna
>requiring no tuner, you can find one on my web page at
>http://www.qsl.net/w5dxp/notuner.htm
>If you don't want to go to the trouble of varying the
>length of your feedline, you can at least learn what
>you are up against in your quest.

thanks, Cecil.

I have looked at that before.

(Not to argue with you, but I considered your feedline switches a
form of tuner, just not conventional ;).

That is definitely a great looking antenna. I am glad you pointed out
the precision needed on the OCF I was looking at. What I am working
towards is a great all-band antenna that can be easily ported and
setup and used without switching (kind of like the T2FD) and no
unique parts required.

I am glad to meet you (and know who you are.) To be honest, I have
spent a lot of time on your site. At one time, I could have answered

many questions about your antenna without looking at it. Your site is the first place I saw the ferrite beads on the feedline for a choke and I have investigated them in depth since then too.

One thing I didn't find about the antenna was the bandwidth of 40/80 meters or an SWR chart for each band. (I realize that you might not be able to do that easily, I'm just stating an observation.)

Also, in addition to the antenna I mentioned to you (It was only one of several OCF's I am looking at), it seems to be common for OCF antennas to use 6:1 baluns. Some do use 4:1 and most, regardless of the balun, require a tuner.

I have several ideas that I am kicking around so being able to easily be able to build an inexpensive balun at different ratios will come in very handy for my experiments.

Before the internet there were books. The best one could hope for was to see a picture of the author on the cover, but now, after all these years, I am still amazed when I find myself in conversation what use to be ... the untouchables. :)

It was great to meet you. Thanks for replying.

Buck.

--
73 for now
Buck
N4PGW

1784. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 15:53:03 UTC
From: Buck <iam@this.site>
Message-ID: <elksv0dq1t3pdi2v0nvk87rd5nhd55agrp@4ax.com>
Source record: 82623

On Mon, 31 Jan 2005 02:21:24 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>It will give you lower gain. . .

What were you thinking?

My apologies to the OP and others.....

I don't know why I said 'lower gain'. (make a note to myself, don't
answer usenet when I should be asleep.)

The fatter dipole will offer a broader bandwidth and a reduced length.
However for the FM broadcast band reception, bandwidth isn't a
problem.

Thanks Roy and Richard. My apologies to you Brad.

--
73 for now
Buck
N4PGW

1785. Re: Fat dipole for FM (FM Broadcast Polarization)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 15:54:43 UTC
From: Buck <iam@this.site>
Message-ID: <q4lsv09vpuikldhs6bfsa4ok2qg4vddh42@4ax.com>
Source record: 82624

On Mon, 31 Jan 2005 06:28:37 -0800, "Caveat Lector" <CL@barahmas.com>
wrote:

>From URL:
>http://www.astronantennas.com/polarization.html
>In the early days of FM radio in the 88-108 MHz spectrum, the radio stations
>broadcasted horizontal polarization. However, in the 1960's, FM radios
>became popular in automobiles which used vertical polarized receiving whip
>antennas. As a result, the FCC modified Part 73 of the rules and
>regulations to allow FM stations to broadcast RHC or elliptical polarization
>to improve reception to vertical receiving antennas as long as the
>horizontal component was dominant.

Thanks Caveat Lector.

(Caveat emptor means buyer beware, what does caveat lector mean?)

--
73 for now
Buck
N4PGW

1786. Re: vertical with tuner at the rig?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 16:13:14 UTC
From: denton <denton@oregontrail.net>
Message-ID: <10vsm85jtpahhc8@corp.supernews.com>
Source record: 82626

I am using a 32 ft gound mounted homebrew vertical with 30 radials of
whatever will fit in a 50 by 50 ft area
I feed it at the base with a 4 to 1 voltage balun and bypass the balun for
use on 40 meters.
swr anywhere from 40 thru 10 meters isnt over 3 to 1.
I feed it with 30 ft or so of good quality rg-8 coax and a little auto tuner
in the shack.
"DrBrain" <drbrain@hot.ee> wrote in message
news:a4d3b1f9.0501310107.39c5316b@posting.google.com...
> Hello everyone!
>
> There's now brand-new steel roof over me and time to put up a
> vertical. Dont want to spent too much time over that slippery and
> rather high roof messing with traps, so: planning to put up a fishing
> pole (7 m long) and coil wire around it. Would like to use rig's
> autotuner and short run of rg6 cable. Dont mind swr 5 or so. Played
> with EZNEC and found that 12 m long radiator would present reasonable
> impedances at 40, 30, 20, 17, 15. But, when my mast is 7m long, should
> I coil 12 m or more wire around it?? Should I use capasitators at the
> base of the antenna to to tune out reactances? Or can tuner do that on
> the other side of coax? Anyone done something similar? Any comments?
>
> Andrus

1787. Re:For Buck (Fat dipole for FM) [FM Broadcast Polarization]

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 16:13:34 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <OOsLd.4408$bu.457@fed1read06>
Source record: 82625

Reader Beware -- hi hi

I have had some awful experiences on the NG's using my real identity and Amateur Radio call sign -- so thought Caveat Lector was appropriate for the NG's

73 -- Caveat Lector

"Buck" <iam@this.site> wrote in message news:q4lsv09vpuikldhs6bfsa4ok2qg4vddh42@4ax.com...
> On Mon, 31 Jan 2005 06:28:37 -0800, "Caveat Lector" <CL@barahmas.com>
> wrote:> >From URL:
>http://www.astronantennas.com/polarization.html
>In the early days of FM radio in the 88-108 MHz spectrum, the radio
>stations
>broadcasted horizontal polarization. However, in the 1960's, FM radios
>became popular in automobiles which used vertical polarized receiving whip
>antennas. As a result, the FCC modified Part 73 of the rules and
>regulations to allow FM stations to broadcast RHC or elliptical
>polarization
>to improve reception to vertical receiving antennas as long as the
>horizontal component was dominant.

> (Caveat emptor means buyer beware, what does caveat lector mean?)
> --
> 73 for now
> Buck
> N4PGW
>

1788. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 16:29:14 UTC
From: richardharrison@webtv.net
Message-ID: <16518-41FE5CDA-77@storefull-3256.bay.webtv.net>
Source record: 82627

Roy, W7EL wrote:
"That`s interesting.(I don`t know why you want fat. It will give you lower gain.) How much lower? Why?"

It`s a fact. Fat antennas have more bandwidth, and that is inversely proportional to Q. Teducing antenna Q, by fattening the antenna, reduces the antenna potential by about the same factor.

Best regards, Richard Harrison, KB5WZI

1789. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 16:40:53 UTC
From: richardharrison@webtv.net
Message-ID: <16517-41FE5F95-212@storefull-3256.bay.webtv.net>
Source record: 82630

Brad wrote:
"I want to build a fat dipole for FM listening for my brother-in-law,
who refuses to get a rotor."

A twin-lead dipole may be fat enough. These are sold at Radio Shack and other outlets for just a few dollars and can be used to determine if such an approach is satisfactory. You can still build an "improved antenna" if the bought antenna works on site.

Best regards, Richard Harrison, KB5WZI

1790. Re: "Compound" SWR question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 16:49:38 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <T6GdnUZGLqQB_GPcRVn-jQ@comcast.com>
Source record: 82628

"Jaggy Taggy" <outhouse@midcoast.com> wrote in message
news:BE229BE1.1247%outhouse@midcoast.com...
>I am trying to learn more about antennas and transmission lines and am
> currently reading through the transmission line chapter of a recent ARRL
> Handbook.
>
> There is a calculated example for a load with a certain SWR connected to a
> transmission line with certain losses and the author states:
>
> "Because of losses in a transmission line, the measured SWR at the input
> of
> the line is less than the SWR measured at the load end of the line."
>
>
>
> My first reaction was Oh my God, I am soo proud of my decent SWR at the
> input of my antenna feedline and in reality I could have a really bad
> mismatch between the antenna and the transmission line and wouldn't even
> know about it.
>
> And my second thought was what is happening to the energy, since an SWR
> gives me an indication of how much power reaches the antenna and how much
> is
> either radiated from the feedline or lost as heat and here I have two
> different SWR in the system, one at the antenna and one for the
> antenna/feedline system.
>
> I think it can't be that I would loose a whole lot at the antenna (high
> SWR)
> but then wouldn't loose all that much for the system since the overall SWR
> is lower.
>
>
> Where do I go wrong??
>
> Uwe
>If you post the following, somebody will tell you what the antenna SWR is:

1) Length of coax
2) Type of coax
3) SWR you measure
4) Frequency

The power that gets attenuated is used up to heat the coax. This can be
useful. For instance, I am using 100+ feet of RG58 as a 50 MHz 100W

attenuator.

TYam/WB2TT

1791. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 16:55:03 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ctlnt7rov1@sparta.btinternet.com>
Source record: 82629

> Fat antennas have more bandwidth, and that is inversely
> proportional to Q. Teducing antenna Q, by fattening the antenna, reduces
> the antenna potential by about the same factor.
>
> Best regards, Richard Harrison, KB5WZI

==========

Richard, If you got this off Terman and Kraus then Terman and Kraus are a couple of the oldest of old wives.

Reg

1792. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 17:29:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rjqsv09amnoad9l4bv07hekp8bfb18hd44@4ax.com>
Source record: 82631

On Mon, 31 Jan 2005 16:55:03 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

> If you got this off Terman and Kraus then Terman and Kraus are a
>couple of the oldest of old wives.

Reggie,

This has got to be the height of your boredom to force your nemesis
into the thread to then complain about them. Sounds unmistakably like
the envy of a hausfrau.

73's
Richard Clark, KB7QHC

1793. Re: 1 to x baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 18:23:49 UTC
From: richardharrison@webtv.net
Message-ID: <25936-41FE77B5-65@storefull-3253.bay.webtv.net>
Source record: 82633

reggie wrote:
"I would like to build baluns with non-conventional ratios,---"

"Conventional" may mean a coil balun such as was common for TV reception not so long ago. These were essentially transformers with a two to one turns ratio which provides an impedance ratio of the square, or four to one. This is similar to a center-tapped coil. The TV balun gives a 75-ohm coax connection to a 300-ohm balanced twin-lead connection.

My 1987 efition of the ARRL Handbook shows how to use RF transformers to step up / step down impedance in Chapter 16. Also, ON4UN shows how to match high-impedance to coax on page 6-14 of the 2nd edition of "Low-Band DXing", an ARRL published book.

Best regards, Richard Harrison, KB5WZI

1794. Re: speaking of baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 18:24:20 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41fe7955$1_1@127.0.0.1>
Source record: 82632

Buck wrote:
> (Not to argue with you, but I considered your feedline switches a
> form of tuner, just not conventional ;).

More precisely, a form of tuned feeders.

> One thing I didn't find about the antenna was the bandwidth of 40/80
> meters or an SWR chart for each band. (I realize that you might not be
> able to do that easily, I'm just stating an observation.)

The HF bandwidth of that antenna *plus* the tuned feeders is 27
MHz, all the way from 3 to 30 MHz with an SWR of less than 2:1
(for the ham bands). I haven't measured the SWR outside of the
ham bands. There's a graphic that shows the SWR=2:1 bandwidth
for 40m to be about 160 kHz for a fixed length of ladder-line.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1795. Re: Fat dipole for FM (FM Broadcast Polarization)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 18:53:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pvusv0trnrnbb8p84vvhnvab9lvur38ug6@4ax.com>
Source record: 82634

On Mon, 31 Jan 2005 10:54:43 -0500, Buck <iam@this.site> wrote:

>(Caveat emptor means buyer beware, what does caveat lector mean?)

Hi Buck,

You got the Caveat part down, but I'm not sure if ***** is being coy,
or has taken the wrong translation. His intent may be (if read
literally) that "reader beware." However, this is not the same as the
meaning of lector, where the meaning would offer "beware reader." It
is a subtle distinction at best leading to the same caution, but
Lector is one who reads (imparts information) to others (instead of
being a silent reader, such as anyone "reading" this post).

73's
Richard Clark, KB7QHC

1796. AARONIA AG offers worldwide first Lowbudget PROFESSIONAL RF & EMF meters

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 19:01:44 UTC
From: itsneumueller@yahoo.de
Message-ID: <45db88fb.0501311101.669c6554@posting.google.com>
Source record: 82635

Someone in this group who hase on of those SPECTRAN meters from
Aaronia ? See http://www.elektrosmog.de/Spektrumanalysator.htm
Seems quite interesting at THAT price...

1797. Re: AARONIA AG offers worldwide first Lowbudget PROFESSIONAL RF & EMF meters

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 19:16:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <lv0tv09a17mlln0ppngi486a1f4l7p7aua@4ax.com>
Source record: 82636

On 31 Jan 2005 11:01:44 -0800, itsneumueller@yahoo.de (Samuel) wrote:

>Someone in this group who hase on of those SPECTRAN meters from
>Aaronia ? See http://www.elektrosmog.de/Spektrumanalysator.htm
>Seems quite interesting at THAT price...

Why don't you simply go across the hall and look for yourself?

1798. Re: Short lot 80 and possible 160 antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 19:53:09 UTC
From: Rick Scott <RickN7HJ@gmail.com>
Message-ID: <1107201188.996819.65380@f14g2000cwb.googlegroups.com>
Source record: 82637

Al,
I ordered thier L160CF, I will let you know how it works after I get
it up.

Hopefully I can do all bands on it with my tuner.

Scotty N7HJ

1799. Re: 6 meter conversion

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 20:20:01 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <RpwLd.13489$JO2.8699@tornado.tampabay.rr.com>
Source record: 82638

hi justin
welcome to 6 meters
unfortunatly i dont think just cutting the stinger down will drop the
SWR enough to get to 6 meters that load in the middle would be to big
why dont you just make a 1/4 wave ground plane out of an old 102in whip
and never mind the magmount
also you could build a wire dipole its only between 54-56in on either
side of center and fed with 50 ohm coax
good luck

Justï¿½n Kï¿½se wrote:
> Has anyone converted one of the old center loaded magnet mount CB
> antennas from Radio Shack to 6 meters? This is one of the ones with a
> large (soda can size) loading coil and a fairly large (approx 7") magnet
> plate. Currently I have it on the roof of this apartment using an old
> computer case for stability and a strip of plumbers tape for a
> counterpoise. I had to trim about an inch and a half to get it resonant
> at 28.4 Mhz, and am thinking of taking it down a few more inches to use
> on 6 meters. Would I need to also adjust the length of the counterpoise
> strip accordingly, or would the radiator only use as much as needed for
> resonance, and disregard the rest, like as if it were mounted on a large
> roof vehicle?

1800. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 21:19:27 UTC
From: nm5k@wt.net
Message-ID: <1107206367.214974.119630@f14g2000cwb.googlegroups.com>
Source record: 82639

Buck wrote:

>
>
> How does it rate it with that one radial buried in the ground as in
> the OP rather than above the ground?
>
Should be slightly worse, I would think. MK

1801. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 21:32:20 UTC
From: nm5k@wt.net
Message-ID: <1107207140.892974.175440@f14g2000cwb.googlegroups.com>
Source record: 82640

Hummm. Maybe that explains the large difference I saw between it and
the ground
mount. I know the antenna seemed to really come alive once it's up
about a 1/4
wave. I never was too crazy about ground mount verticals. To me, it's
like
ground mounting a dipole...Makes about the same sense....Of course, the
GP may
not be for everyone...Not really hard to put up, but it's a 68 ft tall
antenna,
the way I had it installed. I took it down a couple of summers ago,
because the
lightning had been so bad. Was paranoid I'd take a hit eventually...It
was
boom-boom every day at that time...It's now resting on the side of the
house..
MK

1802. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 21:34:14 UTC
From: richardharrison@webtv.net
Message-ID: <7452-41FEA456-273@storefull-3257.bay.webtv.net>
Source record: 82643

Reg, G4FGQ wrote:
"Richard, If you got this off Terman and Kraus then Terman and Kraus are a couple of the oldest of old wives."

I can`t blame them because I wrote without consulting them first.

Terman does in fact say about what I said. I haven`t checked with Kraus yet. In his 1955 edition on page 921 Terman writes:
"The second possible way to achieve broad-band characteristics consists in starting with a resonant antenna (as opposed to a rhombic for example), but so proportioning this antenna as to minimize resonance effects. Thus a resonant antenna employing a thin wire is equivalent to a moderately high Q system and so has a relatively narrow frequency band.
However, if the diameter of the antenna is made large, the effective Q is very substantially reduced with resulting increase in bandwidth."

Best regards, Richard Haarrison, KB5WZI

1803. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 21:39:01 UTC
From: nm5k@wt.net
Message-ID: <1107207541.663033.186160@z14g2000cwz.googlegroups.com>
Source record: 82641

Put the horizontal antenna up high and it works with either low
conductivity or high conductivity soils.

Same for the vertical.

Low height is the h azard for
the horizontal antenna if you want DX.

Yes, but even high, they aren't always the best choice on the low
bands.
In a way, I think the same can apply to the verticals. Low height is a
hazard for those too, unless you have a load of radials...:/ MK

1804. Re: Fat dipole for FM (FM Broadcast Polarization)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 21:45:59 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <rGxLd.26839$xt.3582@fed1read07>
Source record: 82642

Ah I have been misled by my latin teacher
so must now clarify I guess
--
Caveat Lector - Reader Beware

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:pvusv0trnrnbb8p84vvhnvab9lvur38ug6@4ax.com...
> On Mon, 31 Jan 2005 10:54:43 -0500, Buck <iam@this.site> wrote:
>
>>(Caveat emptor means buyer beware, what does caveat lector mean?)
>
> Hi Buck,
>
> You got the Caveat part down, but I'm not sure if ***** is being coy,
> or has taken the wrong translation. His intent may be (if read
> literally) that "reader beware." However, this is not the same as the
> meaning of lector, where the meaning would offer "beware reader." It
> is a subtle distinction at best leading to the same caution, but
> Lector is one who reads (imparts information) to others (instead of
> being a silent reader, such as anyone "reading" this post).
>
> 73's
> Richard Clark, KB7QHC

1805. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 22:02:42 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <7WxLd.25390$B95.18466@lakeread02>
Source record: 82644

"Cecil Moore" <w5dxp@totalzone.com> wrote
> Ed wrote:
> > What characteristics would a 1/2 wave dipole have if one side was
near
> > vertical, and the other side buried along the ground? Would it act like
a
> > poorly counterpoised groundplane vertical, or something else? Any
> > redeeming qualities?
>
> When two radials are 180 degrees apart and elevated, they tend
> to cancel the radiation from each other. When you bury one
> radial, you ensure that ~half your RF energy is lost. If you
> bury that one radial vertically, you do indeed lose half your
> signal since you have put half of your dipole underground.
> Ground mounted verticals give up approximately half their
> power to ground losses. Then they give up approximately another
> 3 dB to a rotatable dipole. Approximately 10 ohms of the feedpoint
> impedance for mobile antennas is ground losses. (Please note that
> everything I said is approximate. :-)
> --
> 73, Cecil http://www.qsl.net/w5dxp

Hello Cecil,
Is it appropriate to apply the above discussion to two random-wires, end-fed (coax) from a 4:1 Balun were one half of the Balun output is directly connected to ground? I would like to experiment using one or more radials (laid on the surface of ground at first, buried if that helps). for this antenna. Electrically, the antenna is about 1/8 wavelength for some frequencies, and as much as 9/5 wavelength for others. The angle of the wires is about 45 degrees elevation. One wire is about 76' and the other 42'long. I use an ATU for this antenna and it has no trouble loading anything, however only 5-15 mhz is reliable for DX. Due to the antenna's location on the property line, I could only apply radials 180 degrees (along its axis) and of course if permanent, would have their ends bonded to the station/service ground, etc.

Thanks for suggestions...

Jack Painter
Virginia Beach, Virginia

1806. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 22:06:56 UTC
From: richardharrison@webtv.net
Message-ID: <7452-41FEAC00-281@storefull-3257.bay.webtv.net>
Source record: 82647

I also wrote:
"Fat antennas have more bandwidth, and that is inversely proportional to Q. Reducing antenna Q, by fattening the antenna, reduces the antenna potential by almost the same factor."

Here is support from Ed Laport`s "Radio Antenna Engineering page 37":
"It is seen that bandwidth is inversely proportional to antenna (or total circuit) Q. To decrease Q, the same design considerations are required as for the reduction of antenna potential."

Best regards, Richard Harrison, KB5WZI

1807. Re: 93 ohm coax

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 22:08:39 UTC
From: King Zulu <KingZulu123@msn.com>
Message-ID: <H%xLd.11466$C24.2969@attbi_s52>
Source record: 82645

"David McBeth" <damarg@ihug.co.nz> wrote in message
news:cthfg5$h9e$1@lust.ihug.co.nz...
> I have been given 300mtrs of 93 ohm coax.Can this be used in pair to give
46
> ohms? Thankyou, David ZL2DG

Yep, just like paralleling resistors. I used to run two parallel RG-59 feed lines to my 1/4-wave verticals. It matched the vertical impendence very nicely, and the amplifier's PI network tuning could handle 36-ohm load OK.

ak

1808. Re: Fat dipole for FM (FM Broadcast Polarization)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 22:13:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <n5btv0hane9p48go1uq15lctbfko17qp5n@4ax.com>
Source record: 82646

On Mon, 31 Jan 2005 13:45:59 -0800, "Caveat Lector" <CL@barahmas.com>
wrote:

>Ah I have been misled by my latin teacher
>so must now clarify I guess

Hi OM,

It could easily be my own mistake through attribution of the English
derivation from Latin. Luckily no one ('arry palms) is demanding the
root form of the ancient greek assembled phontetically as a cross
check.

73's
Richard Clark, KB7QHC

1809. Re: Fat dipole for FM (FM Broadcast Polarization)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 22:24:06 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <aeyLd.26844$xt.3159@fed1read07>
Source record: 82648

FB Richard -- now back to antennas -- I really enjoy the posts here -- very informative.
--
Caveat Lector (Reader Beware)

"Richard Clark" <kb7qhc@comcast.net> wrote in message news:n5btv0hane9p48go1uq15lctbfko17qp5n@4ax.com...
> On Mon, 31 Jan 2005 13:45:59 -0800, "Caveat Lector" <CL@barahmas.com>
> wrote:
>
>>Ah I have been misled by my latin teacher
>>so must now clarify I guess
>
> Hi OM,
>
> It could easily be my own mistake through attribution of the English
> derivation from Latin. Luckily no one ('arry palms) is demanding the
> root form of the ancient greek assembled phontetically as a cross
> check.
>
> 73's
> Richard Clark, KB7QHC

1810. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-01-31 23:14:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10vteve8a0gri24@corp.supernews.com>
Source record: 82649

As a competent and experienced engineer, it should then be simple for you to answer the following:

What is the gain difference, in dB, between a dipole resonant at 97.5 MHz (the geometric center of the FM band) which is 1 mm diameter and one which is 1 cm diameter? Feel free to assume that the conductor is perfect, or use copper if you prefer.

Also feel free to calculate the antenna Q and "antenna potential", although the question here is about gain.

Roy Lewallen, W7EL

Richard Harrison wrote:
> Roy, W7EL wrote:
> "That`s interesting.(I don`t know why you want fat. It will give you
> lower gain.) How much lower? Why?"
>
> It`s a fact. Fat antennas have more bandwidth, and that is inversely
> proportional to Q. Teducing antenna Q, by fattening the antenna, reduces
> the antenna potential by about the same factor.
>
> Best regards, Richard Harrison, KB5WZI
>

1811. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 00:33:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pmitv0h58eu4o3dvkt29fsmkgqpob3v0hr@4ax.com>
Source record: 82650

On Mon, 31 Jan 2005 15:14:49 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>As a competent and experienced engineer, it should then be simple for
>you to answer the following:
>
>What is the gain difference, in dB, between a dipole resonant at 97.5
>MHz (the geometric center of the FM band) which is 1 mm diameter and one
>which is 1 cm diameter? Feel free to assume that the conductor is
>perfect, or use copper if you prefer.
>
>Also feel free to calculate the antenna Q and "antenna potential",
>although the question here is about gain.
>
>Roy Lewallen, W7EL
>
>Richard Harrison wrote:
>> Roy, W7EL wrote:
>> "That`s interesting.(I don`t know why you want fat. It will give you
>> lower gain.) How much lower? Why?"
>>
>> It`s a fact. Fat antennas have more bandwidth, and that is inversely
>> proportional to Q. Teducing antenna Q, by fattening the antenna, reduces
>> the antenna potential by about the same factor.
>>
>> Best regards, Richard Harrison, KB5WZI

Hi Roy,

What an unusual demand to throw in the face of someone who agrees with
you: no difference in gain. Richard's quote is merely your ironic
question to Buck's quote (already discounted by Buck).

However, for Brad's interest (and conforming to his original design,
not of 1cM but more like 170mm diamter) the Q for the fatter dipole is
indeed much less (in fact it covers the entire FM band into a 50 Ohm
load between 2:1 VSWR points) where the thin dipole (1mm) is something
less than 6MHz. Bandwidth (and inferentially Q) differential 4:1
which would translate the input V to the tips to something less (at
the same proportion) than that experienced with the thin dipole (which
for a recieve antenna is a strange characteristic to focus upon).

73's
Richard Clark, KB7QHC

1812. Re: 6 meter conversion

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 00:50:49 UTC
From: megahertz <richardsdalton@sbcglobal.net>
Message-ID: <JnALd.12347$2e7.11312@newssvr12.news.prodigy.com>
Source record: 82651

I used a center loaded radioshack mobile scanner antenna,worked great,for 2
meter ops,i removed the top section including the centerload.cheap with good
results
"Just�n K�se" <chupacabra@operamail.com> wrote in message
news:41fe9575.6190746@chupacabra...
> In Message-ID:<RpwLd.13489$JO2.8699@tornado.tampabay.rr.com> posted on
> Mon, 31 Jan 2005 20:20:01 GMT, Dennis Kaylor wrote:
>
>>hi justin
>>welcome to 6 meters
>>unfortunatly i dont think just cutting the stinger down will drop the
>>SWR enough to get to 6 meters that load in the middle would be to big
>
> I have it trimmed to resonance in ten meters now, and there's plenty
> more stinger left, but I was wondering about the size of the big old CB
> style coil, and if it would influence a shorter wavelength resonance, or
> perhaps skew the takeoff angle.
>
>>why dont you just make a 1/4 wave ground plane out of an old 102in whip
>>and never mind the magmount
>
> I need the magnet base to secure it.
> All the masts I have available are occupied with other antennas.
> The current ten meter j-pole (antron-99) on one,
> and a TV plus two meter/seventy centimeter dual band on the other.
>
>>also you could build a wire dipole its only between 54-56in on either
>>side of center and fed with 50 ohm coax
>
> I even have a balun leftover from when I had a 80/20 meter dipole on
> another building, but this location is size restricted and vertical
> stuff is about all I can squeeze in.
>
>>good luck
>
> tnx
> --
>
> JK

1813. Tuned Feeders : was speaking of baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 00:52:14 UTC
From: Buck <iam@this.site>
Message-ID: <thktv0le4acugd88069knbo1foc5alo61k@4ax.com>
Source record: 82652

On Mon, 31 Jan 2005 12:24:20 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Buck wrote:
>> (Not to argue with you, but I considered your feedline switches a
>> form of tuner, just not conventional ;).
>
>More precisely, a form of tuned feeders.
>
>> One thing I didn't find about the antenna was the bandwidth of 40/80
>> meters or an SWR chart for each band. (I realize that you might not be
>> able to do that easily, I'm just stating an observation.)
>
>The HF bandwidth of that antenna *plus* the tuned feeders is 27
>MHz, all the way from 3 to 30 MHz with an SWR of less than 2:1
>(for the ham bands). I haven't measured the SWR outside of the
>ham bands. There's a graphic that shows the SWR=2:1 bandwidth
>for 40m to be about 160 kHz for a fixed length of ladder-line.

how much RF is in the shack when you use your system?

--
73 for now
Buck
N4PGW

1814. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 01:47:05 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10vtnsuqnrculd6@corp.supernews.com>
Source record: 82653

Richard Clark wrote:
> On Mon, 31 Jan 2005 15:14:49 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
>
>>As a competent and experienced engineer, it should then be simple for
>>you to answer the following:
>>
>>What is the gain difference, in dB, between a dipole resonant at 97.5
>>MHz (the geometric center of the FM band) which is 1 mm diameter and one
>>which is 1 cm diameter? Feel free to assume that the conductor is
>>perfect, or use copper if you prefer.
>>
>>Also feel free to calculate the antenna Q and "antenna potential",
>>although the question here is about gain.
>>
>>Roy Lewallen, W7EL
>>
>>Richard Harrison wrote:
>>
>>>Roy, W7EL wrote:
>>>"That`s interesting.(I don`t know why you want fat. It will give you
>>>lower gain.) How much lower? Why?"
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>>>It`s a fact. Fat antennas have more bandwidth, and that is inversely
>>>proportional to Q. Teducing antenna Q, by fattening the antenna, reduces
>>>the antenna potential by about the same factor.
>>>
>>>Best regards, Richard Harrison, KB5WZI
>
>
>
> Hi Roy,
>
> What an unusual demand to throw in the face of someone who agrees with
> you: no difference in gain. Richard's quote is merely your ironic
> question to Buck's quote (already discounted by Buck).
>
> However, for Brad's interest (and conforming to his original design,
> not of 1cM but more like 170mm diamter) the Q for the fatter dipole is
> indeed much less (in fact it covers the entire FM band into a 50 Ohm
> load between 2:1 VSWR points) where the thin dipole (1mm) is something
> less than 6MHz. Bandwidth (and inferentially Q) differential 4:1
> which would translate the input V to the tips to something less (at

> the same proportion) than that experienced with the thin dipole (which
> for a recieve antenna is a strange characteristic to focus upon).
>
> 73's
> Richard Clark, KB7QHC

If you were agreeing with me, Richard (Harrison), I apologize. It wasn't apparent to me with my poor language skills. Thanks to Richard (Clark) for effectively applying his superior parsing skills to the problem.

There are only two ways to change the free space gain of an antenna -- change the efficiency, or change the pattern. Those are all the choices you've got. A fat antenna is certainly no less efficient than a skinny one -- in fact, it'll be more efficient. But the difference in this case would be so small as to be unmeasurable. There would be some very slight change in pattern between a fat antenna and a slim one, but again the change would be negligibly small.

Considering only free space performance to remove the additional variable of ground reflection, and assuming that an antenna is essentially 100% efficient, it's impossible to design an antenna that has gain in its best direction which is any less than 2.15 dB below that of a half wave dipole. The lowest possible gain of any efficent antenna is the isotropic, at 0 dBi.

Roy Lewallen, W7EL

1815. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 02:08:54 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10vtp5oj3n85mc0@corp.supernews.com>
Source record: 82654

Dear MK (NM5K):

I do not understand. Why speculate? In the over forty years that I have been involved with the prediction of HF propagation, huge progress has transpired in the ease with which one may investigate the issues that seem to be of interest.

Today, one may download and run a series of computer programs that will provide statistically significant answers to your questions. The programs have evolved over decades and are refined.
Go to:
http://elbert.its.bldrdoc.gov/hf.html

As Reg might say: ready to run.

Numbers tell the story. Enjoy.

73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net

1816. Re: Newsgroups on Decline? AOL dropping this NG

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 02:58:09 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20050131215809.21851.00000351@mb-m05.aol.com>
Source record: 82655

Yep, AOL screwed it with charging for ham ads, they faded away. Now they are trying to get rid of NG - stupid. If it is not very busy so what's the problem? If they kill NG, maybe time to change. Too much lib bias at AOL anyway.

Yuri, K3BU.us

1817. Re: 6 meter conversion

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 04:00:29 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <%4DLd.9166$qJ3.2119@bignews1.bellsouth.net>
Source record: 82656

"Just�n K�se" <chupacabra@operamail.com> wrote in message
news:41ff890e.3015801@chupacabra...
> Has anyone converted one of the old center loaded magnet mount CB
> antennas from Radio Shack to 6 meters? This is one of the ones with a
> large (soda can size) loading coil and a fairly large (approx 7") magnet
> plate. Currently I have it on the roof of this apartment using an old
> computer case for stability and a strip of plumbers tape for a
> counterpoise. I had to trim about an inch and a half to get it resonant
> at 28.4 Mhz, and am thinking of taking it down a few more inches to use
> on 6 meters. Would I need to also adjust the length of the counterpoise
> strip accordingly, or would the radiator only use as much as needed for
> resonance, and disregard the rest, like as if it were mounted on a large
> roof vehicle?
> --
>

If you can get inside the coil housing and short-out some of the windings,
you may have a better radiator.

1818. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 05:18:41 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41ff12b5_1@127.0.0.1>
Source record: 82657

Jack Painter wrote:
> Is it appropriate to apply the above discussion to two random-wires, end-fed
> (coax) from a 4:1 Balun were one half of the Balun output is directly
> connected to ground?

I'm sorry Jack, I don't understand the question. If the two wires
are equal length and the currents are flowing in opposite physical
directions, the far fields will tend to cancel.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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1819. Re: Tuned Feeders : was speaking of baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 05:26:51 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41ff149d$1_2@127.0.0.1>
Source record: 82658

Buck wrote:

> Cecil Moore <w5dxp@hotmail.com> wrote:
>>The HF bandwidth of that antenna *plus* the tuned feeders is 27
>>MHz, all the way from 3 to 30 MHz with an SWR of less than 2:1
>>(for the ham bands). I haven't measured the SWR outside of the
>>ham bands. There's a graphic that shows the SWR=2:1 bandwidth
>>for 40m to be about 160 kHz for a fixed length of ladder-line.
>
> how much RF is in the shack when you use your system?

The ladder-line comes off at right angles to the balanced
dipole so common-mode current is minimum and is choked
on the transmitter side of the ladder-line length selector.

Balanced currents don't cause "RF in the shack". If the
currents are unbalanced, RF in the shack is likely with
either coax or balanced line.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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1820. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 06:02:21 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <OXELd.25435$B95.12550@lakeread02>
Source record: 82659

"Cecil Moore" <w5dxp@hotmail.com> wrote
in message news:41ff12b5_1@127.0.0.1...
> Jack Painter wrote:
> > Is it appropriate to apply the above discussion to two random-wires, end-fed
> > (coax) from a 4:1 Balun were one half of the Balun output is directly
> > connected to ground?
>
> I'm sorry Jack, I don't understand the question. If the two wires
> are equal length and the currents are flowing in opposite physical
> directions, the far fields will tend to cancel.
> --
> 73, Cecil http://www.qsl.net/w5dxp

Sorry Cecil, I'll be more clear:

I have a random wire antenna, it has one coax-attachment (feedpoint) from which two different length wires start from a 4:1 Balun on a ground rod, up to a Pine tree about 60' in the air. The shorter 42' wire terminates via insulated connector and non-conductive line to the main 76' wire that continues skyward (about a 45 degree angle) until it terminates at an insulator before the support line finally connects it to the high tree limb. Some folks call this a "fan" arrangement.

A Radio Works 4:1 current-type Balun has two output connectors, and both random wires start at one of those connectors. The other connector (normally intended for the other half of a dipole) is shorted to the ground rod the Balun is mounted to. This is a noise-limiting design from an old Fine Tuning "Proceedings" article.

My question is, if I added a long radial (on the ground) from that ground rod, all the way under the sloping antenna wires, would there be any benefit in the transmitting pattern? How about two radials, 180 degrees from each other (one under the antenna, the other 180 degrees away from it)?

I sounds kind of like creating an 1/2 underground dipole, which you and others well explained is a non-starter. But the antenna also has characteristics similar to an inverted-L, and I believe those can benefit from radials. The antenna has been easy to manually tune via an MFJ-962D, and an MFJ-994 ATU makes quick work of any thing I have loaded it with. Could radials improve this "random wire(s)" antenna, or just soak up more power?

Thanks a lot,

Jack

1821. amateur radio swap meet

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 06:09:56 UTC
From: webberdog@webtv.net
Message-ID: <15753-41FF1D34-280@storefull-3334.bay.webtv.net>
Source record: 82660

held once a month on last saturday of every month 7am to 11:30am.free admission.free parking.restrooms.food concession stand.held in northrup grumman parking lot south east corner of aviation blvd. and marine ave. in manhatan beach.take 405 fwy to rosecrans off ramp..tons of electronics:: surplus,computers,software,hard drives,memory cards,cases,cables,connectors,parts,components,wire,shrink tubing,ham radios,shortwave radios,cb radios,hi fi,antique radios/hi fi,tubes,ic's,transistors,audio,speakers,video,tools,soldering equipment,test equipment,laboratory equipment,power supplies,chargers,batteries,experimenter projects/parts/components,anything electronic.worth the drive tell your friends & co workers.for directions see THE W6TRW ARC SWAPMEET address: http://www.w6trw.com/swapmeet/w6trw_arc_swapmeet.htm

1822. Free (1GB) iPod - it's a legitimate offer, you just have to check it out

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 10:04:25 UTC
From: oscar <oscarreyes@neo.tamu.edu>
Message-ID: <1107251782.108492.76010@c13g2000cwb.googlegroups.com>
Source record: 82661

Want a free ipod shuffle (1GB). All you have to do is follow this link
and try a free offer.

Here is the link:

http://www.FreeiPodShuffle.com/?r=14718704

At first I was skeptical and decided to just give it a try. It turned
out that this is really a legitimate offer. I ended up getting my iPod
within 3 weeks. It's true, see it for yourself and in no time you'll
start enjoying the brand new iPod Shuffle capable of holding 1GB of
mp3's or wma's. If you don't believe me just follow the link below to
see it for yourself:

http://www.freeipodguide.com/video/nbcdl.php (download a video clip
from NBC validating the freeipod site is legit)
Thanks for checking this offer out.

Peace

1823. Free (1GB) iPod - it's a legitimate offer, you just have to check it out

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 10:06:21 UTC
From: oscar <oscarreyes@neo.tamu.edu>
Message-ID: <1107251821.373584.130130@z14g2000cwz.googlegroups.com>
Source record: 82662

Want a free ipod shuffle (1GB). All you have to do is follow this link
and try a free offer.

Here is the link:

http://www.FreeiPodShuffle.com/?r=14718704

At first I was skeptical and decided to just give it a try. It turned
out that this is really a legitimate offer. I ended up getting my iPod
within 3 weeks. It's true, see it for yourself and in no time you'll
start enjoying the brand new iPod Shuffle capable of holding 1GB of
mp3's or wma's. If you don't believe me just follow the link below to
see it for yourself:

http://www.freeipodguide.com/video/nbcdl.php (download a video clip
from NBC validating the freeipod site is legit)
Thanks for checking this offer out.

Peace

1824. A 1930's two-pole knife switch

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 10:40:22 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <3694qrF4vhie1U1@individual.net>
Source record: 82663
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

Having recently obtained a 1930's two-pole knife
switch an a porcelain base, I decided to make use of it
in my own shack. Seeming to be of copper, on inspection
it proved to be copper-plated brass. The rivets forming the
hinge on the knives were loose and could not be banged-up
so I drilled them out and replaced with 2BA screws plus
locknuts.

So, now I can earth the G5RV when it is not in use, and
disconnect it from the TX.

It brought up something interesting, and that is,
that one half of the G5RV produced no signal
on RX - perhaps in the recent winds when the
lilac tree blew over (Quod Vide), one of the connections
from the co-ax to the ladder sections has fractured; that
remains for investigation.

This is thin coax which has been installed for about 22 years.

I was intrigued to find that both the braid and the inner conductor
were blackened, despite being on a section of the cable that could
not have had water ingress. Perhaps is time to replace with some
larger diameter coax?

1825. Re: A 1930's two-pole knife switch

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 11:59:46 UTC
From: Spike <Aero.Spike@Solutions.invalid>
Message-ID: <09ruv0p6il5mk6j2t66r54bcpeup0k3e4f@4ax.com>
Source record: 82664
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

On Tue, 1 Feb 2005 10:40:22 -0000, Airy R.Bean wrote:

>This is thin coax which has been installed for about 22 years.
>
>I was intrigued to find that both the braid and the inner conductor
>were blackened, despite being on a section of the cable that could
>not have had water ingress.

The problem is not '(liquid) water ingress' but diffusion of water molecules from the atmosphere through the cable sheathing.

>Perhaps is time to replace with some larger diameter coax?

The cable sheathing may not be that much thicker than that of the 'thin' coax, and so will not significantly slow the diffusion, and in addition you will have mechanical problems due to the much heavier coax.

Your thin coax probably blackened years ago.

You can try to reduce the effect by covering the cable sheathing with a light coating at regular time-intervals of something water-resistant such as wax furniture spray or WD40 - not as '(liquid) water' is the problem, but that the light fractions of the wax or oil will tend to fill the pores in the sheathing material and so delay the diffusion effect. You could move to the Arctic or a desert of your choice ;-)
--
from
Aero Spike

1826. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 14:41:06 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41ff9685$1_1@127.0.0.1>
Source record: 82665

Jack Painter wrote:
> My question is, if I added a long radial (on the ground) from that ground
> rod, all the way under the sloping antenna wires, would there be any benefit
> in the transmitting pattern? How about two radials, 180 degrees from each
> other (one under the antenna, the other 180 degrees away from it)?

If I understand it correctly, I would guess that radials would
help that antenna. Sounds like you are losing half your power
in the ground rod. Two radials are better than one and the more
radials the better.
--
73, Cecil http://www.qsl.net/w5dxp

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1827. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 16:41:50 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <jjOLd.80061$Tf5.19004@lakeread03>
Source record: 82666

"Cecil Moore" <w5dxp@hotmail.com> wrote
> Jack Painter wrote:
> > My question is, if I added a long radial (on the ground) from that
ground
> > rod, all the way under the sloping antenna wires, would there be any
benefit
> > in the transmitting pattern? How about two radials, 180 degrees from
each
> > other (one under the antenna, the other 180 degrees away from it)?
>
> If I understand it correctly, I would guess that radials would
> help that antenna. Sounds like you are losing half your power
> in the ground rod. Two radials are better than one and the more
> radials the better.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>

Thanks Cecil. It probably is a power-sink when xmit. The antenna was originally set up as a receive-only antenna, and you should hear the difference in volume when the grounded side of the Balun is off/on the ground rod. Audible increase (for DX purposes, where a couple of S-units is a lot, hi). I'll try the radials, and disconnect the shorting ground, and see if this improves things a little. I never heard anyone mention making a "vee" dipole antenna (from the ground-up), is that a NVIS?

Jack

1828. New Aaronia RF- meters

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 18:02:55 UTC
From: itsneumueller@yahoo.de
Message-ID: <45db88fb.0502011002.733406c2@posting.google.com>
Source record: 82667

Very funny!
So it seem, that i get no professional answers here ?

1829. Re: New Aaronia RF- meters

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 18:23:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <86ivv0dp1i3brp4cug97dfcgk0g7pppjuc@4ax.com>
Source record: 82668

On 1 Feb 2005 10:02:55 -0800, itsneumueller@yahoo.de (Samuel) wrote:
>Very funny!
>So it seem, that i get no professional answers here ?
What? The doors too narrow to get through to go across the hall?
(professionals can spot a shill)

1830. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 18:26:56 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41ffcb74$1_1@127.0.0.1>
Source record: 82669

Jack Painter wrote:
> I never heard anyone mention making a
> "vee" dipole antenna (from the ground-up), is that a NVIS?

A balanced-V would not have very much vertically polarized
radiation and thus would probably be an NVIS.
--
73, Cecil http://www.qsl.net/w5dxp

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---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1831. Re: Why the 4:1 or 9:1 baluns?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 18:50:29 UTC
From: King Zulu <KingZulu123@msn.com>
Message-ID: <VbQLd.12987$C24.1925@attbi_s52>
Source record: 82670

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:41e17445$1_1@127.0.0.1...
> Sorry, I don't know the answer. I operate my W2DU choke into close
> to a pure resistance that varies between 28 ohms and 90 ohms.

Cecil - I stopped using baluns for dipoles when my neighbor's TV reception was getting killed every time I went on 10 meters. I took out my W2AU balun, and no more problem. Whenever I need to match higher or lower antenna impedances now, I use a 1/4-wave length of the appropriate coax line to get close to the antenna impedance. Works great, seems impervious to the weather, and have never found the unbalanced feedline to balanced antenna (dipoles & full wave loops/quads) was a problem that feeding the coax away from the antenna in a perpendicular fashion wouldn't solve. Also, two parallel RG-59 coax lines feed grounded verticals nicely, and a tuner or the amp pi network can easily do the load match.

ak

1832. Has anyone actuially received the latest QRZ Callsign CD

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 19:33:31 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10vvmcinb0n0403@news.supernews.com>
Source record: 82671
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

I ordered mine over 8 days ago and so far not a word from qrz.com except an "order confirmation" on Dec 25 and a charge to our CC of course. The "new CD" was advertised as "available now" on the web site.
--

CJ

1833. Re: A 1930's two-pole knife switch

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 19:43:27 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ctom4v$45m$1@sparta.btinternet.com>
Source record: 82572
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Spike" <Aero.Spike@Solutions.invalid> wrote in message
news:09ruv0p6il5mk6j2t66r54bcpeup0k3e4f@4ax.com...
> On Tue, 1 Feb 2005 10:40:22 -0000, Airy R.Bean wrote:
>
> >This is thin coax which has been installed for about 22 years.
> >
> >I was intrigued to find that both the braid and the inner conductor
> >were blackened, despite being on a section of the cable that could
> >not have had water ingress.
>
> The problem is not '(liquid) water ingress' but diffusion of water
> molecules from the atmosphere through the cable sheathing.
>
> >Perhaps is time to replace with some larger diameter coax?
>
> The cable sheathing may not be that much thicker than that of the
> 'thin' coax, and so will not significantly slow the diffusion, and in
> addition you will have mechanical problems due to the much heavier
> coax.
>
> Your thin coax probably blackened years ago.
>
> You can try to reduce the effect by covering the cable sheathing with
> a light coating at regular time-intervals of something water-resistant
> such as wax furniture spray or WD40 - not as '(liquid) water' is the
> problem, but that the light fractions of the wax or oil will tend to
> fill the pores in the sheathing material and so delay the diffusion
> effect. You could move to the Arctic or a desert of your choice ;-)
> --
> from
> Aero Spike
==========

A not-very-well-remembered true story.

Shortly after WW2, a British Post Office cable ship was repairing (or
stealing for reparations) a coaxial telephone cable in the North Sea,
somewhere off the Heligoland Bight. It had been manufactured and laid by our
European friends, the Germans, during the war.

The cable was polyethylene plus air insulated. The inner conductor was
insulated by a thick, circular, polyethylene string or rod, slowly
spiralling around it. Plenty of air space. There may not have been an outer
conductor - the return conductor could have been the North Sea water. It's

OK up to a few KHz. But the whole thing was protected by a thick polyethylene sheath in contact with sea water. Polyethylene was a very uncommon material in those days.

(It has always amazed me how much time communications engineers had to spare in experimenting in the middle of a world war. The Russians experimented with future, peacetime, high-voltage DC, single-wire power transmission while the population was dying by the million from murder, starvation and disease. I obtained some of my programs' formulae for calculating the resistance of ground electrodes from a translated Russian book of the time.)

The above-mentioned unbroken cable was laid across the deck of the ship. The cable jointer, not knowing quite what to expect, had his tools around him, including a lighted parafin blow lamp.

The cable jointer, a skilled workman, cut into the sheath with a saw. And immediately there was a hissing noise and a very hot flare of pale flame. Whether the jointer was injured or not is lost in history. (I was either in Hong Kong at that time or was walking the darkened pavements in Hiroshima marvelling at the lighter-coloured shadows cast on the paving slabs by the first of the WMD.*)

It later transpired in the laboratory that when water is under relatively high pressure, such as at the bottom of the North Sea, when in contact with a thick polyethylene membrane it dissasociates into hydrogen and oxygen. The very light element diffuses through leaving heavy oxygen on the outside. Thus, after a few years, the air-space on the inside becomes filled with high pressure hydrogen. If there's any copper on the outside then presumably it becomes blackened by copper oxide.

A tongue-in cheek WARNING - When digging up very old air-spaced coax from soggy soil in your back yard it is advisable to erect no-smoking notices.

(* Actually, the RAF, of which I was a member, had already incinerated more people than both atomic bombs just in one fire storm on one city. Churchill might have been knighted for services rendered. But Air Marshall Bomber Harris was never decorated with a medal or honoured with a statue. He, partially responsible, with 10,000 air-crew plus 100,000 ground staff, took the ashamed blame. After all, there are very few problems in finding 100,000 people to manufacture and operate and transport 5 million people to the gas chambers.)

I'm on South African red wine tonight. It says on the bottle it should be drunk within 12 months of purchase and within two days of opening. I have a corkscrew. No problems!

Help yourself to a program.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp

. . . . . .

1834. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 19:53:37 UTC
From: richardharrison@webtv.net
Message-ID: <16517-41FFDE41-420@storefull-3256.bay.webtv.net>
Source record: 82575

Roy, W7EL wrote:
"There are only two ways to change the free space gain of an antenna---change the efficiency , or change the pattern."

I agree. Terman defines "directive gain" and "power gain" which involve the pattern and efficiency of an antenna.

The isotropic antenna is by definition omnidirectional. All others are more directional and thus have gain in their best direction.

The power ratio of a 1/2-wave resonant conductor radiates in its best direction 1.64 times the power per unit area from an isotropic antenna. This is a simple power ratio, not dB. This is from Terman`s Table 23-1 in his 1955 edition.

My original posting in this thread was based on the fact that antenna voltage distribution depends on constructon and frequency. Voltage amplitudes at all points on the sntenna increase when the rms voltage at any point rises.. Radiation and reception from an antenna are a function of antenna voltage. This is unrelated to directive gain.

A higher antenna Q results in higher voltage. The dipole we discussed was resonant. We`ve seen the textbook curves for resonant circuits which pften show impedance versus frequency, and we have tuned lumped and distributed versions. A high Q series resonant circuit has little resistance to limit current at resonance. A high Q parallel resonant circuit has little conductance to limit voltage.
My posting said: "Reducing antenna Q by fattening the antenna, reduces the antenna potential by about the same factor."

A higher Q antenna results in more voltage, more radiation, and more reception. It also has less bandwidth.

I usually read Roy`s postings because they are interesting and I often learn something from them. They are greatly appreciated by me and many others have said they appreciate them too. Some aren`t even EZNEC users, so there is still room for growth.

On the issue of antenna Q, I recall a Yagi design article which advised against large diameter parasitic elements as they would have insufficient Q and not perform properly. That seemed strange to me at the time but maybe there was something to it.

Best regards, Richard Harrison, KB5WZI

1835. Re: A 1930's two-pole knife switch

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 20:02:07 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <36a5h7F4th1f5U1@individual.net>
Source record: 82573
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Spike" <Aero.Spike@Solutions.invalid> wrote in message
news:09ruv0p6il5mk6j2t66r54bcpeup0k3e4f@4ax.com...
> On Tue, 1 Feb 2005 10:40:22 -0000, Airy R.Bean wrote:
>
> >This is thin coax which has been installed for about 22 years.
> >
> >I was intrigued to find that both the braid and the inner conductor
> >were blackened, despite being on a section of the cable that could
> >not have had water ingress.
>
> The problem is not '(liquid) water ingress' but diffusion of water
> molecules from the atmosphere through the cable sheathing.
>
> >Perhaps is time to replace with some larger diameter coax?
>
> The cable sheathing may not be that much thicker than that of the
> 'thin' coax, and so will not significantly slow the diffusion, and in
> addition you will have mechanical problems due to the much heavier
> coax.
>
> Your thin coax probably blackened years ago.
>
> You can try to reduce the effect by covering the cable sheathing with
> a light coating at regular time-intervals of something water-resistant
> such as wax furniture spray or WD40 - not as '(liquid) water' is the
> problem, but that the light fractions of the wax or oil will tend to
> fill the pores in the sheathing material and so delay the diffusion
> effect. You could move to the Arctic or a desert of your choice ;-)

For thin (RG58 etc) coax, it is cheap and running it not normally and issue-
so just replace every 12 mths or so (it really does not like the sun!).

For RG213, run inside new hose pipe (B&Q cheap stuff is ideal). Seems to
last 'forever'- well over 10 years without visible deteriotion of the coax,
or measureable change in loss at 430MHz. Not so much about saving money as
hassle lowering masts etc to replace.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

1836. Re: Has anyone actuially received the latest QRZ Callsign CD

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 20:02:58 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <10vvo3uacau9544@news.supernews.com>
Source record: 82574
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

s/b Jan 25 NOT Dec 25 - mea culpa...

--

"Charlie" <charlie@earthlink.com> wrote in message
news:10vvmcinb0n0403@news.supernews.com...
>
> I ordered mine over 8 days ago and so far not a word from qrz.com except
> an "order confirmation" on Dec 25 and a charge to our CC of course. The
> "new CD" was advertised as "available now" on the web site.
> --
>
> CJ
>
>
>
>
>
>

1837. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 20:35:54 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <pjZfoEBqg+$BFwhw@g3ohx.demon.co.uk>
Source record: 82576

In message <41ffcb74$1_1@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
writes
>Jack Painter wrote:
>> I never heard anyone mention making a
>> "vee" dipole antenna (from the ground-up), is that a NVIS?
>
>A balanced-V would not have very much vertically polarized
>radiation and thus would probably be an NVIS.

Vee antennas (inverted or not) tend to produce quite a lot of vertically
polarised radiation off the ends. Horizontal broadside, of course.
Ian.
--

1838. HF and VHF Antenna assistance

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 21:26:25 UTC
From: Chris <d@iolfree.ie>
Message-ID: <ctosvg$a7g$1@kermit.esat.net>
Source record: 82577

Thanks for reading my post,

What would the most highest quality antenna for VHF as a mobile use and HF antenna for base usage for just listening in?

All the best!
73
Chris
EI9FZB

1839. Re: A 1930's two-pole knife switch

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 21:26:45 UTC
From: Spike <Aero.Spike@Solutions.invalid>
Message-ID: <4rsvv0dcih183bg73mrdkprfr493g9nfh6@4ax.com>
Source record: 82578
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

On Tue, 1 Feb 2005 19:43:27 +0000 (UTC), Reg Edwards wrote:

>I was either
>in Hong Kong at that time or was walking the darkened pavements in Hiroshima
>marvelling at the lighter-coloured shadows cast on the paving slabs by the
>first of the WMD

A nice story of the perils of new materials technology, Reg, thanks.

If the SA red hasn't taken it's toll, do a little Googling on
"Japanese occupation of Manchuria" + Harbin.

See if you can find the appropriate meaning of the Japanese word
"maruta".
--
from
Aero Spike

1840. Re: HF and VHF Antenna assistance

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 21:43:25 UTC
From: F8BOE <f8boe-8@bluemail.ch>
Message-ID: <41fff7fb$0$1010$626a14ce@news.free.fr>
Source record: 82579

```
Barker and Williamson for antennas
Bang and Olufsen for listening in...
I think... Hi!

73 de F8BOE Olivier ...-.-
```

"Chris" <d@iolfree.ie> a crit dans le message de news:
ctosvg$a7g$1@kermit.esat.net...
> Thanks for reading my post,
>
> What would the most highest quality antenna for VHF as a mobile use and HF
> antenna for base usage for just listening in?
>
> All the best!
> 73
> Chris
> EI9FZB
>

1841. Re: A 1930's two-pole knife switch

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 22:00:22 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <36acevF4u6a7tU1@individual.net>
Source record: 82580
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:ctom4v$45m$1@sparta.btinternet.com...

> It later transpired in the laboratory that when water is under relatively
> high pressure, such as at the bottom of the North Sea, when in contact
with
> a thick polyethylene membrane it dissasociates into hydrogen and oxygen.

> The very light element diffuses through leaving heavy oxygen on the
outside.
> Thus, after a few years, the air-space on the inside becomes filled with
> high pressure hydrogen.

What caused this "disassociation", and where did it happen? Just, I'd expect the hydrogen to bubble off PDQ, assuming this process did occur. Also, diffusion is the movement of something from a high to a low concentration, assuming the mechanism is correct, I wonder how long before the concentration would equalise (after all, the hydrogen around the cable must have been in pretty low concentration.

Was the cable sealed at the ends? If so, what happened the gas (I assume air) already in the cable?

>If there's any copper on the outside then
> presumably it becomes blackened by copper oxide.

How did get to the copper? If the insulation was all polyethylene, how did it sometimes stop the oxygen and not others?

Is Dr Boris around?

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

1842. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 22:07:19 UTC
From: nm5k@wt.net
Message-ID: <1107295639.590299.183110@g14g2000cwa.googlegroups.com>
Source record: 82581

J. Mc Laughlin wrote:
> Dear MK (NM5K):
>
> I do not understand. Why speculate? In the over forty years
that I
> have been involved with the prediction of HF propagation, huge
progress has
> transpired in the ease with which one may investigate the issues that
seem
> to be of interest.

I'm not sure I understand. Why speculate about what? Verticals vs
dipoles?
Or do you mean propagation only? Or you talking about qround quality
per a
certain area?
>
> Today, one may download and run a series of computer programs
that will
> provide statistically significant answers to your questions. The
programs
> have evolved over decades and are refined.
> Go to:
> http://elbert.its.bldrdoc.gov/hf.html
>
> As Reg might say: ready to run.
>
> Numbers tell the story. Enjoy.

Tell what story? I might try downloading them, but what is it I'm
trying to find out?
What are my questions? I'm not overly keen on downloading a potentially
large
program, I then have to install, and take up more room, without knowing
what it is
I want to do with it, or even what it does... You are leaving me in the
dark too
much as to what this program does...Even they don't give a real
description.. MK

1843. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 23:08:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2d1001hhuul7b49cmnpio03h0cg87uc3eb@4ax.com>
Source record: 82582

On 1 Feb 2005 14:07:19 -0800, nm5k@wt.net wrote:

>What are my questions? I'm not overly keen on downloading a potentially
>large
>program, I then have to install, and take up more room, without knowing
>what it is
>I want to do with it, or even what it does... You are leaving me in the
>dark too
>much as to what this program does...Even they don't give a real
>description.

Hi Mark,

What Mac is offering is a link to a propagation modeler that was developed for the Voice of America engineers. This sucker is complexityï¿½ and by the trepidation offered in your response, you probably would not like it very much. But that may be an over reaching analysis in the domain of the psyche.

There are plenty of boxes to fill in, plenty of settings to establish, and a host of targets to select. What they describe are your power, your antenna, your path (which presumes you know your audience - literally), their background noise level, the time of day, the height of any ionospheric layer, the sunspot count. From this you get probabilities of S+N/N at the receiver, fluctuation of signal level, even issues of multipath and other interference.

What is the actual payoff is that it also paints a picture of the characteristic of interest either in the form of a chart or on a map. This makes for nice 24 hour MUF forecasts for your intended target (a sub continental sized region on the globe) or actual signal levels, or interference levels (and on and on and on....).

The software also allows you to tailor your antenna's characteristics. I like to describe an impossible design with a 1ï¿½ beam width and beam height to then present me with a map of the world where it hits. This, in a nutshell, pretty quickly dissolves arguments about the value of any particular TOA. Why? Because even with this impossible thin razor's edge of a lobe, when it leaps across the continent it splashes down into a fairly large region. A standard monopole radiation characteristic will illuminate continental wide swaths of the globe with alternating layers of good reception and poor reception like ripples across a spherical metallic sea. The link:
http://www.qsl.net/kb7qhc/propagation/index.htm
offers just such a treatment with 24 forecasts of a standard monopole (one each hour in a day) in an animated GIF loop. It is interesting

to see the sun revolving around Seattle (Galileo had it all wrong as science will prove). Please note the server at qsl.net is quite slow to the point of downloading all 24 images to run the animation.

73's
Richard Clark, KB7QHC

1844. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-01 23:19:02 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <36ah39F4tc2aiU1@individual.net>
Source record: 82583

"Richard Harrison" wrote
> My original posting in this thread was based on the fact that antenna
> voltage distribution depends on constructon and frequency. Voltage
> amplitudes at all points on the sntenna increase when the rms voltage at
> any point rises.. Radiation and reception from an antenna are a function
> of antenna voltage. This is unrelated to directive gain.

TV and FM broadcast transmit antenna designs include many using 1/2-wave, resonant dipoles with "fat" radiators -- however they all have published gains based on the standard gain of a dipole (1.64X that of an isotropic radiator). There is no difference in gains between slender and fat radiator designs in the broadcast industry.

Examples on request.

RF

1845. Re: A 1930's two-pole knife switch

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 00:02:35 UTC
From: "Jock." <real_class_a@yahoo.co.uk>
Message-ID: <13600119k3h00g30bspek8r7hukk29t178@4ax.com>
Source record: 82584
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

On Tue, 1 Feb 2005 20:02:07 -0000, "Brian Reay" <brian.reay@(spamstopper)bigfoot.com>
wrote:

>For thin (RG58 etc) coax, it is cheap and running it not normally and issue-
>so just replace every 12 mths or so (it really does not like the sun!).

With the best will in the world, I can't follow that Brian!

Jock.

--
"You teach a child to read, and he or her will be
able to pass a literacy test".
- George W. Bush, Townsend, TN, Feb 2001 .

1846. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 00:26:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11007h4853a1262@corp.supernews.com>
Source record: 82585

If you'd like something simpler, I highly recommend W6ELProp, a free and very capable propagation program. (Note that's W6EL, not W7EL.) Shel, W6EL, created the DOS program MiniProp and sold it for many years. When time came for the major job of rewriting the program for Windows, Shel did it -- and generously made the program free, as W6ELProp. It doesn't do the fancy graphics of the big government programs, but its predictions are quite good, and it's very easy to use. I've used it and its predecessor MiniProp for a long time.

You can get W6ELProp at http://www.qsl.net/w6elprop/.

Roy Lewallen, W7EL

nm5k@wt.net wrote:
>
> Tell what story? I might try downloading them, but what is it I'm
> trying to find out?
> What are my questions? I'm not overly keen on downloading a potentially
> large
> program, I then have to install, and take up more room, without knowing
> what it is
> I want to do with it, or even what it does... You are leaving me in the
> dark too
> much as to what this program does...Even they don't give a real
> description.. MK
>

1847. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 00:32:05 UTC
From: Buck <iam@this.site>
Message-ID: <mq70015anmajga9c9eqq2ep60apoh4vhqj@4ax.com>
Source record: 82586

On Tue, 1 Feb 2005 01:02:21 -0500, "Jack Painter" <223bthp@cox.net>
wrote:

>
>"Cecil Moore" <w5dxp@hotmail.com> wrote
> in message news:41ff12b5_1@127.0.0.1...
>> Jack Painter wrote:
>> > Is it appropriate to apply the above discussion to two random-wires,
>end-fed
>> > (coax) from a 4:1 Balun were one half of the Balun output is directly
>> > connected to ground?
>>
>> I'm sorry Jack, I don't understand the question. If the two wires
>> are equal length and the currents are flowing in opposite physical
>> directions, the far fields will tend to cancel.
>> --
>> 73, Cecil http://www.qsl.net/w5dxp
>
>Sorry Cecil, I'll be more clear:
>
>I have a random wire antenna, it has one coax-attachment (feedpoint) from
>which two different length wires start from a 4:1 Balun on a ground rod, up
>to a Pine tree about 60' in the air. The shorter 42' wire terminates via
>insulated connector and non-conductive line to the main 76' wire that
>continues skyward (about a 45 degree angle) until it terminates at an
>insulator before the support line finally connects it to the high tree limb.
>Some folks call this a "fan" arrangement.
>
>A Radio Works 4:1 current-type Balun has two output connectors, and both
>random wires start at one of those connectors. The other connector (normally
>intended for the other half of a dipole) is shorted to the ground rod the
>Balun is mounted to. This is a noise-limiting design from an old Fine Tuning
>"Proceedings" article.
>
>My question is, if I added a long radial (on the ground) from that ground
>rod, all the way under the sloping antenna wires, would there be any benefit
>in the transmitting pattern? How about two radials, 180 degrees from each
>other (one under the antenna, the other 180 degrees away from it)?
>
>I sounds kind of like creating an 1/2 underground dipole, which you and
>others well explained is a non-starter. But the antenna also has
>characteristics similar to an inverted-L, and I believe those can benefit
>from radials. The antenna has been easy to manually tune via an MFJ-962D,
>and an MFJ-994 ATU makes quick work of any thing I have loaded it with.

>Could radials improve this "random wire(s)" antenna, or just soak up more
>power?
>
>Thanks a lot,
>
>Jack
>

Sounds an awful lot like a form of J-Pole antenna.

--
73 for now
Buck
N4PGW

1848. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 00:33:33 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11007v2l4do1n22@corp.supernews.com>
Source record: 82587

Richard Harrison wrote:
> . . .
> A higher Q antenna results in more voltage, more radiation, and more
> reception. It also has less bandwidth.
> . . .

There's a problem here. Let's say we begin with a smallish loop antenna, one small enough so it has essentially equal current around the perimeter. We'll make it using a perfect conductor. Put 100 watts into it; since it has no loss, 100 watts will be radiated, distributed in a dipole-like pattern.

Now reduce the size of the loop. The Q will increase.

You've said that because of the increase in Q, it will have more radiation. My question is, does that greater radiation result from a more directional pattern, or from more power being radiated? If the former, why would the smaller loop have a sharper pattern than the larger one (considering the assumption made about the initial loop size)? If the latter, we've really stumbled onto something here -- more than 100 watts out with 100 watts in. Perpetual motion, here we come!

Roy Lewallen, W7EL

1849. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 00:34:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1100814so524857@corp.supernews.com>
Source record: 82588

Richard Fry wrote:
> . . .There is no difference in gains between slender
> and fat radiator designs in the broadcast industry.

Rest assured, there's no difference in any other industry either.

Roy Lewallen, W7EL

1850. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 00:41:55 UTC
From: Buck <iam@this.site>
Message-ID: <8b8001pkbmqnpm0r7uadjif3hbjc9ick32@4ax.com>
Source record: 82589

On Tue, 1 Feb 2005 11:41:50 -0500, "Jack Painter" <223bthp@cox.net>
wrote:

>Thanks Cecil. It probably is a power-sink when xmit. The antenna was
>originally set up as a receive-only antenna, and you should hear the
>difference in volume when the grounded side of the Balun is off/on the
>ground rod. Audible increase (for DX purposes, where a couple of S-units is
>a lot, hi). I'll try the radials, and disconnect the shorting ground, and
>see if this improves things a little. I never heard anyone mention making a
>"vee" dipole antenna (from the ground-up), is that a NVIS?
>
>Jack
>

I would think it would be NVIS. A lazy Vee (horizontal wires) is
directional going from the point through the midpoint between the two
ends.

If it is directional horizontal, it must be directional pointed strait
up.

--
73 for now
Buck
N4PGW

1851. Re: Has anyone actuially received the latest QRZ Callsign CD

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 00:53:05 UTC
From: Buck <iam@this.site>
Message-ID: <v09001thefpboh7o51e44luqhc5aoog2oq@4ax.com>
Source record: 82590
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Tue, 1 Feb 2005 13:33:31 -0600, "Charlie" <charlie@earthlink.com>
wrote:

>
>I ordered mine over 8 days ago and so far not a word from qrz.com except an
>"order confirmation" on Dec 25 and a charge to our CC of course. The "new
>CD" was advertised as "available now" on the web site.

'

Has anyone ever cross-posted to too many groups before?

Buck
--
For what it's worth.

1852. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 01:54:07 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <1100cm0nchlvs96@corp.supernews.com>
Source record: 82591

Dear MK:
You speculated about the performance of some antennas. Performance
includes antenna gain distribution and ionospheric propagation. The
programs that I, and others, mentioned would provide you with meaningful
performance numbers. I thought that you might wish to know the performance
of the antennas you discussed over the paths mentioned (and other paths).
Such knowledge might reduce the uncertainty of the speculations. It is an
engineering sort of thing. Not all are enamored of changes in entropy.

Please disregard my suggestion. It was not matched to your desires.

Mac N8TT
--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
<nm5k@wt.net> wrote in message
news:1107295639.590299.183110@g14g2000cwa.googlegroups.com...
>
> J. Mc Laughlin wrote:
> > Dear MK (NM5K):
> >
> > I do not understand. Why speculate? In the over forty years
> that I
> > have been involved with the prediction of HF propagation, huge
> progress has
> > transpired in the ease with which one may investigate the issues that
> seem
> > to be of interest.
>
> I'm not sure I understand. Why speculate about what? Verticals vs
> dipoles?
> Or do you mean propagation only? Or you talking about qround quality
> per a
> certain area?
> >
> > Today, one may download and run a series of computer programs
> that will
> > provide statistically significant answers to your questions. The
> programs
> > have evolved over decades and are refined.
> > Go to:
> > http://elbert.its.bldrdoc.gov/hf.html
> >
> > As Reg might say: ready to run.
> >

> > Numbers tell the story. Enjoy.
>
> Tell what story? I might try downloading them, but what is it I'm
> trying to find out?
> What are my questions? I'm not overly keen on downloading a potentially
> large
> program, I then have to install, and take up more room, without knowing
> what it is
> I want to do with it, or even what it does... You are leaving me in the
> dark too
> much as to what this program does...Even they don't give a real
> description.. MK
>

1853. Re: Has anyone actuially received the latest QRZ Callsign CD

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 02:39:10 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <1100fao1ciosp2c@news.supernews.com>
Source record: 82592
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

I wouldn't know...evidently the news server had no trouble handling it!!!

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"Buck" <iam@this.site> wrote in message
news:v09001thefpboh7o51e44luqhc5aoog2oq@4ax.com...
> On Tue, 1 Feb 2005 13:33:31 -0600, "Charlie" <charlie@earthlink.com>
> wrote:
>
>>
>>I ordered mine over 8 days ago and so far not a word from qrz.com except
>>an
>>"order confirmation" on Dec 25 and a charge to our CC of course. The "new
>>CD" was advertised as "available now" on the web site.
>
> '
> Has anyone ever cross-posted to too many groups before?
>
>
> Buck
> --
> For what it's worth.
>

1854. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 03:25:17 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <yKXLd.80332$Tf5.67039@lakeread03>
Source record: 82593

"Buck" <iam@this.site> wrote
"Jack Painter" <223bthp@cox.net>
> wrote:
>
> >Thanks Cecil. It probably is a power-sink when xmit. The antenna was
> >originally set up as a receive-only antenna, and you should hear the
> >difference in volume when the grounded side of the Balun is off/on the
> >ground rod. Audible increase (for DX purposes, where a couple of S-units
is
> >a lot, hi). I'll try the radials, and disconnect the shorting ground, and
> >see if this improves things a little. I never heard anyone mention
making a
> >"vee" dipole antenna (from the ground-up), is that a NVIS?
> >
> >Jack
> >
>
> I would think it would be NVIS. A lazy Vee (horizontal wires) is
> directional going from the point through the midpoint between the two
> ends.
>
> If it is directional horizontal, it must be directional pointed strait
> up.
>
> --
> 73 for now
> Buck
> N4PGW
>

Adding a single radial under 45 degree random wires did not have a
noticeable effect on 2182 performance under the midday sun. 100 miles was
it's maximum and barely readable (both ways) from the one station I talked
to. Even if I did configure it for NVIS, that would make a totally useless
daytime antenna for MF, with all of it's energy being absorbed. The
Canadian stations certainly do well, being loud and clear from Halifax, St
Johns, Placentia, Labrador, St Anthony, all the way to the Mid-Atlantic. I
guess a vertical or high elevation 1/2 wave dipole are the only solutions
for daytime success there. Maybe a job for the super-Isotron, hi, hi. But
seriously, I might try a much longer wire, something close to 1/2 wave, with
a feedpoint-choke but no Balun.

73,
Jack Painter
Virginia Beach, Virginia

1855. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 03:36:59 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ctphsq$aq0$1@hercules.btinternet.com>
Source record: 82594

Why does everybody insist on OVER-COMPLICATING this simple problem?

The Q of a resonant 1/2-wave dipole is given by -

Q = Omega * L / 2 / R

Where L is the end-to-end wire inductance and R is the radiation resistance
of about 71 ohms.

Just the same 'formula', in fact, as any other tuned circuit or transmission
line. Resonant rise in voltage and current, and bandwidth, etc., all
follow.

It's so simple it doesn't occur to Terman and other 'beings' to mention it.

Reg

1856. Re: HF and VHF Antenna assistance

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 03:40:43 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ctpi3rddr1@titan.btinternet.com>
Source record: 82595

"Chris" <d@iolfree.ie> wrote in message news:ctosvg$a7g$1@kermit.esat.net...
> Thanks for reading my post,
>
> What would the most highest quality antenna for VHF as a mobile use and HF
> antenna for base usage for just listening in?
>
> All the best!
> 73
> Chris
> EI9FZB
>
==========

Just a length of wire!

1857. Re: 6 meter conversion

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 04:28:35 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <YBYLd.22979$t67.13917@bignews5.bellsouth.net>
Source record: 82596

"Just�n K�se" <chupacabra@operamail.com> wrote in message
news:42009e8d.2399164@chupacabra...
> In Message-ID:<%4DLd.9166$qJ3.2119@bignews1.bellsouth.net> posted on
> Mon, 31 Jan 2005 23:00:29 -0500, Hal Rosser wrote:
>
> >
> > >If you can get inside the coil housing and short-out some of the
windings,
> > >you may have a better radiator.
> > >
>
> Good idea, tnx, that would maintain the same capture area.
> The coil is exposed, maybe I can use alligator clip jumpers.
> --

```
- who knows - you may find a resonant point with that alligator clip - then
when you do - solder a jumper wire in its place
```

1858. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 04:36:51 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42005a68$1_2@127.0.0.1>
Source record: 82597

Ian Jackson wrote:
> Cecil Moore <w5dxp@hotmail.com> writes:
>> A balanced-V would not have very much vertically polarized
>> radiation and thus would probably be an NVIS.
>
> Vee antennas (inverted or not) tend to produce quite a lot of vertically
> polarised radiation off the ends. Horizontal broadside, of course.
> Ian.

Sorry, I left out a couple of words. Should have been
"A balanced-V would not have very much vertically polarized
low angle radiation and thus would probably be an NVIS."
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1859. Re: A 1930's two-pole knife switch

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 05:24:24 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <cuZLd.7018$lx.6638@newsread3.news.atl.earthlink.net>
Source record: 82598
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

Reg, I am a teetotaler myself but that was quite a story. Cheers from the other side of the pond.....

WB7FFI

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:ctom4v$45m$1@sparta.btinternet.com...
> I'm on South African red wine tonight. It says on the bottle it should be
> drunk within 12 months of purchase and within two days of opening. I have
> a
> corkscrew. No problems!
>
> Help yourself to a program.

1860. Re: A' little' db extra gain !

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 06:00:06 UTC
From: nm5k@wt.net
Message-ID: <1107324005.975019.247550@g14g2000cwa.googlegroups.com>
Source record: 82599

J. Mc Laughlin wrote:
> Dear MK:
> You speculated about the performance of some antennas.
Performance
> includes antenna gain distribution and ionospheric propagation. The
> programs that I, and others, mentioned would provide you with
meaningful
> performance numbers. I thought that you might wish to know the
performance
> of the antennas you discussed over the paths mentioned (and other
paths).
> Such knowledge might reduce the uncertainty of the speculations. It
is an
> engineering sort of thing. Not all are enamored of changes in
entropy.
>
> Please disregard my suggestion. It was not matched to your
desires.

If you say so...I just wanted to know what the program does.. I don't
have a lot
of room on my drive, and when they start talking about "install"
programs, ect,
it makes me think the program is pretty large. I don't think I really
"speculated"
about the antennas. I just described my results with them. I did
speculate as to
why I have to bump up the ground qualities in the modeling programs to
match my
real life results. But I think Richards theory about the elevated
performance
was about as good as any. I may try some of the programs later. I need
to get a
new drive..My present one is crammed full..I have to shuffle junk
around to make
room for big programs. My flight sim, and 1000's of old pictures I
store, hog all
my room...Not to mention a zillion zip files...I'm like a packrat when
it comes
to data....:/ Time for a new big drive...I rebuilt my puter last
summer, but
not the drive yet...I'm still on a puny 6.8 g. I need about a 100 g...
BTW...I'm not sure why my type is constantly messed up as far as the
lines, etc.

I'm using google, and I *hate* their post entry window...It doesn't
autowrap like
I'm used to, and I never know how to make it look normal...If you try
to let it
autowrap the lines, it just types off to the right forever...I never
had this
problem with the old google...If I try to match the width of the
previous post,
it still usually ends up all goofed up...Don't worry...It's not an
excess of wine
causing the problem. :/
MK

1861. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 14:57:29 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <36c82tF4vu1ltU1@individual.net>
Source record: 82600

"Reg Edwards" wrote
> Just the same 'formula', in fact, as any other tuned circuit or
> transmission line. Resonant rise in voltage and current,
> and bandwidth, etc., all follow.

The impedance bandwidth of a fat dipole can be so large that an acceptable input match is possible at frequencies where the dipole is no longer very near a resonant 1/2 wavelength. In those cases and at a constant input power, there is a redistribution of the current in the radiators, resulting in a relatively modest change in the peak gain of the radiation pattern.

It is true that the Q of a fat radiator is less than a thin one, but that in itself does not produce a change in gain. A gain change results from a change in the radiation pattern of the antenna -- which is related only to the length of the dipole elements with respect to the operating frequency; independent of Q.

For example, a "short" dipole (fat or thin) has a gain of 1.50X and a 3dB beamwidth of ~90ï¿½. A standard 1/2-wave dipole (fat or thin) has a gain of 1.64X and a 3dB beamwidth of ~78ï¿½ [Kraus, 3rd Ed, Table 6-2].

Another example is that of the vertical radiators used in MW AM broadcasting. There is no term for Q in the equations for their radiation patterns. For a given set of installation conditions, a thin tower produces the same elevation pattern/peak gain at the carrier frequency as a fat one.

RF

1862. Re: A 1930's two-pole knife switch

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 15:26:33 UTC
From: Custos Custodum <me@privacy.net>
Message-ID: <0dr101dp7jotdi9std84f25hu0mviaks4t@4ax.com>
Source record: 82601
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

On Tue, 1 Feb 2005 22:00:22 -0000, "Brian Reay"
<brian.reay@(spamstopper)bigfoot.com> wrote:

>"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
>news:ctom4v$45m$1@sparta.btinternet.com...
>
>> It later transpired in the laboratory that when water is under relatively
>> high pressure, such as at the bottom of the North Sea, when in contact
>with
>> a thick polyethylene membrane it dissasociates into hydrogen and oxygen.
>
>> The very light element diffuses through leaving heavy oxygen on the
>outside.
>> Thus, after a few years, the air-space on the inside becomes filled with
>> high pressure hydrogen.
>
>What caused this "disassociation", and where did it happen?

Water dissociates naturally to a small extent. Think of how the pH
scale is derived.

>Just, I'd expect
>the hydrogen to bubble off PDQ, assuming this process did occur. Also,
>diffusion is the movement of something from a high to a low concentration,
>assuming the mechanism is correct, I wonder how long before the
>concentration would equalise (after all, the hydrogen around the cable must
>have been in pretty low concentration.
>
It all sounds a bit like Maxwell's 'demons' but my half-educated guess
is that the polyethylene was acting as a semi-permeable membrane,
allowing only the much smaller hydrogen atoms (ions?) to pass through
under the action of the pressure differential.

1863. Re: A 1930's two-pole knife switch

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 15:46:58 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <36cauqF504ai2U1@individual.net>
Source record: 82602
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Custos Custodum" <me@privacy.net> wrote in message
news:0dr101dp7jotdi9std84f25hu0mviaks4t@4ax.com...
> On Tue, 1 Feb 2005 22:00:22 -0000, "Brian Reay"
> <brian.reay@(spamstopper)bigfoot.com> wrote:
>
> >"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> >news:ctom4v$45m$1@sparta.btinternet.com...
> >
> >> It later transpired in the laboratory that when water is under
relatively
> >> high pressure, such as at the bottom of the North Sea, when in contact
> >with
> >> a thick polyethylene membrane it dissasociates into hydrogen and
oxygen.
> >
> >> The very light element diffuses through leaving heavy oxygen on the
> >outside.
> >> Thus, after a few years, the air-space on the inside becomes filled
with
> >> high pressure hydrogen.
> >
> >What caused this "disassociation", and where did it happen?
>
> Water dissociates naturally to a small extent. Think of how the pH
> scale is derived.

I thought the pH scale came from "per Hydronium"- H30+ ?

If the 'extra' H came from the water, then there would also be OH- to
neutralise it.

>
> >Just, I'd expect
> >the hydrogen to bubble off PDQ, assuming this process did occur. Also,
> >diffusion is the movement of something from a high to a low
concentration,
> >assuming the mechanism is correct, I wonder how long before the
> >concentration would equalise (after all, the hydrogen around the cable
must
> >have been in pretty low concentration.
> >
> It all sounds a bit like Maxwell's 'demons' but my half-educated guess
> is that the polyethylene was acting as a semi-permeable membrane,

Semi-permeable membranes feature in osmosis, rather than diffusion (although I have heard osmosis related to diffusion in via the concept of the solvent diffusing).

> allowing only the much smaller hydrogen atoms (ions?) to pass through
> under the action of the pressure differential.

As I recall, a hydrogen ion doesn't stay 'free' for long.

Long time since I did Chemistry, is Dr Boris not about?
--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

1864. Re: HF and VHF Antenna assistance

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 15:59:55 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <%N6Md.27523$xt.13937@fed1read07>
Source record: 82603

> "Chris" <d@iolfree.ie> wrote in message
> news:ctosvg$a7g$1@kermit.esat.net...
>> Thanks for reading my post,
>>
>> What would the most highest quality antenna for VHF as a mobile use and
>> HF
>> antenna for base usage for just listening in?
>>
>> All the best!
>> 73
>> Chris
>> EI9FZB
>>
> ========================

Highest quality aside

For SWL antennas you can build -- see URL:
http://ac6v.com/swl.htm#ANT

For VHF homebrew antennas -- see URL:
http://ac6v.com/antprojects.htm

--
Caveat Lector (Reader Beware)

1865. FAST AND EASY LEGAL MONEY

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 16:14:53 UTC
From: mvagustas <george512tr@prodigy.net>
Message-ID: <1107360893.211415.111880@l41g2000cwc.googlegroups.com>
Source record: 82604

ARE YOU IN NEED OF CASH? DON'T GO AND STEAL IT. TRY THIS. THIS REALLY CAN MAKE YOU EASY MONEY!! IT WORKS!!! BUT YOU HAVE TO FOLLOW THE LETTER FOR IT TO WORK!!!! THIS IS NOT A PYRAMID SCAM!! YOU TOO CAN BE RICH!!!!!
A little while back, I was browsing through newsgroup, just like you are now and came across an article similar to this that said you could
make thousands dollars within weeks with only an initial investment of
$6.00! So I thought, "Yeah, right, this must be a scam", but like most
of us, I was curious, so I kept reading. Anyway, it said that you send
$1.00 to each of the 6 names and address stated in the article. You then place your own name and address in the bottom of the list at #6,

and post the article in at least 200 newsgroups. (There are ¬thousands)
No catch, that was it. So after thinking it over, and talking to few people first, I thought about trying it. I figured what have I got to

lose except 6 stamps and $6.00, right? Like most of us I was a little

skeptical and a little worried about the legal aspects of it, so I checked it out with the U.S. Post Office (1-800-725-2161) and they confirmed that it is indeed legal!
Then I invested the measly $6.00. Well GUESS WHAT? Within 7 days, I started getting money in the mail! I was shocked! I figured it would end soon, but the money just kept coming in. In my first week, I made

about $30. By the end second week I had made a total over $425! In the
third week I had over $1,500 and it's still growing. This is now my fourth week and I have made a total of just over $7,450 and it's still
coming in rapidly. It's certainly worth $6.00, and 6 stamps, I have spent more than that on the lottery!! Let me tell you how this works and most importantly, why it works? Also, make sure you print a copy of this article NOW, so you can get the information off of it, as you need it.
STEP 1: Get 6 separate pieces of paper and write the following on each
piece of paper "PLEASE PUT ME ON YOUR MAILING LIST", your name and mailing address, and your e-mail address, so I can send you an e-mail

with all the newsgroup and newsletter that I posted with your information included. Once I have your name and mailing address, I will post your information to all newsgroup and newsletter all over the
world. You have to do your part too of course. You will need to post the information in this letter including your information to at least

200 or more newsgroup or newsletter all over the world. If you do everything correctly, you will be rich in no time. GUARANTEED!!
Now get 6 US $1.00 bills and place ONE inside EACH of the 6 pieces of paper so the bill will not be seen through the envelope to prevent thievery. Next, place one paper in each stating the above phrase, your
name and address, and a $1.00 bill. What you are doing is creating a service by this.
THIS IS ABSOLUTELY LEGAL! Mail the 6 envelopes to the following addresses:
1. Hue Le, 581 Independence Drive, San Jose, CA 95111
2. Brandon Butler, 25 Clark Park Rd., Hooks, TX 75561
3. John Huynh, 491 Posada Way, #14, Chico, CA 95973
4. Cheran Shelton, 1184 Wilorraine Place, Rialto, CA 92376
5. John Green, 125 Virginia St, Brighton, IL 62012
6. George Argyris, Woodford Lane Apt. 660B, Yardley, PA 19067
STEP 2: Now take the #1 name off the list that you see above, move the
other names up (6 becomes 5, 5 becomes 4, etc) and add YOUR name as number 6 on the list.
STEP 3: Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups, message board. (I think there are close to 24,000
groups) All you need is 200, but remember, the more you post, the more
money you make!
DIRECTIONS HOW TO POST TO NEWSGROUPS, MESSAGE BOARD
You do not need to re-type this entire letter to do your own posting.

Simply put your cursor at the beginning of this letter and drag your cursor to the bottom of this document, and select 'copy' from the edit
menu. This will copy the entire letter into the computer memory. Step

2) Open a blank 'notepad' file and place your cursor at the top of the
blank page. From the 'edit' menu select 'paste'. This will paste a copy
of the letter into notepad so that you can add your name to the list.

Step 3) save your new notepad file as a .txt file. If you want to do your postings in different sittings, you'll always have this file to go
back to.

Step 4: Use Netscape or Internet explorer and try searching for various
newsgroups (on-line forums, message boards, chat sites, discussions.)

Just example you log on any search engine like Yahoo.com, go¬ogle.com,

altavista.com, excite.com then you search with this subject? Millionaire message board, money-making message board, employment message board, money-making discussions, money making forum, and business message board? Etc. You will find thousand & thousand messag
board. Click one by one then you will find the option post a new message.
Step 5: Visit these messages boards and post this article as a new message by highlighting the text of this letter and selecting paste from the edit menu. Fill in the Subject, this will be the header that

everyone sees as they scroll through the list of postings in a particular group, click the post message button. You're done with your
first one! Congratulations? THAT'S IT! All you have to do is jump to different newsgroups and post away, after you get the hang of it, and

it will take about 30 seconds for each newsgroup!
REMEMBER, THE MORE NEWSGROUPS OR MESSAGE BOARD YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200. That's it!
You will begin receiving money from around the world within days! You

may can rent a P.O. Box due to the large amount of mail you will receive. If you wish to stay anonymous, you can invent a name to use,

as long as the postman will deliver it. **JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT. **
Now the WHY part: Out of 200 postings, say I receive only 5 replies (a
very low example). So I made $5.00 with my name at #6 on the letter. Now, each of the 5 persons who just sent me $1.00 make the MINIMUM 200 postings, each with my name at #5 and only 5 persons respond to each of the original 5, that is another $25.00 for me, now those 25 each make 200 MINIMUM posts with my name at #4 and only 5 replies each, I will bring in an additional $125.00! Now, those 125 persons turn ¬around and post the MINIMUM 200 with my name at #3 and only receive 5

r¬eplies each, I will make an additional $625.00! OK, now here is the¬ fun part, each of those 625 persons post a MINIMUM 200 letters with my¬ name at #2 and they only receive 5 replies, that just made me

$3,125.00¬!!!
Those 3,125 persons will all deliver this message to 200 newsgroups with my name at #1 and if still 5 persons per 200 newsgroups react I will receive $15,625.00! With an original investment of only $6.00!

AMAZING! When your name is no longer on the list, you just take latest posting in the newsgroups, and send out another $6.00 to names on the list, putting your name at number 6 again. And start posting again. The thing to remember is, do you realize that thousands of peopl¬e all over the world are joining the Internet and reading these article¬s everyday, JUST LIKE YOU are now!! So can you afford $6?? See

if it rea¬lly works?? I think so. PLAY FAIRLY AND HONESTLY AND THIS WILL WORK FOR ¬YOU TOO.
BEST WISHES TO YOUR FINANCIAL FUTURE.
If you are not serious about this Easy Making Money Strategy, please disregard this message. This Easy Making Money Strategy is primary for
those who interested in changing their financial life style.
Remember to INCLUDE your e-mail address in the envelope, so I can e-mail you a confirmation letter with all the newsletter and newsgroup
that I posted with your information on it. This is very important!!
I'm an honest businessman, and I do what I said.

1866. Re: A 1930's two-pole knife switch

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 16:22:05 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <36cd7mF4utjf3U1@individual.net>
Source record: 82605

And the moral of that story is....sort out in your own mind
which are the antenna connections and which are the rig
connections!

"Airy R.Bean" <Me@privacy.net> wrote in message
news:3694qrF4vhie1U1@individual.net...
> It brought up something interesting, and that is,
> that one half of the G5RV produced no signal
> on RX

1867. Re: A 1930's two-pole knife switch

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 17:13:26 UTC
From: Spike <Aero.Spike@Solutions.invalid>
Message-ID: <80220159im8767ai1asfejpms52a6sqvqo@4ax.com>
Source record: 82606
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

On Wed, 2 Feb 2005 15:46:58 -0000, "Brian Reay"
<brian.reay@(spamstopper)bigfoot.com> wrote:

>I thought the pH scale came from "per Hydronium"- H30+ ?
>
>If the 'extra' H came from the water, then there would also be OH- to
>neutralise it.

pH is defined as the negative of the logarithm of the hydrogen ion
concentration.

In pure water the product of [H+][OH-] is very close to 10exp-14,
where square brackets indicate concentrations.

Hence in pure water pH = 7 because the concetrations of the two
species are equal.

An acid solution, where [H+] is greater than that in water, has [H+]<7

There is a more exact definition involving hydrogen ion activity.
--
from
Aero Spike

1868. Re: A 1930's two-pole knife switch

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 17:26:16 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <36cgp2F51j2j9U1@individual.net>
Source record: 82607
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Spike" <Aero.Spike@Solutions.invalid> wrote in message
news:80220159im8767ai1asfejpms52a6sqvqo@4ax.com...
> On Wed, 2 Feb 2005 15:46:58 -0000, "Brian Reay"
> <brian.reay@(spamstopper)bigfoot.com> wrote:
>
> >I thought the pH scale came from "per Hydronium"- H30+ ?
> >
> >If the 'extra' H came from the water, then there would also be OH- to
> >neutralise it.
>
> pH is defined as the negative of the logarithm of the hydrogen ion
> concentration.
>
> In pure water the product of [H+][OH-] is very close to 10exp-14,
> where square brackets indicate concentrations.

So, if the water was being 'split', the concentrations would be the same.

> Hence in pure water pH = 7 because the concetrations of the two
> species are equal.
>
> An acid solution, where [H+] is greater than that in water, has [H+]<7
>

Ah, that sounds familar!

> There is a more exact definition involving hydrogen ion activity.

That I don't recall, maybe it was beyond A level ;-)

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

1869. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 19:12:55 UTC
From: richardharrison@webtv.net
Message-ID: <28798-42012637-46@storefull-3258.bay.webtv.net>
Source record: 82608

Reg, G4FGQ wrote:
"Its so simple it doesn`t occur to Terman and other "beings" to mention it."

Well, Ed Laport had experience with many high-powered transmitters, so it occurred to him to mention antenna Q in "Radio Antenna Engineering".

Ed assumes power in a dipole is all radiated and none is used to heat the dipole. Radiation resistance of his horizontal dipole is a function of its height above ground.

To calculate the Q of the antenna, he first calculates a factor "m" which is the ratio of the attenuated voltage 180-degrees from the generator on an infinite line to the generated voltage:
m = Zo-radiation resistance / Z0+radiation resistance

Then: Q = 1+m / 1-m

Radiation resistance = 276 log l/rho

where l is the total length of the dipole, and rho is the radius of the conductor in the same units.

Laport is interested in antenna Q to make sure the antenna won`t plume at maximum voltage.
Ed picks a wire size and computes maximum voltage at the antenna tips to make sure that under assumed conditions the voltage is below the corona firing potential. The calculation is on page 241 of "Radio Antenna Engineering".
A trial wire size has a radius of 0.102 inch.

m ccomputes as 0.84

Q computes as 11.4

Balanced dipole feedpoint volts are picked as 690 rms from the unmodulated applied power.
Volts at the ends of the dipole are:
QV/2=3950 volts as rounded.

Corona is initiated on peaks and a further safety factor is added to avoid pluming, but that`s the way a wire size might be checked.

Best regards, Richard Harrison, KB5WZI

1870. tax time

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 19:48:52 UTC
From: KC8QJP <KathleenLee@yahoo.com>
Message-ID: <7jb201t6i7nhqhlo0k20glhf3s6s6qr5p5@4ax.com>
Source record: 82609
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

I AM CRISCO KATHY,TAX SEASON IS ALMOST UPON US. I
CAN GET YOU THE BEST
RETURN. IT MIGHT BE A LITTLE BIT ILLEGAL.BUT WHAT
THE HECK,THE
GOVERMENT TAKES TO MUCH OF OUR MONEY. BE SURE AND
BRING A BIG CAN OF
CRISCO WITH YOU. I WORK BEST ON MY KNEES WHILE
SOMEONE SLATHERS MY FAT
ASS WITH CRISCO. BRING A BIG CAN, I HAVE A VERY
LARGE ASS.

Usenet Zone Free Binaries Usenet Server
More than 120,000 groups
Unlimited download
http://www.usenetzone.com to open account

1871. Extending Icom AH-4 tuner control cable

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 20:09:14 UTC
From: Jon KB1HTW <kb1htw!@!arrl.net>
Message-ID: <ctrc1h$21f$1@newslocal.mitre.org>
Source record: 82610

I need to extend the control cable for my AH-4 tuner. I have lots of Cat 5 Ethernet cable. The four leads to the tuner are Key, Start, +13.8Vdc, and Ground. I initially hooked up each to each of the four pairs in the Ethernet cable (i.e., Key to Blue/Blue-White). My thinking was parallel each pair so I have less current loss, but I think I blew the capacitance out of the water and the Key/Start pulses are getting smeared along the 100+ foot run.

What's the best way to wire things up so to the twisted pairs so any RFI gets nulled out? Ground to each of the 4 White leads, and Key to say Blue, Start to Green, and +13.8V to Orange? That way each twisted pair would have a "signal" and ground. Or I could use the Brown for Ground, and connect the AH-4 factory cable's shield to the four white leads. Which is the preferred route for minimizing RFI or cable capacitance affecting the Start/Key pulse signals?

Jon - KB1HTW

1872. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 20:56:28 UTC
From: Buck <iam@this.site>
Message-ID: <pif201ptnjeu2ju3kt6okb3iq7hu49ivle@4ax.com>
Source record: 82611

On Wed, 2 Feb 2005 08:57:29 -0600, "Richard Fry" <rfry@adams.net>
wrote:

>"Reg Edwards" wrote
>> Just the same 'formula', in fact, as any other tuned circuit or
>> transmission line. Resonant rise in voltage and current,
>> and bandwidth, etc., all follow.
>_____________
>
>The impedance bandwidth of a fat dipole can be so large that an acceptable
>input match is possible at frequencies where the dipole is no longer very
>near a resonant 1/2 wavelength. In those cases and at a constant input
>power, there is a redistribution of the current in the radiators, resulting
>in a relatively modest change in the peak gain of the radiation pattern.
>
>It is true that the Q of a fat radiator is less than a thin one, but that in
>itself does not produce a change in gain. A gain change results from a
>change in the radiation pattern of the antenna -- which is related only to
>the length of the dipole elements with respect to the operating frequency;
>independent of Q.
>
>For example, a "short" dipole (fat or thin) has a gain of 1.50X and a 3dB
>beamwidth of ~90ï¿½. A standard 1/2-wave dipole (fat or thin) has a gain of
>1.64X and a 3dB beamwidth of ~78ï¿½ [Kraus, 3rd Ed, Table 6-2].
>
>Another example is that of the vertical radiators used in MW AM
>broadcasting. There is no term for Q in the equations for their radiation
>patterns. For a given set of installation conditions, a thin tower produces
>the same elevation pattern/peak gain at the carrier frequency as a fat one.
>
>RF

How FAT would an FM broadcast dipole have to be to lose one db gain?

approximately
--
73 for now
Buck
N4PGW

1873. Wrong? - dogie04.jpg (0/1)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 21:01:10 UTC
From: KC8QJP Kathy Lee <n8wwm@arrl.net>
Message-ID: <2of2011sjb6657i3702ftidb8nsnu912fs@4ax.com>
Source record: 82612

I tried to tell my better half (n8wwm) that he
could do a better job of putting up our antenna.
Please take a look at his install and see what you
think. TIA

Usenet Zone Free Binaries Usenet Server
More than 120,000 groups
Unlimited download
http://www.usenetzone.com to open account

1874. Re: Extending Icom AH-4 tuner control cable

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 21:36:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8oh2019nqidhak40jk06lvjuldtohpdvnr@4ax.com>
Source record: 82613

On Wed, 2 Feb 2005 15:09:14 -0500, "Jon KB1HTW" <kb1htw!@!arrl.net>
wrote:

>Which is the preferred
>route for minimizing RFI or cable capacitance affecting the Start/Key pulse
>signals?

Hi Jon,

Use RS-422 components to translate voltage signals into current
signals, and then back (at the other end) to voltage signals. If you
have surplus twisted pairs, then this will give you the
transmission/length requirements.

73's
Richard Clark, KB7QHC

1875. Re: Extending Icom AH-4 tuner control cable

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 22:15:18 UTC
From: Jon KB1HTW <kb1htw!@!arrl.net>
Message-ID: <ctrje8$5mk$1@newslocal.mitre.org>
Source record: 82614

Thanks for the info, but I don't think it'll work.

From http://home.comcast.net/~hamlakemn/ah4/ah4.htm (great site for AH-4 info, by the way!)

"The AH-4 uses 12 volt inverted logic and an "open collector" transistor to ground to perform signaling. The radio provides 13.8 volts to the tuner. It also provides a START line that is pulled up to 13.8 volts inside the radio. The radio pulls the START line to ground to assert the signal (start the tuning operation). Similarly, the AH-4 pulls the KEY line to 5 volts through a 22 kohm resistor/diode combination. The radio also pulls this line to 13.8 volts through a resistor. The AH-4 pulls this line to ground to assert the signal (indicate tuning status to the radio.)."

I think it may be more effort than it's worth. Plus, I'm not sure if what I described as the "problem" is really the cause - I just think it was the most likely candidate. I guess I need to check the end of the cable and see if I'm getting better than 12V at the tuner. The author of that website says he's been able to control the tuner using 18 gauge rotor cable up to 60 meters away. My Cat 5 Ethernet cable is probably 24 or 26 gauge solid core - that's why I paralleled the leads. Another possible cause why the tuner can't tune any band is that my temporary ground is probably pretty poor. The tuner's on the roof, feeding a long wire - 14 AWG copperweld, ~73' I just tied the RF ground terminal on the tuner to an old 10 AWG aluminum lightning ground wire that goes down to the electrical service entrance of my house. The ground there is a cold water pipe augmented with an 8' length of 1/2" copper pipe driven 6' into sandy/rocky ground.

Since the AH-4 is supposedly capable of driving a dipole - with the tuner at the center, I think I'll try stringing up another wire as a counterpoise. Only I don't have 150' linear feet of space on my property, so the dipole will end up being a sort of a "J-pole" being fed at the center...

Good thing is that I live on a harbor in Massachusetts, so as soon as the weather's better (like May? ;-( ), I should be able do drive some ground rods next to the seawall, where they'll be in saltwater-saturated sand. Hopefully they'll last a few years... I'm itching to get my IC-706Mk2G up and running HF - 2m/70cm works fine...

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:8oh2019nqidhak40jk06lvjuldtohpdvnr@4ax.com...
> On Wed, 2 Feb 2005 15:09:14 -0500, "Jon KB1HTW" <kb1htw!@!arrl.net>
> wrote:
>
>>Which is the preferred
>>route for minimizing RFI or cable capacitance affecting the Start/Key

>>pulse
>>signals?
>
> Hi Jon,
>
> Use RS-422 components to translate voltage signals into current
> signals, and then back (at the other end) to voltage signals. If you
> have surplus twisted pairs, then this will give you the
> transmission/length requirements.
>
> 73's
> Richard Clark, KB7QHC

1876. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 22:32:06 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <36d2naF4mdgtcU1@individual.net>
Source record: 82615

"Buck" wrote>
> How FAT would an FM broadcast dipole have to be to
> lose one db gain? approximately

Dipoles consisting of radiators of any practical diameter all will have the same gain if they have the same electrical length at the operating frequency. "Q" has nothing to do with it.

RF

1877. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-02 22:44:07 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1102ltna6lcee67@corp.supernews.com>
Source record: 82616

Buck wrote:
>
> How FAT would an FM broadcast dipole have to be to lose one db gain?
>
> approximately

A perfect application for the free EZNEC demo program, from
http://eznec.com.

Roy Lewallen, W7EL

1878. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 00:09:02 UTC
From: bradmanz@comcast.net
Message-ID: <1107389342.048006.192150@g14g2000cwa.googlegroups.com>
Source record: 82617

Thanks for the overload of info guys. I may have resolved his issue by purchasing a Marantz ST-17 tuner, which has provision for two antennas. The ST-2 that he has is fine for all stations he listens to except one. I'll have him get the Radio Shack Yagi abd some good coax and aim it for best reception on that station.

However, I need to make a good omnidirectional antenna to go in my attic. I did not get an answer on if the ARRL handbook has the directions for makinng the fat dipole.

I live outside of Atlanta, GA (hilly) and cannot have an outside antenna, and have very little room horizonally in attic - a directional is out, but do have an area for a tal vertical antenna.
What would be your recommendations?

What suggestions

1879. Re: Has anyone actuially received the latest QRZ Callsign CD

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 00:43:17 UTC
From: Bob Reed W2CE <w2ce@comcast.net>
Message-ID: <FvudneJ1ffyx6ZzfRVn-iw@comcast.com>
Source record: 82618
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Charlie" <charlie@earthlink.com> wrote in message
news:10vvmcinb0n0403@news.supernews.com...
>
> I ordered mine over 8 days ago and so far not a word from qrz.com except
an
> "order confirmation" on Dec 25 and a charge to our CC of course. The "new
> CD" was advertised as "available now" on the web site.
> --
>
> CJ

I am very sure that QRZ.com is very much aware that they must not charge
your credit card until shipment has taken place. The fact that they did
tells me that you need to report to them that nothing has been received and
ask them to trace the shipment. They are just too reputable, a break down
in the shipping path has occured.

1880. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 01:25:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7av201583alv6utk3vfnbiim5da40j8bg8@4ax.com>
Source record: 82620

On 2 Feb 2005 16:09:02 -0800, bradmanz@comcast.net wrote:

>but do have an area for a tal vertical antenna.
>What would be your recommendations?

Hi Brad,

Go back to radio shack and buy their discone antenna.

73's
Richard Clark, KB7QHC

1881. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 01:26:39 UTC
From: Buck <iam@this.site>
Message-ID: <8av2015k3ibfs29a9thrd3bkjvchp862uo@4ax.com>
Source record: 82619

On Wed, 02 Feb 2005 14:44:07 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Buck wrote:
>>
>> How FAT would an FM broadcast dipole have to be to lose one db gain?
>>
>> approximately
>
>A perfect application for the free EZNEC demo program, from
>http://eznec.com.
>
>Roy Lewallen, W7EL

I was kinda thinking that the antenna would become a capacitor if the
elements get too fat.

--
73 for now
Buck
N4PGW

1882. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 01:56:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b313019pj1u94boon321ifcq6ovjpevsag@4ax.com>
Source record: 82621

On Wed, 02 Feb 2005 20:26:39 -0500, Buck <iam@this.site> wrote:

>I was kinda thinking that the antenna would become a capacitor if the
>elements get too fat.

Hi Buck,

And the inductance goes down (think about the product and
proportionalities of the two.

73's
Richard Clark, KB7QHC

1883. bracket and parts help

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 02:21:44 UTC
From: ml <m@di.net>
Message-ID: <m-C24F2D.21213602022005@news.verizon.net>
Source record: 82472

hi

I will be putting up a small antenna soon, using a small mast mounted to a brick wall.

Looking all over for a place that sells simple brackets, all i could find was the cheep 8 steal plated small guage ones.

now i can't find any of the 'good' ones

any body know of a place where i can find them specifically , google didn't help

many years ago radio shack had some nice heavy duty ones made out f aluminum , i've also seen them in stainless

thanks

1884. Re: "Compound" SWR question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 02:45:35 UTC
From: Jaggy Taggy <outhouse@midcoast.com>
Message-ID: <BE26FA7B.130A%outhouse@midcoast.com>
Source record: 82473

Hello George, don't worry, you and the others who pointed out my misconceptions are not offending me, they are indeed helping.

I started to read the article you recommended, or at least a version of it available on the ARRL website.

The difficulties I encounter are partially (you mentioned it and Maxwell mentions this problem in his 'Reflections' as well) because of the widespread misconceptions about transmission line behavior where everybody has an opinion, but it seems many of them are wrong. So one has to find trustworthy sources.

Also, and maybe you know of a source for this, as I gain theoretical insights I like to strengthen my understanding through measurements and experiments, a "lab companion book" would be great.

Other than that I will shut up for a while and read.

Best regards from Maine

Uwe
KB1JOW

On 1/31/05 1:56 AM, in article XEkLd.122520$w62.46453@bgtnsc05-news.ops.worldnet.att.net, "George, W5YR" <w5yr@att.net> wrote:

> I strongly suggest that you invest in "Reflections II" by Walt Maxwell, W2DU
> and sleep with it a few nights.
>
> No offense, but the tone of your questions and comments indicates that you
> are working with a number of highly erroneous misconceptions. The sooner you
> iron out these kinks, the better you will understand and enjoy your
> antennas.
>
> Walt is working on "Reflections III" but it may be this Fall before it
> publishes, so the current edition is more than adequate.
>
> However, don't feel bad - the notion of SWR (its causes and effects) is
> probably one of the most widely misunderstood concepts in amateur radio.
> Walt can help a lot . . .

1885. Re: bracket and parts help

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 03:20:16 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <106301l1cukp1sb26f9edpmjrqi1a1hjg8@4ax.com>
Source record: 82474

On Thu, 03 Feb 2005 02:21:44 GMT, ml <m@di.net> wrote:

>hi
>
>I will be putting up a small antenna soon, using a small mast mounted to
>a brick wall.
>
>Looking all over for a place that sells simple brackets, all i could
>find was the cheep 8 steal plated small guage ones.

Radio Shack still sells them. See...

http://www.radioshack.com/category.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F003%5F001%5F003%5F004&Page=1

I've used the 12" brackets for a fairly heavy vertical antenna mast.

Bob
k5qwg

>
>
>
>now i can't find any of the 'good' ones
>
>any body know of a place where i can find them specifically , google
>didn't help
>
>many years ago radio shack had some nice heavy duty ones made out f
>aluminum , i've also seen them in stainless
>
>
>thanks

1886. Re: "Compound" SWR question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 04:17:32 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <ab9301d5prcjgsl2oqhoq3vckq7i12e3rb@4ax.com>
Source record: 82475

On Thu, 03 Feb 2005 02:45:35 GMT, Jaggy Taggy <outhouse@midcoast.com>
wrote:

>
>Also, and maybe you know of a source for this, as I gain theoretical
>insights I like to strengthen my understanding through measurements and
>experiments, a "lab companion book" would be great.

Maxwell has a number of his "Reflections II" chapters up at his web
site. See http://home.iag.net/~w2du/

Bob
k5qwg

>
>Other than that I will shut up for a while and read.
>
>Best regards from Maine
>
>Uwe
>KB1JOW
>
>
>
>
>
>On 1/31/05 1:56 AM, in article
>XEkLd.122520$w62.46453@bgtnsc05-news.ops.worldnet.att.net, "George, W5YR"
><w5yr@att.net> wrote:
>
>> I strongly suggest that you invest in "Reflections II" by Walt Maxwell, W2DU
>> and sleep with it a few nights.
>>
>> No offense, but the tone of your questions and comments indicates that you
>> are working with a number of highly erroneous misconceptions. The sooner you
>> iron out these kinks, the better you will understand and enjoy your
>> antennas.
>>
>> Walt is working on "Reflections III" but it may be this Fall before it
>> publishes, so the current edition is more than adequate.
>>
>> However, don't feel bad - the notion of SWR (its causes and effects) is
>> probably one of the most widely misunderstood concepts in amateur radio.
>> Walt can help a lot . . .

1887. How to restore relays of Antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 05:14:43 UTC
From: Andrey <a8421@intergate.bc.ca>
Message-ID: <1103cq0hp75qp67@corp.supernews.com>
Source record: 82476

Hello All,

I am dealing with a bunch of relays that have burnt out contacts: Mechanics works fine but contacts measure 3 - 15 Ohms between them instead of zero. I opened several - the contact pads turned dark gray, almost black. It is not coal, still looks like metal surface. The dark surface is very thin, several passes of sandpaper clean it and relay works fine after that.

I wonder if there is a way to clean the contacts without opening relays (the relays are sealed, the only way to open it to cut the body apart.)

Appreciate any wisdom

Andrey

PS: the relays are used to switch RF power at 2 - 30 MHz

1888. Reflector Length??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 06:59:05 UTC
From: kelly@dvol.com
Message-ID: <1107413944.984889.145320@f14g2000cwb.googlegroups.com>
Source record: 82477

I'm diddling with the design of a homebrewed 20M hexagonal wire beam a la the Traffie Hexbeam. I have the driven element resonated at 14.150± in the modeler. Now I have to add the reflector to the model. The question is how much longer should the refelector be vs. the overall length of the driven element in terms of percenatge/scale factor. I'm much more interested in F/B performance than I am in forward gain. Does anybody who has been there have suggestions for a starting point??

Tnx, w3rv

1889. Re: Reflector Length??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 08:33:17 UTC
From: pfriedmanNoSpam <p.paulfriedmanNoSpam@comcast.net>
Message-ID: <RaednX4exvhQfJzfRVn-gQ@comcast.com>
Source record: 82478

<kelly@dvol.com> wrote in message
news:1107413944.984889.145320@f14g2000cwb.googlegroups.com...
I'm diddling with the design of a homebrewed 20M hexagonal wire beam a
la the Traffie Hexbeam. I have the driven element resonated at
14.150 in the modeler. Now I have to add the reflector to the model.
The question is how much longer should the refelector be vs. the
overall length of the driven element in terms of percenatge/scale
factor. I'm much more interested in F/B performance than I am in
forward gain. Does anybody who has been there have suggestions for a
starting point??

Tnx, w3rv

You might want to check out the Files section the hex-beam Yahoo group.
There are several files there with detailed specs on home brewed mono- and
multi-band hexbeams.

Paul AB0SI

1890. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 08:56:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1103pqama2eok1e@corp.supernews.com>
Source record: 82479

Richard Clark wrote:
> On Wed, 02 Feb 2005 20:26:39 -0500, Buck <iam@this.site> wrote:
>
>
>>I was kinda thinking that the antenna would become a capacitor if the
>>elements get too fat.
>
>
> Hi Buck,
>
> And the inductance goes down (think about the product and
> proportionalities of the two.
>
> 73's
> Richard Clark, KB7QHC

Then, the next step is to think about why having less inductance and more capacitance should reduce the gain.

Does it cause the pattern to change?
Does it reduce the efficiency?

Those are the only ways to change the gain.

Roy Lewallen, W7EL

1891. Re: "Compound" SWR question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 09:12:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1103qona73skd0a@corp.supernews.com>
Source record: 82480

You can trust the _ARRL Antenna Book_ and Walt Maxwell's _Reflections_(*). There are many good textbooks on the topic, but most get too involved for a beginner(**). You're wise to be leery of sources other than the _Antenna Book_ and _Reflections_, or real textbooks. And web pages should undergo even more critical scrutiny. I see some pretty bad misconceptions popping up in the works of some of the most prolific and, among the amateur community most respected, authors.

(*) No work is perfect. But I know both Walt, and Dean Straw, the _Antenna Book_ editor, personally, and both know the topic very well. At least as important is that both are absolutely committed to conveying accurate information, and do their very best to verify the accuracy of their work and correct any errors which are found.

(**) One you might consider is _Transmission Lines, Antennas, and Wave Guides_, by King, Mimno, and Wing. It's well written, and a paperback edition was printed which you can often find at a reasonably low price. The paperback edition is by Dover, published in 1965.

Roy Lewallen, W7EL

Jaggy Taggy wrote:
> Hello George, don't worry, you and the others who pointed out my
> misconceptions are not offending me, they are indeed helping.
>
> I started to read the article you recommended, or at least a version of it
> available on the ARRL website.
>
> The difficulties I encounter are partially (you mentioned it and Maxwell
> mentions this problem in his 'Reflections' as well) because of the
> widespread misconceptions about transmission line behavior where everybody
> has an opinion, but it seems many of them are wrong. So one has to find
> trustworthy sources.
>
> Also, and maybe you know of a source for this, as I gain theoretical
> insights I like to strengthen my understanding through measurements and
> experiments, a "lab companion book" would be great.
>
> Other than that I will shut up for a while and read.
>
> Best regards from Maine
>
> Uwe
> KB1JOW

1892. Re: How to restore relays of Antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 09:55:19 UTC
From: grasshouse@hotmail.com
Message-ID: <ctsseb$gb6$1@news6.svr.pol.co.uk>
Source record: 82481

a guess , jewellers use a device called a sonic cleaner.
It puts sonic waves into a cabinet and the shi,,, rubbish falls off. Don't know about sealed relays, but if you want a clean ring get access to a sonic.

1893. Reflector Length??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 10:45:54 UTC
From: 4nec2@gmx.net
Message-ID: <ee90361b.0502030245.befde4d@posting.google.com>
Source record: 82482

> I'm diddling with the design of a homebrewed 20M hexagonal wire beam a
> la the Traffie Hexbeam. I have the driven element resonated at
> 14.150 in the modeler. Now I have to add the reflector to the model.
> The question is how much longer should the refelector be vs. the
> overall length of the driven element in terms of percenatge/scale
> factor. I'm much more interested in F/B performance than I am in
> forward gain. Does anybody who has been there have suggestions for a
> starting point??

I would say, Use 4nec2 to let it automatically determine the reflector length and/or spacing for optimal F/B ratio, or send me your EzNec, NecWin+, *.ant data or whatever modeler you are using, and I'll let you know the spacing and/or length.

Arie.

p.s. excuses for the new thread, because somehow I am not able to reply any more on an existing posting because I get below message:

"Unable to retrieve message 1107413944.984889.145320@f14g2000cwb.googlegroups.com"

Anybode having a suggestion to overcome this or how to get more detailed error info ?

1894. Re: bracket and parts help

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 12:35:59 UTC
From: ml <m@di.net>
Message-ID: <m-E8ACB2.07355503022005@news.verizon.net>
Source record: 82483

In article <10630ll1cukp1sb26f9edpmjrqi1a1hjg8@4ax.com>,
Bob Miller <NOSPAM@neosoft.com> wrote:

> On Thu, 03 Feb 2005 02:21:44 GMT, ml <m@di.net> wrote:
>
> >hi
> >
> >I will be putting up a small antenna soon, using a small mast mounted to
> >a brick wall.
> >
> >Looking all over for a place that sells simple brackets, all i could
> >find was the cheep steal plated small guage ones.
>
> Radio Shack still sells them. See...
>
> http://www.radioshack.com/category.asp?catalog%5Fname=CTLG&category%5Fname=CTL
> G%5F003%5F001%5F003%5F004&Page=1
>
> I've used the 12" brackets for a fairly heavy vertical antenna mast.
>
> Bob
> k5qwg
>
> >
> >
> >
> >now i can't find any of the 'good' ones
> >
> >any body know of a place where i can find them specifically , google
> >didn't help
> >
> >many years ago radio shack had some nice heavy duty ones made out f
> >aluminum , i've also seen them in stainless
> >
> >
> >thanks

thanks bob, for the reply, but first thing i did was to goto radioshack,
and the stuff there, that you pointed out is all cheep thin guage, and
material that will rust solid after the coating wears off

anybody know a place where they sell some good commercial quality
wall mounting antenna brackets??

thanks to all

1895. Re: bracket and parts help

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 13:38:31 UTC
From: cl <clfurent@Yahoo.Com>
Message-ID: <ZOpMd.41225$NC6.24698@newsread1.mlpsca01.us.to.verio.net>
Source record: 82484

give me a yell. I think I can help you out.

cl

"ml" <m@di.net> wrote in message
news:m-E8ACB2.07355503022005@news.verizon.net...
> In article <10630ll1cukp1sb26f9edpmjrqi1a1hjg8@4ax.com>,
> Bob Miller <NOSPAM@neosoft.com> wrote:
>
>> On Thu, 03 Feb 2005 02:21:44 GMT, ml <m@di.net> wrote:
>>
>> >hi
>> >
>> >I will be putting up a small antenna soon, using a small mast mounted to
>> >a brick wall.
>> >
>> >Looking all over for a place that sells simple brackets, all i could
>> >find was the cheep steal plated small guage ones.
>>
>> Radio Shack still sells them. See...
>>
>> http://www.radioshack.com/category.asp?catalog%5Fname=CTLG&category%5Fname=CTL
>> G%5F003%5F001%5F003%5F004&Page=1
>>
>> I've used the 12" brackets for a fairly heavy vertical antenna mast.
>>
>> Bob
>> k5qwg
>>
>> >
>> >
>> >
>> >now i can't find any of the 'good' ones
>> >
>> >any body know of a place where i can find them specifically , google
>> >didn't help
>> >
>> >many years ago radio shack had some nice heavy duty ones made out f
>> >aluminum , i've also seen them in stainless
>> >
>> >
>> >thanks
>
> thanks bob, for the reply, but first thing i did was to goto radioshack,
> and the stuff there, that you pointed out is all cheep thin guage, and

> material that will rust solid after the coating wears off
>
> anybody know a place where they sell some good commercial quality
> wall mounting antenna brackets??
>
>
> thanks to all

1896. Re: Reflector Length??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 13:55:58 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42022ef5$1_2@127.0.0.1>
Source record: 82485

4nec2@gmx.net wrote:
> "Unable to retrieve message
> 1107413944.984889.145320@f14g2000cwb.googlegroups.com"
>
> Anybode having a suggestion to overcome this or how to get more
> detailed error info ?

If I remember correctly, Google gives their posters the option
of the article expiring after a certain number of days and
not being retained. Looks like that article expired.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1897. Re: How to restore relays of Antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 14:10:59 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <cttbdi$kj4$1@f04n12.cac.psu.edu>
Source record: 82486

Hi all:
Nope the sonic cleaner uses a cleaning fluid and will not work in this case.
What your doing is the only way to clean the relay contacts. Of course the
real question is why the relays are corroding/burning in the first place. If
this is a auto tuner the first thing I would do is not tune with any more
power than is necessary to make the tuner work. After it finds tune then
raise the power up to the normal level. And I'd make sure I was not running
any more power than its rated for.

--
John Passaneau W3JXP
State College Pa
jxp16@psu.edu
This mail is a natural product. The slight variations in spelling and
grammar enhance its individual character and beauty and in no way are to
be considered flaws or defects.

<grasshouse@hotmail.com> wrote in message
news:ctsseb$gb6$1@news6.svr.pol.co.uk...
> a guess , jewellers use a device called a sonic cleaner.
> It puts sonic waves into a cabinet and the shi,,, rubbish falls off. Don't
> know about sealed relays, but if you want a clean ring get access to a
> sonic.
>
>

1898. Re: Reflector Length??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 14:27:03 UTC
From: Floyd Sense <fsense@copper.net>
Message-ID: <42023502$1_4@newsfeed.slurp.net>
Source record: 82487

Haven't ever modeled this, but do have a Traffie HexBeam. I recall that Mike Traffie told me the 20 meter element driven element was resonant BELOW the bottom of the 20 meter band and that was necessary because of interaction with the other bands. The F/B was good at the bottom of the CW band, but deteriorated as I went up the band, to the point of being effectively bi-directional high in the SSB portion of the band.

K8AC

<kelly@dvol.com> wrote in message news:1107413944.984889.145320@f14g2000cwb.googlegroups.com...
I'm diddling with the design of a homebrewed 20M hexagonal wire beam a la the Traffie Hexbeam. I have the driven element resonated at 14.150&#65533; in the modeler. Now I have to add the reflector to the model. The question is how much longer should the refelector be vs. the overall length of the driven element in terms of percenatge/scale factor. I'm much more interested in F/B performance than I am in forward gain. Does anybody who has been there have suggestions for a starting point??

Tnx, w3rv

1899. Re: bracket and parts help

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 14:32:31 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <p7d401tfqnlqd9qe179651t02etf9pceth@4ax.com>
Source record: 82488

On Thu, 03 Feb 2005 12:35:59 GMT, ml <m@di.net> wrote:

>In article <106301l1cukp1sb26f9edpmjrqi1a1hjg8@4ax.com>,
> Bob Miller <NOSPAM@neosoft.com> wrote:
>
>> On Thu, 03 Feb 2005 02:21:44 GMT, ml <m@di.net> wrote:
>>
>> >hi
>> >
>> >I will be putting up a small antenna soon, using a small mast mounted to
>> >a brick wall.
>> >
>> >Looking all over for a place that sells simple brackets, all i could
>> >find was the cheep steal plated small guage ones.
>>
>> Radio Shack still sells them. See...
>>
>> http://www.radioshack.com/category.asp?catalog%5Fname=CTLG&category%5Fname=CTL
>> G%5F003%5F001%5F003%5F004&Page=1
>>
>> I've used the 12" brackets for a fairly heavy vertical antenna mast.
>>
>> Bob
>> k5qwg
>>
>> >
>> >
>> >
>> >now i can't find any of the 'good' ones
>> >
>> >any body know of a place where i can find them specifically , google
>> >didn't help
>> >
>> >many years ago radio shack had some nice heavy duty ones made out f
>> >aluminum , i've also seen them in stainless
>> >
>> >
>> >thanks
>
>thanks bob, for the reply, but first thing i did was to goto radioshack,
>and the stuff there, that you pointed out is all cheep thin guage, and
>material that will rust solid after the coating wears off

Thanks, with Radio Shack, I was trying to find you someone local. If
you can order by mail, try this site for heavier galvanized steel

brackets:

http://www.tvantenna.com/products/tvreception/mounting.html

bob
k5qwg

>
>anybody know a place where they sell some good commercial quality
>wall mounting antenna brackets??
>
>
>thanks to all

1900. Icom AH-4 tuner and IC-706Mk2G radio

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 14:58:31 UTC
From: Jon KB1HTW <kb1htw!@!arrl.net>
Message-ID: <ctte75$4rm$1@newslocal.mitre.org>
Source record: 82489

More info, Richard:

I climbed up on my roof last night (from my 3rd floor balcony - always an adventure!) with a flashlight to check my RF ground - sure enough the old cable had a splice that was broken in one place (that I could find in the dark). So I fixed that. I also verified that the internal fuse of my radio (IC-706) wasn't blown (the tuner connector on the back of the radio still put out +13.8Vdc.

When I plugged everything back in, I figured I'd at least be able to tune at least a couple of the bands, but I was met with - nothing. Pressing the Tune button on the radio for two seconds would do absolutely nothing - no changing mode to CW and keying for transmit, not even a short beep saying the tuner couldn't tune the long wire. Just dead.

By then my wife was dragging me out for dinner, and it was too late after for any troubleshooting. And this weekend, I'll be out of town, so I won't be able to do any serious troubleshooting during daylight hours for another week and a half.

Man, this is frustrating...

"Jon KB1HTW" <kb1htw!@!arrl.net> wrote in message
news:ctrje8$5mk$1@newslocal.mitre.org...
> Thanks for the info, but I don't think it'll work.
>
> From http://home.comcast.net/~hamlakemn/ah4/ah4.htm (great site for AH-4
> info, by the way!)
>
> "The AH-4 uses 12 volt inverted logic and an "open collector" transistor
> to ground to perform signaling. The radio provides 13.8 volts to the
> tuner. It also provides a START line that is pulled up to 13.8 volts
> inside the radio. The radio pulls the START line to ground to assert the
> signal (start the tuning operation). Similarly, the AH-4 pulls the KEY
> line to 5 volts through a 22 kohm resistor/diode combination. The radio
> also pulls this line to 13.8 volts through a resistor. The AH-4 pulls this
> line to ground to assert the signal (indicate tuning status to the
> radio.)."
>
> I think it may be more effort than it's worth. Plus, I'm not sure if what
> I described as the "problem" is really the cause - I just think it was the
> most likely candidate. I guess I need to check the end of the cable and
> see if I'm getting better than 12V at the tuner. The author of that
> website says he's been able to control the tuner using 18 gauge rotor
> cable up to 60 meters away. My Cat 5 Ethernet cable is probably 24 or 26
> gauge solid core - that's why I paralleled the leads. Another possible

> cause why the tuner can't tune any band is that my temporary ground is
> probably pretty poor. The tuner's on the roof, feeding a long wire - 14
> AWG copperweld, ~73' I just tied the RF ground terminal on the tuner to an
> old 10 AWG aluminum lightning ground wire that goes down to the electrical
> service entrance of my house. The ground there is a cold water pipe
> augmented with an 8' length of 1/2" copper pipe driven 6' into sandy/rocky
> ground.
>
> Since the AH-4 is supposedly capable of driving a dipole - with the tuner
> at the center, I think I'll try stringing up another wire as a
> counterpoise. Only I don't have 150' linear feet of space on my property,
> so the dipole will end up being a sort of a "J-pole" being fed at the
> center...
>
> Good thing is that I live on a harbor in Massachusetts, so as soon as the
> weather's better (like May? ;-( ), I should be able do drive some ground
> rods next to the seawall, where they'll be in saltwater-saturated sand.
> Hopefully they'll last a few years... I'm itching to get my IC-706Mk2G up
> and running HF - 2m/70cm works fine...
>

1901. Re: amateur radio swap meet

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 15:01:38 UTC
From: Rick Scott <RickN7HJ@gmail.com>
Message-ID: <1107442898.175256.146380@z14g2000cwz.googlegroups.com>
Source record: 82490

So you advertise to the whole stinking world, for your one little local swap meet. Do you consider that wize ???

1902. Re: Reflector Length??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 15:36:16 UTC
From: kelly@dvol.com
Message-ID: <1107444976.002589.327390@f14g2000cwb.googlegroups.com>
Source record: 82491

4nec2@gmx.net wrote:
> > I'm diddling with the design of a homebrewed 20M hexagonal wire
beam a
> > la the Traffie Hexbeam. I have the driven element resonated at
> > 14.150 in the modeler. Now I have to add the reflector to the
model.
> > The question is how much longer should the refelector be vs. the
> > overall length of the driven element in terms of percenatge/scale
> > factor. I'm much more interested in F/B performance than I am in
> > forward gain. Does anybody who has been there have suggestions for
a
> > starting point??
>
> I would say, Use 4nec2 to let it automatically determine the
reflector
> length and/or spacing for optimal F/B ratio, or send me your EzNec,
> NecWin+, *.ant data or whatever modeler you are using, and I'll let
> you know the spacing and/or length.

There's an offer I can't refuse. After I add a "generic" reflector to
the model I can ship you an .nwp file probably sometime on Friday,
Saturday at the latest.

I can't decipher your e-mail address. Mine is (kelly) at dvol dot com.
Delete parenthesizes.

Thanks Arie.

> Arie.

w3rv

>
> p.s. excuses for the new thread, because somehow I am not able to
> reply any more on an existing posting because I get below message:
>
> "Unable to retrieve message
> 1107413944.984889.145320@f14g2000cwb.googlegroups.com"
>
> Anybode having a suggestion to overcome this or how to get more
> detailed error info ?

. . . we're all Google's involuntary beta testers, pain in the butt . .

1903. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 15:38:18 UTC
From: richardharrison@webtv.net
Message-ID: <3411-4202456A-242@storefull-3257.bay.webtv.net>
Source record: 82493

Brad wrote:
"What would be your recommendations?"
Brad also wrote:
"---but do have an area for a tall vertical antenna."

There are often obstructions in an otherwise line-of-sight path. Antenna gain is usually not enough to overcome an obstructed path. Antenna height can overcome the obstruction.

Flagpoles are usually acceptable where antennas are banned. In Terman`s 1955 edition of "Electronis and Radio Engineering" on page 902 are found "Flagpole Antennas". These are balanced vertical dipoles, transformed to a coax feed through the bottom of the dipole.

If the flagpole is tall enough, you receive FM broadcasts.

Q = f/BW means your dipoe needs a Q of less than 4.8 to span 88 MHz to 108 MHz. The antenna would center upon 97.5 MHz, the geometric mean or center of the band.

Such a bandwidth is likely impractical. You can settle for less or center the response on the part of the band you would most use.

Multiply the lowest frequency of high interest by the highest frequency of high interest and take the square root of the product to find the frequency the dipole should be cut for. The fatter the dipole is, the lower its Q will be, and the more even its frequency response will be. You can probably do quite well with uneven response in your antenna is high enough.

Best regards, Richard Harrison, KB5WZI

1904. Re: Reflector Length??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 15:41:12 UTC
From: kelly@dvol.com
Message-ID: <1107445272.185238.259190@o13g2000cwo.googlegroups.com>
Source record: 82492

pfriedmanNoSpam wrote:
> <kelly@dvol.com> wrote in message
> news:1107413944.984889.145320@f14g2000cwb.googlegroups.com...
> I'm diddling with the design of a homebrewed 20M hexagonal wire beam
a
> la the Traffie Hexbeam. I have the driven element resonated at
> 14.150± in the modeler. Now I have to add the reflector to the
model.
> The question is how much longer should the refelector be vs. the
> overall length of the driven element in terms of percenatge/scale
> factor. I'm much more interested in F/B performance than I am in
> forward gain. Does anybody who has been there have suggestions for a
> starting point??
>
> Tnx, w3rv
>
>
> You might want to check out the Files section the hex-beam Yahoo
group.
> There are several files there with detailed specs on home brewed
mono- and
> multi-band hexbeams.

Thanks for the tip Paul, I'll dig into it.

> Paul AB0SI

w3rv

1905. Re: Reflector Length??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 18:23:43 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <itq401lm7qe34ntu64b0oijgtnkckur8n8@4ax.com>
Source record: 82494

On 2 Feb 2005 22:59:05 -0800, kelly@dvol.com wrote:
>Does anybody who has been there have suggestions for a
>starting point?

Hi Kelly,

5% larger. However, its presence will change the resonance of the
driven element and you will have to approach the solution iteratively.

73's
Richard Clark, KB7QHC

1906. Re: Icom AH-4 tuner and IC-706Mk2G radio

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 18:56:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qmr401l015jc45abp3gu3mnr6d4ch1t7ai@4ax.com>
Source record: 82495

On Thu, 3 Feb 2005 09:58:31 -0500, "Jon KB1HTW" <kb1htw!@!arrl.net>
wrote:

>More info, Richard:
>
>I climbed up on my roof last night (from my 3rd floor balcony - always an
>adventure!) with a flashlight to check my RF ground - sure enough the old
>cable had a splice that was broken in one place (that I could find in the
>dark). So I fixed that. I also verified that the internal fuse of my radio
>(IC-706) wasn't blown (the tuner connector on the back of the radio still
>put out +13.8Vdc.
>
>When I plugged everything back in, I figured I'd at least be able to tune at
>least a couple of the bands, but I was met with - nothing. Pressing the Tune
>button on the radio for two seconds would do absolutely nothing - no
>changing mode to CW and keying for transmit, not even a short beep saying
>the tuner couldn't tune the long wire. Just dead.
>
>By then my wife was dragging me out for dinner, and it was too late after
>for any troubleshooting. And this weekend, I'll be out of town, so I won't
>be able to do any serious troubleshooting during daylight hours for another
>week and a half.
>
>Man, this is frustrating...
>
>
>"Jon KB1HTW" <kb1htw!@!arrl.net> wrote in message
>news:ctrje8$5mk$1@newslocal.mitre.org...
>> Thanks for the info, but I don't think it'll work.
>>
>> From http://home.comcast.net/~hamlakemn/ah4/ah4.htm (great site for AH-4
>> info, by the way!)

Hi Jon,

I consulted the page you offered and given the timing diagrams I would
suggest there are no issues of risetime on leading edges of the logic.
The microprocessor appears to be a state machine looking at levels,
not edges. Anyway, the timings are extremely long in comparison to
any edge issues at these scales. Even with a mile of wire, the timing
is too simple to be upset by slope.

You should have (or now do) designed this and assembled it on the
bench for testing in a warm place (for your sake). Replace the cable
so there are NO splices anywhere (if you found one broken, that is

pilot error).

As for the size of wire. This will never be a problem unless you are running in the 40s of gauge. You MUST however meet the peak current demand. This is for the benefit of the 22 relays. You must confirm the average current demand meets spec too for the benefit of the control circuitry.

Skip the attention being placed on the ground lead down. As long as it is long (and on the roof of a three floor home, length is sufficient) it hardly matters, RF-wise, what it ties to. The only point about it going to ground is for the sake of lightning protection (which seems a matter of luck anyway in this configuration).

I see no discussion of choking either the transmission line nor the control lines on this page. This is poor coverage (or I simply scanned it too fast). This may/may not change your situation, but using them is standard procedure.

Get an O'scope and tie it to the control lines and confirm the timing diagrams illustrated at the link offered. If you have no O'scope, then patch a meter across the lines and at least confirm a twitch of the needle. This won't prove much - unless there is no twitch. The timing suggests this would be long enough to overcome the ballistics of needle mass. If you have a digital VOM, and it offers AC Peak hold reading, this should resolve at least one change of state - it will not distinguish between the fail indication timing waveform and normal operation illustrated at the link however.

If you have the bench talent, you could assemble a simple pulse stretcher from ICs to aid in this troubleshooting. If you are very talented, you could assemble ICs to stretch, clock, gate, and resolve the fail indication waveform. An O'scope is far simpler and by far the surest method.

73's
Richard Clark, KB7QHC

1907. Re: amateur radio swap meet

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 19:16:05 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <51aad2-pa3.ln1@p400bob.lse.com.au>
Source record: 82496

Yeah I got real excited there until I realised a USD2200 airfare would
be in order...

Mind you there is nothing wrong with it being advertised but please put
the location in the Subject field.

Cheers Bob VK2YQA

Rick Scott wrote:
> So you advertise to the whole stinking world, for your one little local
> swap meet. Do you consider that wize ???
>

1908. Re: Reflector Length??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 21:53:29 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <1107467609.049954.277160@g14g2000cwa.googlegroups.com>
Source record: 82497

Richard Clark wrote:
> On 2 Feb 2005 22:59:05 -0800, kelly@dvol.com wrote:
> >Does anybody who has been there have suggestions for a
> >starting point?
>
> Hi Kelly,
>
> 5% larger.

Thanks Richard. I very vaguely remember hearing that somewhere before
but I needed to confirm it.

> However, its presence will change the resonance of the
> driven element and you will have to approach the solution
iteratively.

. . "it only takes time" . . <sigh> . . .

>
> 73's
> Richard Clark, KB7QHC

w3rv

1909. Re: Reflector Length??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 22:57:42 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ctua96oqa1@hercules.btinternet.com>
Source record: 82498

The reflector length should be a little bit longer than 1/2-wavelength.

And that's all there is to it.

1910. Flagpole/Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-03 23:58:26 UTC
From: jimbo <jimbo62@spamex.com>
Message-ID: <1107475106.368477.84220@g14g2000cwa.googlegroups.com>
Source record: 82499

Well, I found a reference to a 10-40 meter flagpole antenna for HOAs that don't like antennas. But they all require radials as long as the vertical height of the antenna, and my minuscule lot just won't be large enough for radials of any significant size. Is there any other option for a vertical antenna for 10-40 meters that doesn't require radials?

In another location, I used a random length dipole under the eves of the house with a Johnson Matchbox tuner with good results. And maybe, I can do the same with a random length dipole in the attic, but the flagpole is an intriguing option. And I was always concerned about the radiation in the house from the antenna and from the ladder line lead. In fact, the irrigation solenoid valves used to open when I transmitted.

jimbo

1911. NEED al or stainless wall mt antenna brackets

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 00:14:25 UTC
From: ml <m@di.net>
Message-ID: <m-95BEEB.19141703022005@news.verizon.net>
Source record: 82500

thanks again for your help bob , not to sound ungreatful

but you'd think this was the easy part of gettng my antenna mounted :)

the new link you mentioned has 2 problems

their brackets are still steal, they will rust, i guess i should have
said i need the brackets to be either aluminum or stainless

any chance you know of a place that has those my usual places don't
carry them

the other bad thing about that site wich btw i tried, is that it has
a ton of dead links on it, and i contacted them to inform them ,and
didn't seem like they cared so didn't strike me as reputable

but i am greatful ---anyone out there know of a place that sells them?

thanks

In article <p7d401tfqnlqd9qe179651t02etf9pceth@4ax.com>,
Bob Miller <NOSPAM@neosoft.com> wrote:

> On Thu, 03 Feb 2005 12:35:59 GMT, ml <m@di.net> wrote:
>
> >In article <10630ll1cukp1sb26f9edpmjrqi1a1hjg8@4ax.com>,
> > Bob Miller <NOSPAM@neosoft.com> wrote:
> >
> >> On Thu, 03 Feb 2005 02:21:44 GMT, ml <m@di.net> wrote:
> >>
> >> >hi
> >> >
> >> >I will be putting up a small antenna soon, using a small mast mounted to
> >> >a brick wall.
> >> >
> >> >Looking all over for a place that sells simple brackets, all i could
> >> >find was the cheep steal plated small guage ones.
> >>
> >> Radio Shack still sells them. See...
> >>
> >> http://www.radioshack.com/category.asp?catalog%5Fname=CTLG&category%5Fname=
> >> CTL
> >> G%5F003%5F001%5F003%5F004&Page=1
> >>
> >> I've used the 12" brackets for a fairly heavy vertical antenna mast.
> >>
> >> Bob

> >> k5qwg
> >>
> >> >
> >> >
> >> >
> >> >now i can't find any of the 'good' ones
> >> >
> >> >any body know of a place where i can find them specifically , google
> >> >didn't help
> >> >
> >> >many years ago radio shack had some nice heavy duty ones made out f
> >> >aluminum , i've also seen them in stainless
> >> >
> >> >
> >> >thanks
> >
> >thanks bob, for the reply, but first thing i did was to goto radioshack,
> >and the stuff there, that you pointed out is all cheep thin guage, and
> >material that will rust solid after the coating wears off
>
> Thanks, with Radio Shack, I was trying to find you someone local. If
> you can order by mail, try this site for heavier galvanized steel
> brackets:
>
> http://www.tvantenna.com/products/tvreception/mounting.html
>
> bob
> k5qwg
>
> >
> >anybody know a place where they sell some good commercial quality
> >wall mounting antenna brackets??
> >
> >
> >thanks to all

1912. Re: NEED al or stainless wall mt antenna brackets

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 00:21:29 UTC
From: dplatt@radagast.org
Message-ID: <1105g09m4cvgee2@corp.supernews.com>
Source record: 82501

>their brackets are still steal, they will rust, i guess i should have
>said i need the brackets to be either aluminum or stainless
>
>any chance you know of a place that has those my usual places don't
>carry them

One possible option is to check around at marine-supply companies.
They seem to have quite a few different stainless-steel antenna
mounting brackets of one sort or another. Rail-mount brackets seem to
be the most common, but stick-out-from-a-wall mast brackets are also
available.

http://www.naval.com/flanges/mast-mount-1.5/
http://www.busse-yachtshop.de/dae_antennenhalter.html

"Make it out of stainless, call it marine-grade, and multiply the
price by 5" seems to be the usual approach.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1913. Re: Flagpole/Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 00:56:08 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <IKzMd.28677$xt.26966@fed1read07>
Source record: 82502

Well I may be wrong here but my understanding is the wires on the ground are a counterpoise and need not be tuned. As they are coupling to the earth. But it may take numerous wires for the counterpoise. Ground conductivity enters into this as well.

Radials on an elevated antenna on the other hand should be tuned. Just four radials on an elevated antenna will do well.

I had a ground mounted vertical and just sprinkled lots of wires thither and yon as best I could to fit in the lot and the antenna tuned fine.

Try it and see the results.

You could try a half wave vertical -- no radials required but now you have an impedance mathing problem.

Some Cushcraft antennas use a half wave end fed scheme, the black box at the feed point is matching unit.
--
Caveat Lector (Reader Beware)

"jimbo" <jimbo62@spamex.com> wrote in message
news:1107475106.368477.84220@g14g2000cwa.googlegroups.com...
> Well, I found a reference to a 10-40 meter flagpole antenna for HOAs
> that don't like antennas. But they all require radials as long as the
> vertical height of the antenna, and my minuscule lot just won't be
> large enough for radials of any significant size. Is there any other
> option for a vertical antenna for 10-40 meters that doesn't require
> radials?
>
> In another location, I used a random length dipole under the eves of
> the house with a Johnson Matchbox tuner with good results. And maybe, I
> can do the same with a random length dipole in the attic, but the
> flagpole is an intriguing option. And I was always concerned about the
> radiation in the house from the antenna and from the ladder line lead.
> In fact, the irrigation solenoid valves used to open when I
> transmitted.
>
> jimbo
>

1914. Re: Flagpole/Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 01:40:25 UTC
From: pfriedmanNoSpam <p.paulfriedmanNoSpam@comcast.net>
Message-ID: <yfadnRO8Lu0VT5_fRVn-tw@comcast.com>
Source record: 82503

"jimbo" <jimbo62@spamex.com> wrote in message
news:1107475106.368477.84220@g14g2000cwa.googlegroups.com...
> Well, I found a reference to a 10-40 meter flagpole antenna for HOAs
> that don't like antennas. But they all require radials as long as the
> vertical height of the antenna, and my minuscule lot just won't be
> large enough for radials of any significant size. Is there any other
> option for a vertical antenna for 10-40 meters that doesn't require
> radials?
>
> In another location, I used a random length dipole under the eves of
> the house with a Johnson Matchbox tuner with good results. And maybe, I
> can do the same with a random length dipole in the attic, but the
> flagpole is an intriguing option. And I was always concerned about the
> radiation in the house from the antenna and from the ladder line lead.
> In fact, the irrigation solenoid valves used to open when I
> transmitted.
>
> jimbo
>

Jim:

I suggest that you do not get carried away with not having room for "full length" radials. I've read some interesting research (I will find the references if you are interested) on this. It appears that radials as short as 0.1 wavelength are quite effective. Are longer ones better. Yes. It is also better to be transmitting in the middle of the ocean.:) It is better to be young, rich, and handsome, too.

Seriously, lay down whatever radial pattern you can. The more the better, the longer the better, but you will surprised how quickly (in both cases) it becomes a matter of quickly diminishing returns.

A friend of mine lives in a restricted community in Southern Cal. He got permission to put up a flag pole, so he and (I was visiting at the time) went out on a Sunday afternoon when everyone could see us and set-up his flagpole, raised the U.S. Flag, etc. Then, about 3 a.m. we went back out and buried 4 radials and a coax feedline. There are not enough radials and they are too short. However, he has no problem working the entire Pacific Rim with 100w.

Paul AB0SI

1915. Re: Flagpole/Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 01:53:14 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <1105lfljpju2d80@corp.supernews.com>
Source record: 82504
Body handling: HTML body converted to readable text

"pfriedmanNoSpam" wrote in message
news:yfadnRO8Lu0VT5_fRVn-tw@comcast.com...
> "jimbo" wrote in message
> news:1107475106.368477.84220@g14g2000cwa.googlegroups.com...
> > Well, I found a reference to a 10-40 meter flagpole antenna for HOAs
> > that don't like antennas. But they all require radials as long as the
> > vertical height of the antenna, and my minuscule lot just won't be
> > large enough for radials of any significant size. Is there any other
> > option for a vertical antenna for 10-40 meters that doesn't require
> > radials?
> >
> > In another location, I used a random length dipole under the eves of
> > the house with a Johnson Matchbox tuner with good results. And maybe, I
> > can do the same with a random length dipole in the attic, but the
> > flagpole is an intriguing option. And I was always concerned about the
> > radiation in the house from the antenna and from the ladder line lead.
> > In fact, the irrigation solenoid valves used to open when I
> > transmitted.
> >
> > jimbo
> >
>
> Jim:
>
> I suggest that you do not get carried away with not having room for "full
> length" radials. I've read some interesting research (I will find the
> references if you are interested) on this. It appears that radials as
short
> as 0.1 wavelength are quite effective. Are longer ones better. Yes. It is
> also better to be transmitting in the middle of the ocean.:) It is better
to
> be young, rich, and handsome, too.
>
> Seriously, lay down whatever radial pattern you can. The more the better,
> the longer the better, but you will surprised how quickly (in both cases)
it
> becomes a matter of quickly diminishing returns.
>
> A friend of mine lives in a restricted community in Southern Cal. He got
> permission to put up a flag pole, so he and (I was visiting at the time)
> went out on a Sunday afternoon when everyone could see us and set-up his
> flagpole, raised the U.S. Flag, etc. Then, about 3 a.m. we went back out
and

> buried 4 radials and a coax feedline. There are not enough radials and
they
> are too short. However, he has no problem working the entire Pacific Rim
> with 100w.
>
> Paul AB0SI
>
>

I live in the sticks, so I can put up whatever I please.
But it seems to me a metal roof with a Fluidmotion SmallIR with a flag on
the roof would ROCK from 20 on up.
Of course folks who wanted just a flag have been screwed by homeowner's
associations.
OTOH a nice copper gutter can get the job done.
Or just build a kick-ass mobile rig.

BTW
Why do people even get involved with such BS, anyway?
I didn't make you live there.

73
H.
NQ5H

1916. Re: Reflector Length??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 02:43:33 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <1107485013.881881.26370@g14g2000cwa.googlegroups.com>
Source record: 82505

Reg Edwards wrote:
> The reflector length should be a little bit longer than
1/2-wavelength.
>
> And that's all there is to it.

Well OK Reg but . . but . . but . . Ah, never mind . .

1917. Re: NEED al or stainless wall mt antenna brackets

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 02:51:20 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <5ao501p63tid4ncmkski3amrjinptr8hs5@4ax.com>
Source record: 82506

On Fri, 04 Feb 2005 00:14:25 GMT, ml <m@di.net> wrote:

>thanks again for your help bob , not to sound ungreatful
>
>but you'd think this was the easy part of gettng my antenna mounted :)
>
>the new link you mentioned has 2 problems
>
>their brackets are still steal, they will rust, i guess i should have
>said i need the brackets to be either aluminum or stainless
>
>any chance you know of a place that has those my usual places don't
>carry them
>
>the other bad thing about that site wich btw i tried, is that it has
>a ton of dead links on it, and i contacted them to inform them ,and
>didn't seem like they cared so didn't strike me as reputable
>
>but i am greatful ---anyone out there know of a place that sells them?
>
>thanks

One last suggextion -- a Google search for "Rohn wall brackets" brings
up a number of sellers -- the brackets are made of galvanized steel,
but it's the same stuff Rohn towers are made of, and I'm not aware of
any rust problems on their towers.

bob
k5qwg

>
>
>
>
>
>In article <p7d401tfqnlqd9qe179651t02etf9pceth@4ax.com>,
> Bob Miller <NOSPAM@neosoft.com> wrote:
>
>> On Thu, 03 Feb 2005 12:35:59 GMT, ml <m@di.net> wrote:
>>
>> >In article <106301l1cukp1sb26f9edpmjrqi1a1hjg8@4ax.com>,
>> > Bob Miller <NOSPAM@neosoft.com> wrote:
>> >
>> >> On Thu, 03 Feb 2005 02:21:44 GMT, ml <m@di.net> wrote:
>> >>

>> >> >hi
>> >> >
>> >> >I will be putting up a small antenna soon, using a small mast mounted to
>> >> >a brick wall.
>> >> >
>> >> >Looking all over for a place that sells simple brackets, all i could
>> >> >find was the cheep steal plated small guage ones.
>> >>
>> >> Radio Shack still sells them. See...
>> >>
>> >> http://www.radioshack.com/category.asp?catalog%5Fname=CTLG&category%5Fname=
>> >> CTL
>> >> G%5F003%5F001%5F003%5F004&Page=1
>> >>
>> >> I've used the 12" brackets for a fairly heavy vertical antenna mast.
>> >>
>> >> Bob
>> >> k5qwg
>> >>
>> >> >
>> >> >
>> >> >
>> >> >now i can't find any of the 'good' ones
>> >> >
>> >> >any body know of a place where i can find them specifically , google
>> >> >didn't help
>> >> >
>> >> >many years ago radio shack had some nice heavy duty ones made out f
>> >> >aluminum , i've also seen them in stainless
>> >> >
>> >> >
>> >> >thanks
>> >
>> >thanks bob, for the reply, but first thing i did was to goto radioshack,
>> >and the stuff there, that you pointed out is all cheep thin guage, and
>> >material that will rust solid after the coating wears off
>>
>> Thanks, with Radio Shack, I was trying to find you someone local. If
>> you can order by mail, try this site for heavier galvanized steel
>> brackets:
>>
>> http://www.tvantenna.com/products/tvreception/mounting.html
>>
>> bob
>> k5qwg
>>
>> >
>> >anybody know a place where they sell some good commercial quality
>> >wall mounting antenna brackets??
>> >

>> >
>> >thanks to all

1918. preamp question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 03:45:36 UTC
From: pdrunen@aol.com
Message-ID: <20050203224536.13985.00000295@mb-m19.aol.com>
Source record: 82507

Hi all,

I have a 1/4 wave vertical on 440, from this a direct connect to my 440 preamp, which as a 50 ohm input and output, then a direct connect to a receiver which has 2000 ohms impedance.

Does it make a different if the receiver input is not exactly matched? Should I try to set up the 50ohm to 2000 or step down the 2000 to 50 ohm?

1919. Re: Icom AH-4 tuner and IC-706Mk2G radio

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 04:19:09 UTC
From: Ivan Makarov <miv@hotmail.com>
Message-ID: <rbSdnfqQGIYgap_fRVn-gQ@rogers.com>
Source record: 82508

Jon,

get your control cable choked before trying anything else. You can use a
pair of split core ferrite beads. Put them close to the cable's ends to stop
induced RF from getting into the circuits.706MKIIG is sensitive to that.
Better then, get a larger core diameter and make as many turns as you can
fit. Same thing applies when you want to extend the control's head cable.
A better option would be to use a shielded cable, not TP. What happens is
that your cable works as an antenna, feding RF back into the radio which may
cause unpredictable results. In case of the remote control head this simply
shuts the radio down when trying to key it.
But you still should be able to get away with your existing TP cable if you
chop the RF off at both ends.

--

Regards,
Ivan

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:qmr401l015jc45abp3gu3mnr6d4ch1t7ai@4ax.com...
> On Thu, 3 Feb 2005 09:58:31 -0500, "Jon KB1HTW" <kb1htw!@!arrl.net>
> wrote:
>
...> I see no discussion of choking either the transmission line nor the
> control lines on this page. This is poor coverage (or I simply
> scanned it too fast). This may/may not change your situation, but
> using them is standard procedure.
>
..> Richard Clark, KB7QHC

1920. Re: Reflector Length??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 09:02:51 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ctvdnr$1je$1@hercules.btinternet.com>
Source record: 82509

> > The reflector length should be a little bit longer than
> 1/2-wavelength.
> >
> > And that's all there is to it.
>
> Well OK Reg but . . but . . but . . Ah, never mind . .
>
Brian, you've got me worried. Have I missed anything out?

1921. clfurent??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 11:54:42 UTC
From: ml <m@di.net>
Message-ID: <m-F52D7A.06543804022005@news.verizon.net>
Source record: 82510

In article <ZOpMd.41225$NC6.24698@newsread1.mlpsca01.us.to.verio.net>,
"cl" <clfurent@Yahoo.Com> wrote:

> give me a yell. I think I can help you out.
>
> cl
>
> "ml" <m@di.net> wrote in message
> news:m-E8ACB2.07355503022005@news.verizon.net...
> > In article <10630ll1cukp1sb26f9edpmjrqi1a1hjg8@4ax.com>,
> > Bob Miller <NOSPAM@neosoft.com> wrote:
> >
> >> On Thu, 03 Feb 2005 02:21:44 GMT, ml <m@di.net> wrote:
> >>
> >> >hi
> >> >
> >> >I will be putting up a small antenna soon, using a small mast mounted to
> >> >a brick wall.
> >> >

i sent you a email few days ago, are you still able to help? can you
get email at your above address??? perhaps you can post the info here??

thanks

1922. Re: Flagpole/Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 12:35:31 UTC
From: KC1DI <elbc2@pivot.net>
Message-ID: <42036C13.1040501@pivot.net>
Source record: 82511

jimbo wrote:
> Well, I found a reference to a 10-40 meter flagpole antenna for HOAs
> that don't like antennas. But they all require radials as long as the
> vertical height of the antenna, and my minuscule lot just won't be
> large enough for radials of any significant size. Is there any other
> option for a vertical antenna for 10-40 meters that doesn't require
> radials?
>
> In another location, I used a random length dipole under the eves of
> the house with a Johnson Matchbox tuner with good results. And maybe, I
> can do the same with a random length dipole in the attic, but the
> flagpole is an intriguing option. And I was always concerned about the
> radiation in the house from the antenna and from the ladder line lead.
> In fact, the irrigation solenoid valves used to open when I
> transmitted.
>
> jimbo
>
Hi Jimbo,

All the responses you have received so far are good, But one other
possibility is to install a fiberglass flag pole with a diameter big
enough to accomodate and R-7 or similar no ground vertical. A freind
here did that and it worked quite well.

73 Dave

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

1923. co phazing 2x 2 meter halo loops

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 13:35:53 UTC
From: DAVID BROWNE <david.browne7@ntlworld.com>
Message-ID: <ZSKMd.143$E41.18@newsfe5-gui.ntli.net>
Source record: 82512

hi i have one i would like to get another and co-phase them, how do i do this (coax feed, distance between loops) and i want to run horizontal
thanks dave

1924. IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 14:13:23 UTC
From: jason <cheanglong@gmail.com>
Message-ID: <1107526403.830643.25680@z14g2000cwz.googlegroups.com>
Source record: 82513

Hello All

I am beginner in RF
I may ask about some silly question and please pardon me
May I know what actually the unit of dbm and db is different from one
another?
If they are different how can we minus the gain in unit of db from a
IP3 in unit of dbm?
Kindly enlighthen
Thank you all

rgds and thanks
Jason

1925. Re: preamp question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 14:46:00 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <IULMd.167$oO.106@newsread2.news.atl.earthlink.net>
Source record: 82514

What kind of receiver are you using that would have a 2000 ohm input
impedance ?

"PDRUNEN" <pdrunen@aol.com> wrote in message
news:20050203224536.13985.00000295@mb-m19.aol.com...
> Hi all,
>
> I have a 1/4 wave vertical on 440, from this a direct connect to my 440
preamp,
> which as a 50 ohm input and output, then a direct connect to a receiver
which
> has 2000 ohms impedance.
>
> Does it make a different if the receiver input is not exactly matched?
Should
> I try to set up the 50ohm to 2000 or step down the 2000 to 50 ohm?

1926. Re: Flagpole/Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 14:55:41 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cu02ddqig1@hercules.btinternet.com>
Source record: 82515

Long, shallow buried radials are by no means a necessity.

Your dry, painted timber flag-pole, with a plastic insulated antenna wire running down it, can be located alongside a wall of your house or at the end, side or middle of the garden.

The soil should not be very dry and sandy but should be capable of growing common-or-garden flowers, shrubs or lawn grass. To improve the soil dig in compost or horse manure. A light sprinkling of copper sulphate won't do any harm except perhaps to the plants.

Lay a dozen or a score of 10-gauge or thicker radials, as long as you can and in as many directions as you can from the base of the pole. They will be useful even if only 2, 3 or 4 feet long.

Use bare copper wire, at a depth of a few inches in well compacted, trodden-down soil. Lay paving slabs on top if you like.

For multi-band use you will need an automatic tuner such as an Icom AH-4 located near the base of the pole. If the pole is mounted on a wall of the house the tuner can be located indoors in the dry.

(My AH-4 is mounted on the inside wall of the kitchen under the kitchen sink. It is also conveniently near to the main incoming water pipe which serves as my best of 7 short radials. The earthing loss resistance is only 6 ohms.)

The AH-4 (no electric motors - a set of relays) easily tunes a 32-feet unloaded vertical wire down to the 160 meter band. It is primarily intended for use in vehicles.

You don't HAVE to have an automatic tuner at the base of the antenna. You can use a home brew L and C matching network on an indoors window ledge by extending the vertical antenna wire sideways, above ground level, through the side of a downstairs window frame. The wire is then X feet longer.

There are a number of workable variations on the tune.

If you like amusing yourself with numbers, download in a few seconds program ENDFEED from website below and run immediately.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

1927. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 15:08:27 UTC
From: Dave <noone@nowhere.com>
Message-ID: <9aadnYarNvBlEp7fRVn-qg@crocker.com>
Source record: 82516

db is a generic term basically meaning: Decibel. A unit for measuring the relative strength of a signal. Usually expressed as the logarithmic ratio of the strength of a transmitted signal to the strength of the original signal. A decibel is one tenth of a "bel".

the key is that it is a ratio... without a reference a ratio is essentially meaningless. that is why you often hear that station a is 10db louder than station b... saying that station a was 10db wouldn't mean anything.

dbm has a built in reference. by definition: Decibels referred to 1 milliwatt.
so the reference is 1 mw. do you can say that the power of a source is 0dbm meaning that it is 1mw, 10dbm is 10mw, 20dbm is 100mw, -10dbm is .1mw, -20db is .01mw, etc.

i don't know an ip3, but maybe that will give you a start to know what you are looking for.

"jason" <cheanglong@gmail.com> wrote in message
news:1107526403.830643.25680@z14g2000cwz.googlegroups.com...
> Hello All
>
> I am beginner in RF
> I may ask about some silly question and please pardon me
> May I know what actually the unit of dbm and db is different from one
> another?
> If they are different how can we minus the gain in unit of db from a
> IP3 in unit of dbm?
> Kindly enlighthen
> Thank you all
>
>
> rgds and thanks
> Jason
>

1928. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 15:18:25 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <420392e5_1@127.0.0.1>
Source record: 82517

jason wrote:
> I may ask about some silly question and please pardon me
> May I know what actually the unit of dbm and db is different from one
> another?

dBm is referenced to a milliwatt. dB is referenced to
something else and that something else must be specified.
dBd is referenced to a dipole. A web search for "decibel"
uncovered 100 dB of information.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1929. Re: co phazing 2x 2 meter halo loops

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 15:48:11 UTC
From: Dr Dave <wvdave1st@hotmail.com>
Message-ID: <%OMMd.8825$Dc.4803@trnddc06>
Source record: 82518

multi-element horizontal omni

http://home.comcast.net/~ross_anderson/HOCollinear.htm

"DAVID BROWNE" <david.browne7@ntlworld.com> wrote in message
news:ZSKMd.143$E41.18@newsfe5-gui.ntli.net...
> hi i have one i would like to get another and co-phase them, how do i do
> this (coax feed, distance between loops) and i want to run horizontal
> thanks dave
>

1930. Re: co phazing 2x 2 meter halo loops

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 15:53:39 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <Nb6dnV07uurgB57fRVn-pA@comcast.com>
Source record: 82519

"DAVID BROWNE" <david.browne7@ntlworld.com> wrote in message
news:ZSKMd.143$E41.18@newsfe5-gui.ntli.net...
> hi i have one i would like to get another and co-phase them, how do i do
> this (coax feed, distance between loops) and i want to run horizontal
> thanks dave
>
Cut two pieces of 75 Ohm coax, 3/4 electrical wavelength long (about 38
inches for regular RG59). Connect one end of each to an antenna, the other
ends to a T connector. Connect 50 Ohm coax from third port of T connector to
radio; you will probably need a UHF F-F adapter to do this. Space the
antennas apart as far as the coax will reach. Anything less than 4 - 5 feet
is not worth doing. As I recall, one wavelength, 2 meter spacing, will give
almost 3 db gain.

Tam/WB2TT

1931. Re: preamp question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 15:58:41 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <VPKdnQKpBNw2Bp7fRVn-vw@comcast.com>
Source record: 82520

"PDRUNEN" <pdrunen@aol.com> wrote in message
news:20050203224536.13985.00000295@mb-m19.aol.com...
> Hi all,
>
> I have a 1/4 wave vertical on 440, from this a direct connect to my 440
> preamp,
> which as a 50 ohm input and output, then a direct connect to a receiver
> which
> has 2000 ohms impedance.

Something wrong here. It would be very difficult to build anything at 440
MHz that has 2000 Ohm input impedance.

Tam/WB2TT

>
> Does it make a different if the receiver input is not exactly matched?
> Should
> I try to set up the 50ohm to 2000 or step down the 2000 to 50 ohm?

1932. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 16:19:27 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <jgNMd.28855$xt.16035@fed1read07>
Source record: 82521

dB is a ratio for example dB = 10 log10 (P1/P2)
so increasing power from 100 watts to 200 watts is 3 dB (3.01dB actually)
But so is increasing power from 10 watts to 20 watts = 3dB
Since it is a ratio -- it is unitless

dBm is referenced to one milliwatt thus is a discrete power level

In the equation above P2 is always one milliwatt

Thus increasing power from 1 milliwatt to 2 milliwatts is 3dBm
From 1 milliwatt to 10 milliwatts is 10dBm etc

Not sure of your reference to ip3 but suspect you mean input third order
intercept point as used in amplifiers
Google ip3 to get explanations of this and how it is measured.
--
Caveat Lector (Reader Beware)

>
> "jason" <cheanglong@gmail.com> wrote in message
> news:1107526403.830643.25680@z14g2000cwz.googlegroups.com...
>> Hello All
>>
>> I am beginner in RF
>> I may ask about some silly question and please pardon me
>> May I know what actually the unit of dbm and db is different from one
>> another?
>> If they are different how can we minus the gain in unit of db from a
>> IP3 in unit of dbm?
>> Kindly enlighthen
>> Thank you all
>>
>>
>> rgds and thanks
>> Jason
>>
>
>

1933. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 16:31:00 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <36hmgeF51s0hlU1@individual.net>
Source record: 82522

From off the top of my head, without any revision.....

IP3, or "Third Order Intercept Point" is an indication
of how good a mixer is, but it is not a physical point!

If you were to plot the wanted output of a mixer stage against
the input signal (ignoring the local oscillator input), you would
get a graph that is a nearly-straight line from the origin
which then starts to flatten off.

At the point of the line where it starts to curve over to
flatness, and therefore starts to be non-linear, other
mixer products, mainly those based upon the third
harmonic of the input signals start to appear in the
output. if you plot these other products on your graph in
addition to the wanted output signal, they grow at a rate (the slope)
which is 3 times greater than was the initial straight line
of the wanted output.

If you take the original straight line of the wanted output, and
extrapolate it so that it meets the other line growing at 3 times
the slope, you get what is known as the "Third Order Intercept
Point". The reason that this is a theoretical point is because the
wanted output has long since flattened off!

The better a mixer is, the higher is IP3 for the outputs of the mixer.

IP3 will be given in terms of the power of the wanted output signal,
say, 50 dBm - other respondents have informed you that this is
50dB (or 10^5) times greater than 1mW, or 100W (Perhaps not
a good figure for an example - a mixer with an output of those
levels could be a PA stage!). In this case dBm gives us the power relative
to the mW.

If we now go back to the flattening off of the curve, at some point,
the curve will be 1dB less than what it would have been had the curve
not been a curve but had carried on as a straight line. This point is known
as the "1dB Compression Point" - In this case we use dB and not dBm because
we are talking relative to some other point on the line.

There is a mathematical derivation (which I don't know off-hand) which
shows that the 1dB Compression Point is 10.4dB below IP3.

So, I hope that I have gone some way to explaining (or increasing your
confusion) on the points that you raised!

"jason" <cheanglong@gmail.com> wrote in message
news:1107526403.830643.25680@z14g2000cwz.googlegroups.com...
> May I know what actually the unit of dbm and db is different from one
> another?
> If they are different how can we minus the gain in unit of db from a
> IP3 in unit of dbm?
> Kindly enlighthen
> Thank you all

1934. Re: Reflector Length??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 17:05:12 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <1107536712.521335.196150@c13g2000cwb.googlegroups.com>
Source record: 82523

Reg Edwards wrote:
> > > The reflector length should be a little bit longer than
> > 1/2-wavelength.
> > >
> > > And that's all there is to it.
> >
> > Well OK Reg but . . but . . but . . Ah, never mind . .
> >
> Brian, you've got me worried. Have I missed anything out?

No, no, it was me again but I'm better now . . thanks for your concern.

1935. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 17:19:29 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <B8OMd.1702$aW6.968@newssvr22.news.prodigy.net>
Source record: 82525

Cecil is CORRECT, also, other terms you might run into are:

dB I = dB Isotropic (an immaginary point source that radiates
in all directions uniformly) , used for antennas.

dB W = dB, gain or loss , referenced to 1 Watt.

dB is simply the logrithmic ratio of (POWER, Voltage) to
the reference (-1 dB = a loss of 1/10 of your power, -3 dB ,
loss of 1/2 your power, and if positive, the opposite is true
1 dB = 10% power gain, 3 dB = twice the power, ect.
as info, Jim NN7K

Cecil Moore wrote:
> jason wrote:
>
>> I may ask about some silly question and please pardon me
>> May I know what actually the unit of dbm and db is different from one
>> another?
>
>
> dBm is referenced to a milliwatt. dB is referenced to
> something else and that something else must be specified.
> dBd is referenced to a dipole. A web search for "decibel"
> uncovered 100 dB of information.

1936. Low dipole performance question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 17:20:44 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <M9OMd.2187$GT.297@okepread01>
Source record: 82524

As I understand it, my dipole shoudn't work - it's flat (non inverted V), it's laid out running east / west so the radiation should be going north and south and it's only 20-25 feet above ground.

The antenna is a coax fed (no balun), 220' long 80/160 trap dipole.

By my way of thinking, this antenna should almost be a NVIS antenna.

If so, how did I manage a QSO with K7NN on 1.893 last night? Tuscon, AZ from Wichita, KS on 100w. EM17ip to DM42li on 160m at 04:00z

Am I missing something here?
--
73's es gd dx de Ken KG&#65533;WX
Grid EM17ip, Flying Pigs #1055,
List Owner, Yahoo! E-groups:
VX-2R & FT-857

1937. Re: Low dipole performance question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 17:31:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9qb701h49oigps5i5du1a548e23slqagof@4ax.com>
Source record: 82526

On Fri, 4 Feb 2005 11:20:44 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>If so, how did I manage a QSO with K7NN on 1.893
>last night? Tuscon, AZ from Wichita, KS on 100w.
>EM17ip to DM42li on 160m at 04:00z
>
>Am I missing something here?
The enjoyment of such an "impossibility?"

Hi Ken,

The how you are asking for could go by any number of explanations, and each may sound as plausible as help from Extra Terrestrials. One way to look at your antenna description (especially with the up front declaration of no choking) is that you have a top loaded, tuned T antenna (vertical instead of horizontal) planted in the highest conductive soil in the U.S.

One could only wonder if you couldn't accomplish what you did.

73's
Richard Clark, KB7QHC

1938. Re: Low dipole performance question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 17:44:11 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <MvOMd.29787$B95.964@lakeread02>
Source record: 82527

"Ken Bessler" <kg0wx@NOSPAMyahoo.com> wrote
> As I understand it, my dipole shoudn't work - it's flat
> (non inverted V), it's laid out running east / west so
> the radiation should be going north and south and it's
> only 20-25 feet above ground.
>
> The antenna is a coax fed (no balun), 220' long 80/160
> trap dipole.
>
> By my way of thinking, this antenna should almost be a
> NVIS antenna.
>
> If so, how did I manage a QSO with K7NN on 1.893
> last night? Tuscon, AZ from Wichita, KS on 100w.
> EM17ip to DM42li on 160m at 04:00z
>
> Am I missing something here?
> --
> 73's es gd dx de Ken KG&#65533;WX
> Grid EM17ip, Flying Pigs #1055,
> List Owner, Yahoo! E-groups:
> VX-2R & FT-857

fwiw, last night the low bands had phenomenal propagation.

At about 0600z I was copying 2182 khz loud and clear in Virginia Beach, VA
from USCG ComSta Kodiak Alaska, Canadian Coast Guard St Johns, Newfoundland,
and USCG Group San Juan, Puerto Rico.

Jack Painter
Virginia Beach, Virginia

1939. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 17:59:30 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cu0d62$9b2$1@sparta.btinternet.com>
Source record: 82528

"Airy R.Bean" wrote -

> The better a mixer is, the higher is IP3 for the outputs of the mixer.
>
==========

From a circuit operational point of view, could you please summarise in what way a high IP3 makes a better mixer?

Am I correct in assuming the device need not be a mixer? Could it be an amplifier? In which case some of the better or worse parameters would just become meaningless.

Reg.

1940. Re: Low dipole performance question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 18:04:23 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4203b9ca$1_1@127.0.0.1>
Source record: 82529

Ken Bessler wrote:
> If so, how did I manage a QSO with K7NN on 1.893
> last night? Tuscon, AZ from Wichita, KS on 100w.
> EM17ip to DM42li on 160m at 04:00z
>
> Am I missing something here?

Feedline radiation? I once talked to New Zealand
on 40m SSB using a G5RV at 30 ft.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1941. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 18:07:45 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <36hrvlF51krtpU1@individual.net>
Source record: 82530

"Caveat Lector" wrote
> dB is a ratio for example dB = 10 log10 (P1/P2)
...snip...
> In the equation above P2 is always one milliwatt

To elaborate, P2 above must be 1 mW only if one wants to calculate dBm.

The equation as it is written above will calculate the relationship in decibels between any two power values expressed in the same units. For example, to find the gain of an amplifier in decibels when its input power is 50 watts and its output power is 1.2 kW:

dB = 10*log(1200/50) = 10*log(24) = 10*1.38 = 13.8

RF

1942. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 18:08:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rec7011iu1iuguppkio5a5kttkb9n7sfd8@4ax.com>
Source record: 82531

On Fri, 04 Feb 2005 17:19:29 GMT, Jim - NN7K
<nn7kexk7zfg@NOSPAMsbcglobal.net> wrote:
>Cecil is CORRECT
>> A web search for "decibel" uncovered 100 dB of information.

Hi Jim,

I must've missed something here with this dimensionless, referenceless declaration. I'm not even sure if there isn't an implicit negative sign to it.

Would this be 100dB above ignorance? 100dB below genius? What is the zero reference for information? Valid information, and simply available information is not exchanged at the same rate (100dB above entropy?). It can't be zero information because that would cause the computation to be "undefined." Hmmm, maybe the baseline is the computation of no information. -No- That returns us to the conundrum of even what is 1dB above "undefined?" SWAG? In that regard:
>> A web search for "decibel" uncovered 100 dB of information re SWAG

Can there be a ratio of 1 SWAG : 10ï¿½ï¿½ Facts? When I enter the universal measure of knowledge into Google, it only returns "19,400,000 for TITS." This is roughly 500 times below the declaration made above. Does it follow you must perform 500 SWAGs to successfully achieve your goal of TITS? This sounds almost about the same as the computation of probability for a teenage boy on a date running out of gas on a dark road - and yet historically this occurs far more often than chance.

73's
Richard Clark, KB7QHC

1943. Re: Low dipole performance question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 18:15:26 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <2ZOMd.2193$GT.882@okepread01>
Source record: 82532

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:4203b9ca$1_1@127.0.0.1...
> Ken Bessler wrote:
>> If so, how did I manage a QSO with K7NN on 1.893
>> last night? Tuscon, AZ from Wichita, KS on 100w.
>> EM17ip to DM42li on 160m at 04:00z
>>
>> Am I missing something here?
>
> Feedline radiation? I once talked to New Zealand
> on 40m SSB using a G5RV at 30 ft.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>

I thought about that since I don't use a balun (I know, I know -
I should). My feedline drops 20' down from the feedpoint then
runs ENE to my house for 40'. I've thought about a balun but
I only use the antenna on 160 & 80 and it seems to work well
so I don't want to mess with sucess.

--
73's es gd dx de Ken KG WX
Grid EM17ip, Flying Pigs #1055,
List Owner, Yahoo! E-groups:
VX-2R & FT-857

1944. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 18:22:03 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <g3PMd.28884$xt.4966@fed1read07>
Source record: 82533

Thanks for the clarification

I meant to say "For dbm In the equation above P2 is always one milliwatt"

Thanks

--
Caveat Lector (Reader Beware)

"Richard Fry" <rfry@adams.net> wrote in message
news:36hrvlF51krtpU1@individual.net...
> "Caveat Lector" wrote
>> dB is a ratio for example dB = 10 log10 (P1/P2)
> ...snip...
>> In the equation above P2 is always one milliwatt
> ___________________
>
> To elaborate, P2 above must be 1 mW only if one wants to calculate dBm.
>
> The equation as it is written above will calculate the relationship in
> decibels between any two power values expressed in the same units. For
> example, to find the gain of an amplifier in decibels when its input power
> is 50 watts and its output power is 1.2 kW:
>
> dB = 10*log(1200/50) = 10*log(24) = 10*1.38 = 13.8
>
> RF
>
>
>

1945. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 18:25:48 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <24-dndptnKq7l57fRVn-gQ@comcast.com>
Source record: 82534

"Rob Stampfli" <restamp@hotmail.com> wrote in message
news:R_ZKd.7363$i42.3624@fe1.columbus.rr.com...
> In article <10vd28fc38a79ee@corp.supernews.com>,
> David G. Nagel <nagel@core.com> wrote:
>>stryped@hotmail.com wrote:
>>
>>> When looking for a power supply for my Alinco dr-590, what type of
>>> power supply would I look for? The radio says 13.8 v dc but if I get a
>>> 12 volt power supply will it put out the same wattage at the radio?
>>>
>>12 VDC to 13.8 VDC are nominal voltages. Very few radios are sensitive
>>to variation of voltage as long as the power supply can supply the amps.
>>The Icom 706 series seem to be sensitive to .LT. 12 VDC. I can't speak
>>to the Alinco.
>>Generally the front of any given power supply will say 12 VDC but the
>>specs will indicate 13.8 VDC.
>>No, if you provide 12 VDC you will output a lower wattage regardless of
>> the capacity to provide adequate amperage.
>
> OK. When the meter lamp in my Kenwood TS-430S burned out recently,
> I substituted a 12V replacement from Radio Shack. So, are bulbs
> rated the same way? Certainly, it would appear auto bulbs are,
> but what about wheat lamps?
>
> Rob

Small light bulbs live in a different world. For instance, many flash lights use a bulb that is rated for a lower voltage than the battery. I have one that uses 2 AA cells and a 2.4 V bulb. This makes it brighter, and if the life of the bulb turns out to be 10 hours, that is inconsequential, because 10 hours of use is beyond the life expectancy of a flash light. You probably should have bought a 14 V bulb, since you do care about bulb life.

Tam/WB2TT

1946. Testing for gain/loss in an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 18:28:21 UTC
From: Buck <iam@this.site>
Message-ID: <h7f701d50v81rampj33ogferfk5vc1hl9v@4ax.com>
Source record: 82535

I want to test a couple of antenna designs and compare them to a dipole antenna.

I am wondering if my idea is a good way to measure gain or loss from an antenna. Here goes:

Create a place in which to install the test antenna which will be consistent. For example, 40 foot high between two power poles (no power lines etc, though.)

Setup a fixed location with a Field Strength Meter (FSM) that has a fixed antenna for testing at that location.

Hang a dipole (the reference antenna) and transmit a signal that can be calibrated to a fixed location on the FSM. Then hang the experimental antenna in place of the dipole. Take the measurements without changing anything from the rig. Measuring the power output required to meet the same setting on the FSM as the dipole should give me a fair idea about the gain or loss from the experimental antenna.

or maybe not.

What am I overlooking?

Thanks
Buck
N4PGW

--
73 for now
Buck
N4PGW

1947. Re: Low dipole performance question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 18:31:16 UTC
From: Buck <iam@this.site>
Message-ID: <dnf701pq66f36flu3gt8sd7vtpp8pt4sc0@4ax.com>
Source record: 82536

On Fri, 4 Feb 2005 11:20:44 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>As I understand it, my dipole shoudn't work - it's flat
>(non inverted V), it's laid out running east / west so
>the radiation should be going north and south and it's
>only 20-25 feet above ground.
>
>The antenna is a coax fed (no balun), 220' long 80/160
>trap dipole.
>
>By my way of thinking, this antenna should almost be a
>NVIS antenna.
>
>If so, how did I manage a QSO with K7NN on 1.893
>last night? Tuscon, AZ from Wichita, KS on 100w.
>EM17ip to DM42li on 160m at 04:00z
>
>Am I missing something here?

YES, It's called Propagation! :)

I was on 75 last night with a similar situation for 75 meters. I
wasn't heard by stations in the southeast, an area I usually cover
very well, but instead had to pass traffic to Illinois to be relayed
to Alabama to be relayed to Kansas. Lots of long skip but I couldn't
talk 60 miles to Columbia, SC.

73 for now
Buck
N4PGW

--
73 for now
Buck
N4PGW

1948. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 18:31:25 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4203c021$1_2@127.0.0.1>
Source record: 82537

Richard Clark wrote:

> Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net> wrote:
>>Cecil is CORRECT
>>>A web search for "decibel" uncovered 100 dB of information.
>
> Would this be 100dB above ignorance? 100dB below genius?

100 dB compared to the answers one gets on a newsgroup. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1949. whip antenna calculations

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 18:46:50 UTC
From: Spam Fighter <spamcollector@sympatico.ca>
Message-ID: <pan.2005.02.04.18.46.49.542745@sympatico.ca>
Source record: 82538

I am looking for a .xls spreadsheet (or something that works under LINUX), to calculate the equations for matching common maritime mobile HF whip antennas:

8 ft
10 ft
15 ft
23 ft
40 ft (backstay, approx 5/8 on 20 Meters)

I want to calculate the matching parameters including voltages generated in the tuner for the 1.8 3.5 7 10.1 14 21 28 MHz ham bands and the 2 4 6 8 12 16 and 22 MHz marine bands.

The ARRL ANTENNA HANDBOOK, 18th edition, chapter 18, has some equations and a table of calculated values for a 8 ft whip on ham bands. I wish to duplicate the calculations and figure out the voltage maximums for component values for, say, 100 W key down power.

Take for example the 1st row of the table:

BASE LOADED 8ft whip
F=1.8 MHz
Loading L = 345 uH
Rc Q=50 = 77 ohms
Rc Q=300 = 13 ohms
Rr =0.1 ohms
Feed R = 23 ohms
Matching L = 3 uH

Now at 1.8 MHz
XL of 345 uH = +j3902 ohms

Do I calculate the current from P=I*I*R so for
Rr = 0.1 ohms, I = sqrt(100/Rr) = 31.6 A
so V XL is I*R = 31.6*3902 = over 123 KV? (seems excessive)

or do I use the R values of 77, 13, or 23 ohms? (4.4 KV, 57 KV, 8.1 KV)?

Do I multiple all RMS voltages by sqrt(2) to convert RMS to PEAK?

Greg
VE0ACR
gblair _at_ sympatico _dot_ ca

1950. Re: co phazing 2x 2 meter halo loops

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 19:17:31 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <fTPMd.8855$Dc.6346@trnddc06>
Source record: 82539

"Dr Dave" <wvdave1st @hotmail.com> wrote in message
news:%OMMd.8825$Dc.4803@trnddc06...
> multi-element horizontal omni
>
> http://home.comcast.net/~ross_anderson/HOCollinear.htm
>
The spacing of these antennas is so close at to make it hardly worthwhile-
as Tam points out in a following post. For simple omnis, or dipoles, the
stacking gain peaks around 4'-->5' at 2M. A first shot at modeling shows
that the gain increase from stacking 2 omnis at 27" is around 0.5dB-
assuming a lossless matching network.

Dale W4OP

Dale W4OP

1951. Re: Flagpole/Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 19:23:11 UTC
From: dplatt@radagast.org
Message-ID: <1107isvikb4dce6@corp.supernews.com>
Source record: 82540

>Your dry, painted timber flag-pole, with a plastic insulated antenna wire
>running down it, can be located alongside a wall of your house or at the
>end, side or middle of the garden.

One common house-building style around here (California) uses a
building frame of 2-by-4 or 2-by-6 wood, with an outer layer
consisting of stucco which incorporates a galvanized-steel "chicken
wire" mesh.

I'd encourage keeping HF vertical antennas well clear of any walls
made in this fashion.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1952. Re: Testing for gain/loss in an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 20:01:34 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <f21dd2-3ep.ln1@p400bob.lse.com.au>
Source record: 82542

Raleigh fading? (Addition or subtraction of reflected signal from the main - or flutter you hear on VHF)

You dont mention the freqency in use or the distance between antenna and FSM. There is some kind of optimum or minimum distance (in wavelengths) that I dont remember off hand

You dont seem to be allowing for ground effects and the desired angle of measured radiation. (If that is important..)

Having said that how you have described it is probably how I would attempt it!

Cheers Bob VK2YQA

Buck wrote:
> I want to test a couple of antenna designs and compare them to a
> dipole antenna.
>
> I am wondering if my idea is a good way to measure gain or loss from
> an antenna. Here goes:
>
> Create a place in which to install the test antenna which will be
> consistent. For example, 40 foot high between two power poles (no
> power lines etc, though.)
>
> Setup a fixed location with a Field Strength Meter (FSM) that has a
> fixed antenna for testing at that location.
>
> Hang a dipole (the reference antenna) and transmit a signal that can
> be calibrated to a fixed location on the FSM. Then hang the
> experimental antenna in place of the dipole. Take the measurements
> without changing anything from the rig. Measuring the power output
> required to meet the same setting on the FSM as the dipole should give
> me a fair idea about the gain or loss from the experimental antenna.
>
> or maybe not.
>
> What am I overlooking?
>
> Thanks
> Buck
> N4PGW
>

1953. Re: Flagpole/Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 20:05:42 UTC
From: Photoman <photomanxaa@hotmail.com>
Message-ID: <JsedncFsxtURSJ7fRVn-gg@adelphia.com>
Source record: 82541

I have had to deal with the same situation and I found that ground moisture plays a big part in making the ground radials work, no matter the length. I picked up a couple 50 pound bags of rock salt, sprinkled it in and around the radials before covering them up and it worked like a charm. Don't be stingy with the salt... and it didn't even kill the grass. The longer the rock salt stays in the ground the better the antenna worked. A good watering down of the area is enough to start the process. If you live in a dry climate an occasional watering also helps. Sure the salt will corrode the wire but before that happened I'll probably be an SK.

That's my 2 cents worth but it worked for me. I've got up inverted Vees at one home now and can really appreciate the real estate. I'm on the east coast (VA) and have worked VK & ZL with 100 watts on SSB 75 and 40 meters.

73,
Ken

"jimbo" <jimbo62@spamex.com> wrote in message
news:1107475106.368477.84220@g14g2000cwa.googlegroups.com...
> Well, I found a reference to a 10-40 meter flagpole antenna for HOAs
> that don't like antennas. But they all require radials as long as the
> vertical height of the antenna, and my minuscule lot just won't be
> large enough for radials of any significant size. Is there any other
> option for a vertical antenna for 10-40 meters that doesn't require
> radials?
>
> In another location, I used a random length dipole under the eves of
> the house with a Johnson Matchbox tuner with good results. And maybe, I
> can do the same with a random length dipole in the attic, but the
> flagpole is an intriguing option. And I was always concerned about the
> radiation in the house from the antenna and from the ladder line lead.
> In fact, the irrigation solenoid valves used to open when I
> transmitted.
>
> jimbo
>

1954. Re: Low dipole performance question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-04 23:51:40 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <ls1801tg1agf1k9cu3ic02vme4elpidhqc@4ax.com>
Source record: 82543

On Fri, 4 Feb 2005 11:20:44 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>As I understand it, my dipole shoudn't work - it's flat
>(non inverted V), it's laid out running east / west so
>the radiation should be going north and south and it's
>only 20-25 feet above ground.
>
>The antenna is a coax fed (no balun), 220' long 80/160
>trap dipole.
>
>By my way of thinking, this antenna should almost be a
>NVIS antenna.
>
>If so, how did I manage a QSO with K7NN on 1.893
>last night? Tuscon, AZ from Wichita, KS on 100w.
>EM17ip to DM42li on 160m at 04:00z
>
>Am I missing something here?

Yes, it's spelled "Tucson."

And Don is a superb operator.

1955. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 00:00:59 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <nt2801dnie82ccv8dptk0c05g6q2n3ikti@4ax.com>
Source record: 82544

On Fri, 4 Feb 2005 16:31:00 -0000, "Airy R.Bean" <Me@privacy.net>
wrote:

>From off the top of my head, without any revision.....
>
>IP3, or "Third Order Intercept Point" is an indication
>of how good a mixer is, but it is not a physical point!
>
>If you were to plot the wanted output of a mixer stage against
>the input signal (ignoring the local oscillator input), you would
>get a graph that is a nearly-straight line from the origin
>which then starts to flatten off.
>
>At the point of the line where it starts to curve over to
>flatness, and therefore starts to be non-linear, other
>mixer products, mainly those based upon the third
>harmonic of the input signals start to appear in the
>output. if you plot these other products on your graph in
>addition to the wanted output signal, they grow at a rate (the slope)
>which is 3 times greater than was the initial straight line
>of the wanted output.
>
>If you take the original straight line of the wanted output, and
>extrapolate it so that it meets the other line growing at 3 times
>the slope, you get what is known as the "Third Order Intercept
>Point". The reason that this is a theoretical point is because the
>wanted output has long since flattened off!
>
>The better a mixer is, the higher is IP3 for the outputs of the mixer.
>
>IP3 will be given in terms of the power of the wanted output signal,
>say, 50 dBm - other respondents have informed you that this is
>50dB (or 10^5) times greater than 1mW, or 100W (Perhaps not
> a good figure for an example - a mixer with an output of those
>levels could be a PA stage!). In this case dBm gives us the power relative
>to the mW.
>
>If we now go back to the flattening off of the curve, at some point,
>the curve will be 1dB less than what it would have been had the curve
>not been a curve but had carried on as a straight line. This point is known
>as the "1dB Compression Point" - In this case we use dB and not dBm because
>we are talking relative to some other point on the line.
>
>There is a mathematical derivation (which I don't know off-hand) which

>shows that the 1dB Compression Point is 10.4dB below IP3.
>
>So, I hope that I have gone some way to explaining (or increasing your
>confusion) on the points that you raised!

Pretty good explanation for a mixer, however, IP3 relates equally well
to amplifiers.

In receivers, IP3 is used as a figure of merit and describes how a
receiver will handle weak signals in the presence of other stronger
signals. It is as explained earlier, a theoretical value.

1956. Re: Low dipole performance question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 00:06:47 UTC
From: W4WNT <w4wnt@carolina.rr.com>
Message-ID: <r6UMd.53816$K72.6875934@twister.southeast.rr.com>
Source record: 82548

Hi Ken,

As you are finding out, "working" is a variable definition. Optimum antennas would be 6 elements a mike high, but antennas do work at all heights above ground, and with the help of propagation can do great things. All my antennas are below 40 feet off the ground and I still make contacts, including DX contacts, with vertical and wire dipoles and a G5RV.

Good luck and good DX,

Bill, W4WNT

"Ken Bessler" <kg0wx@NOSPAMyahoo.com> wrote in message
news:M9OMd.2187$GT.297@okepread01...
> As I understand it, my dipole shoudn't work - it's flat
> (non inverted V), it's laid out running east / west so
> the radiation should be going north and south and it's
> only 20-25 feet above ground.
>
> The antenna is a coax fed (no balun), 220' long 80/160
> trap dipole.
>
> By my way of thinking, this antenna should almost be a
> NVIS antenna.
>
> If so, how did I manage a QSO with K7NN on 1.893
> last night? Tuscon, AZ from Wichita, KS on 100w.
> EM17ip to DM42li on 160m at 04:00z
>
> Am I missing something here?
> --
> 73's es gd dx de Ken KG WX
> Grid EM17ip, Flying Pigs #1055,
> List Owner, Yahoo! E-groups:
> VX-2R & FT-857
>

1957. Re: Isotron antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 00:16:14 UTC
From: W4WNT <w4wnt@carolina.rr.com>
Message-ID: <ifUMd.53818$K72.6882392@twister.southeast.rr.com>
Source record: 82545

I just acquired a used Isotron 40m antenna. Set up on a plastic pipe on the deck, 13 feet off the ground. I've worked VE2, EA8, and KP2 on CW. Receive signal is about 2 S units below an R-7000 in the back yard. Next step is to get some electrical conduit and build a 20 foot mast to see how that works. Instructions (available on the Internet) say it needs a metal support to get the correct impedance.

73,

Bill, W4WNT

"George Csahanin" <george@dyb.com> wrote in message
news:isaLd.11988$2e7.1949@newssvr12.news.prodigy.com...
> Sheesh, you're right. I was just idly curious about the antenna. I know it
> isn't the same as 3 elements at 120'. And I did find that it "gets out".
> But
> was wondering what results others had, like how is the 80 or 160 version.
> Those bands may be "pushing it" a bit. But maybe not. It certainly had me
> grinning, just like when I first built a W5QJR loop years ago and worked
> JA
> on 40 CW with 579, loop next to me, ground floor in house...
>
> But thanks for the additional amusement along the way.
>
> -GeorgeC
> W2DB
> Awstin, TX
>
> "Caveat Lector" <CL@barahmas.com> wrote in message
> news:1PVKd.24$bu.4@fed1read06...
>> The original poster asked for opinions from those that owned the isotron
>> antenna -- we gave him that.
>>
>> Now if he had asked for antenna measurements on an antenna range and
>> comparisons to other antennas -- that is a different question. And I
>> don't
>> know where he would have found that answer.
>>
>> As far as statistics -- fact is 3 out of 10 accidents are caused by drunk
>> drivers -- thus 7 out of 10 are caused by sober drivers - guess we ought
> to
>> get em off the road - huh
>>
>> --
>> Caveat Lector

>>
>>
>>
>> "John Smith" <kd5yikes@mindspring.com> wrote in message
>> news:cth7ee0224c@enews4.newsguy.com...
>> >
>> > "Caveat Lector" <CL@barahmas.com> wrote in message
>> > news:lIOKd.937$1O2.42@fed1read05...
>> >> Oh gee all the guy wanted was some opinions which I gave him at
>> >> http://www.eham.net/reviews/detail/311
>> >>
>> >> From here he gets all this ranting about CBers and 50 kW
>> >> --
>> >> Caveat Lector
>> >>
>> >>
>> >>
>> >>> On Sat, 29 Jan 2005 10:43:25 +0100, "F8BOE" <f8boe-8@bluemail.ch>
>> >>> wrote:
>> >>>
>> >>>>Hoy!
>> >>>>
>> >>>>Thank's for the very interresting link to the isotron reviews. It's
> nice
>> >>>>to
>> >>>>see that citizen's band 's still living on...
>> >>>>Everyone decided to buy one and was pleased by the SWR... but none of
>> >>>>them
>> >>>>seemed concerned about radiation patterns and loss (negative gain?),
> nor
>> >>>>by
>> >>>>the classical "how does it work" question.
>> >>>>
>> >>>>No they were all happy to kick 50W power in it to make DX with the
>> >>>>guy
>> >>>>in
>> >>>>the village nearby... DX begins at your door... But never heard about
>> >>>>ground
>> >>>>wave propagation.
>> >>>>
>> >>>>Nevermind... As far as everybody's happy, it's all good!
>> >>>>
>> >>>>73 de F8BOE Olivier ...-.-
>> >>>>
>> >>>>
>> >>>>
>> >>
>> >>
>> > That's similar to "Statistics show Xnprtd products work better! (This
>> > study sponsored by Xnprtd products)".
>> >

>> >
>> > John
>> >
>>
>>
>
>

1958. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 00:25:58 UTC
From: Old Ed <eXseniorsDeleteThisAndTheX@earthlink.net>
Message-ID: <qoUMd.519$UX3.168@newsread3.news.pas.earthlink.net>
Source record: 82546

Hi Airy -

I generally agree with your description of IP3; but I would add
a few points.

The IP3 model was first published in a now-classic article
back in the 60s. (I could probably dig up the specific
reference, if someone really wants to know.)

The original author observed that many practical devices
(e.g., mixers) exhibit distortion levels that rise as the "power"
of the product in question. For example, third-order distortion
rises 3 times as fast (dB scale) as the desired (linear) signal.

If the subject distortion is plotted against input/output levels,
and approximated by a best-fit straight line, that line will
intersect a similar linear extrapolation of the desired signal
at a point dubbed the "Intercept Point."

The utility of all this is that you can use a single specification--
intercept point--to make quite good predictions of distortion
levels over a wide range of input conditions.

But it is important to remember that IP is only a MODEL,
and an empirical one at that. Real devices will never follow
the model exactly and completely--as you note in your
discussion of the saturation region.

73, Ed, W6LOL

"Airy R.Bean" <Me@privacy.net> wrote in message
news:36hmgeF51s0hlU1@individual.net...
> From off the top of my head, without any revision.....
>
> IP3, or "Third Order Intercept Point" is an indication
> of how good a mixer is, but it is not a physical point!
>
> If you were to plot the wanted output of a mixer stage against
> the input signal (ignoring the local oscillator input), you would
> get a graph that is a nearly-straight line from the origin
> which then starts to flatten off.
>
> At the point of the line where it starts to curve over to
> flatness, and therefore starts to be non-linear, other
> mixer products, mainly those based upon the third
> harmonic of the input signals start to appear in the
> output. if you plot these other products on your graph in

> addition to the wanted output signal, they grow at a rate (the slope)
> which is 3 times greater than was the initial straight line
> of the wanted output.
>
> If you take the original straight line of the wanted output, and
> extrapolate it so that it meets the other line growing at 3 times
> the slope, you get what is known as the "Third Order Intercept
> Point". The reason that this is a theoretical point is because the
> wanted output has long since flattened off!
>
> The better a mixer is, the higher is IP3 for the outputs of the mixer.
>
> IP3 will be given in terms of the power of the wanted output signal,
> say, 50 dBm - other respondents have informed you that this is
> 50dB (or 10^5) times greater than 1mW, or 100W (Perhaps not
> a good figure for an example - a mixer with an output of those
> levels could be a PA stage!). In this case dBm gives us the power relative
> to the mW.
>
> If we now go back to the flattening off of the curve, at some point,
> the curve will be 1dB less than what it would have been had the curve
> not been a curve but had carried on as a straight line. This point is
known
> as the "1dB Compression Point" - In this case we use dB and not dBm
because
> we are talking relative to some other point on the line.
>
> There is a mathematical derivation (which I don't know off-hand) which
> shows that the 1dB Compression Point is 10.4dB below IP3.
>
> So, I hope that I have gone some way to explaining (or increasing your
> confusion) on the points that you raised!
>
>
> "jason" <cheanglong@gmail.com> wrote in message
> news:1107526403.830643.25680@z14g2000cwz.googlegroups.com...
> > May I know what actually the unit of dbm and db is different from one
> > another?
> > If they are different how can we minus the gain in unit of db from a
> > IP3 in unit of dbm?
> > Kindly enlighthen
> > Thank you all
>
>

1959. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 00:25:59 UTC
From: Old Ed <eXseniorsDeleteThisAndTheX@earthlink.net>
Message-ID: <roUMd.520$UX3.200@newsread3.news.pas.earthlink.net>
Source record: 82547

Hi Reg -

It looks like I saw your post before Airy, so I'll respond.
(Note: I sometimes have difficulty telling when some of the posters here are really looking for answers, and when they are just trying to bait each other. I am going to start by assuming that you are in the former category.)

More below...

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:cu0d62$9b2$1@sparta.btinternet.com...
>
> "Airy R.Bean" wrote -
>
> > The better a mixer is, the higher is IP3 for the outputs of the mixer.
> >
> ==========
>
> From a circuit operational point of view, could you please
> summarise in what way a high IP3 makes a better mixer?
>
A higher IP3 simply means that the hypothetical mixer can handle bigger signals before it produces a given level of 3rd order IM distortion products.

Whether or not that makes it a "better" mixer would depend on many other specifications, such as noise figure, loss/gain, bandwidth, and even size and power consumption.

> Am I correct in assuming the device need not be a mixer?
> Could it be an amplifier?

If you're asking whether other components such as amplifiers can have IP3 specifications, the answer is definitely yes.

> In which case some of the better or worse parameters would just
> become meaningless.

I can't figure out what you're trying to say in this last sentence. But correct and relevant specifications are never "meaningless." (At least I can't think of any such pathological examples.)

> ----
> Reg.
>
>

1960. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 04:02:05 UTC
From: jason <cheanglong@gmail.com>
Message-ID: <1107575395.192658.94390@f14g2000cwb.googlegroups.com>
Source record: 82549

Hello to all that Helps
You are all very kind and genius.
It is first time I asked question in newsgroup and I received so many
kind answers.
I am so happy. Thanks a lot

So from what you have all explained, can I bold enough to say that I
can add any value in db and any value in dbm together without
converting to one db or dbm unit because they are in the ratio form and
having virtually the same 10log (P1/P2) formula and nothing else more??
Please verify

Thank you

rgds and thanks
Jason

1961. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 04:29:13 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <42044aca.27123120@news.crosslink.net>
Source record: 82550

On 4 Feb 2005 20:02:05 -0800, "jason" <cheanglong@gmail.com> wrote:

>Hello to all that Helps
>You are all very kind and genius.
>It is first time I asked question in newsgroup and I received so many
>kind answers.
>I am so happy. Thanks a lot
>
>So from what you have all explained, can I bold enough to say that I
>can add any value in db and any value in dbm together without
>converting to one db or dbm unit because they are in the ratio form and
>having virtually the same 10log (P1/P2) formula and nothing else more??
>Please verify

Dear Jason,

I am sorry to say that I cannot agree with your conclusion.

In my opinion, in the general case, you can NOT add dB and dBm. They have different applications and were not intended to be added together.

A quantity expressed in dBm is intended to convey, or imply, a specific power level in a specific load impedance. On the other hand the dB is NOT so defined. Therefore, I cannot think of a situation in which you could simply add them together and have a result that anyone would be able to iterpret at face value.

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1962. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 05:03:36 UTC
From: Jason <cheanglong@gmail.com>
Message-ID: <1107579816.538221.28760@f14g2000cwb.googlegroups.com>
Source record: 82551

Dear Bob,

I understand what you mean. But in the RF lecture, gain is given in db unit, while IP3 is in dbm unit, then in order to find overall IP3 for a cascaded system, the gain and IP3 which in different db unit are add or deduct from one another without effort to change the unit. WHy is it so?
Anyone can help?
Thank you

rgds and thanks
Jason

1963. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 05:04:19 UTC
From: Jason <cheanglong@gmail.com>
Message-ID: <1107579859.420240.147140@o13g2000cwo.googlegroups.com>
Source record: 82552

Dear Bob,

I understand what you mean. But in the RF lecture, gain is given in db unit, while IP3 is in dbm unit, then in order to find overall IP3 for a cascaded system, the gain and IP3 which in different db unit are add or deduct from one another without effort to change the unit. WHy is it so?
Anyone can help?
By the way, how can I get notification from this newsgroup whenever there is new contribution? No email notify me on this. How to do the correct setting?
Thank you

rgds and thanks
Jason

1964. Re: Low dipole performance question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 05:32:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1108mimiarmgl41@corp.supernews.com>
Source record: 82553

You seem to be under the impression that an antenna fits into only one
of two categories, "works" and "doesn't work". That's the first mistake.

You also seem to believe that all the power you radiate goes in only one
direction or at one elevation angle. That's the second mistake.

Once you learn a little about the basic operation of antennas, and how
to interpret a radiation pattern, the answer to your question will
become clear.

Roy Lewallen, W7EL

Ken Bessler wrote:
> As I understand it, my dipole shoudn't work - it's flat
> (non inverted V), it's laid out running east / west so
> the radiation should be going north and south and it's
> only 20-25 feet above ground.
>
> The antenna is a coax fed (no balun), 220' long 80/160
> trap dipole.
>
> By my way of thinking, this antenna should almost be a
> NVIS antenna.
>
> If so, how did I manage a QSO with K7NN on 1.893
> last night? Tuscon, AZ from Wichita, KS on 100w.
> EM17ip to DM42li on 160m at 04:00z
>
> Am I missing something here?

1965. Installed M2 Horizontal Loop today - PHOTOS

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 05:49:15 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <1108njbbertjqcc@news.supernews.com>
Source record: 82554
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

1. http://www.ad5th.com/VHF.html

Also shown my Ringo Ranger II - ARX-2B. Links to technical data for each antenna also.

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

1966. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 06:33:08 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cu1pb4$j2q$1@hercules.btinternet.com>
Source record: 82555

For "meaningless" just read "not applicable".

Thanks.

1967. Mini Beams

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 06:58:44 UTC
From: Dave <myself@yourself.ie>
Message-ID: <E8_Md.19$zQ2.11@newsfe2-gui.ntli.net>
Source record: 82556

Hi All
I only have a small plot and unable to get a big triband beam up
due to the elements hanging over my neighbours garden so the only beam I am
able to put up is a mini beam which one in your opinion is the best the TGM
MQ series or the cushcraft MA5B. Has anybody had any experience with both of
them
Dave

1968. Re: Testing for gain/loss in an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 07:17:54 UTC
From: Buck <iam@this.site>
Message-ID: <7gs8011tcf128gir4sjijp2cku4vfostcu@4ax.com>
Source record: 82557

On Sat, 05 Feb 2005 07:01:34 +1100, Bob Bob <bcnntp@optusnet.com.au>
wrote:

>You dont mention the freqency in use or the distance between antenna and
>FSM. There is some kind of optimum or minimum distance (in wavelengths)
>that I dont remember off hand
>
>You dont seem to be allowing for ground effects and the desired angle of
>measured radiation. (If that is important..)
'

It is for testing HF antennas, but no reason it can't work for VHF as
well.

After writing this, I was thinking of the G5RV, it has a cloverleaf
pattern so it might register as a loss since the antennas would be
broadside to each other.

I don't know the distance for the FSM. I suspect it would have to be
a good distance away. probably a wave length or more.

This would work best with a beam antenna as the lobe would be
consistent. but a 3/2 wave antenna would have different radiation
lobes so it might register a loss instead of the gain it actually has.

It is a thought, but I may have to reconsider it.

Thanks

Buck
N4PGW

--
73 for now
Buck
N4PGW

1969. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 08:33:25 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <kkIs58GVTIBCFwcq@g3ohx.demon.co.uk>
Source record: 82558

In message <qoUMd.519$UX3.168@newsread3.news.pas.earthlink.net>, Old Ed
<eXseniorsDeleteThisAndTheX@earthlink.net> writes

<SNIP>
>
>The original author observed that many practical devices
>(e.g., mixers) exhibit distortion levels that rise as the "power"
>of the product in question. For example, third-order distortion
>rises 3 times as fast (dB scale) as the desired (linear) signal.
<Snip>

Ed, where the increasing intermodulation distortion is simply a result
of increasing the level of the signals at the input of the mixer (or
amplifier), third order distortion actually rises TWICE as fast as the
desired signal. Third order distortion DOES rise on a 'three dB per dB'
basis, but the wanted signal also rises - at 1dB per dB. The difference
is 2dB. So the relationship is 2dB per dB.

If you continued to increase the signal levels, you might expect that
the level of the intermodulation would eventually catch up with - and
overtake - the level of the wanted signal (it doesn't, of course).

The third order intercept point is simply the hypothetical level where
the level of the intermodulation would have risen so much (at 2dB per
dB) that it equals the level of the wanted signal.

Ian.
--

1970. Re: Low dipole performance question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 09:03:43 UTC
From: nm5k@wt.net
Message-ID: <1107594223.448635.327190@o13g2000cwo.googlegroups.com>
Source record: 82559

Ken Bessler wrote:
> As I understand it, my dipole shoudn't work -

I shouldn't either, but I'm too young to retire.

> it's flat
> (non inverted V),

Best way to have one, as far as ground losses...

it's laid out running east / west so
> the radiation should be going north and south

It's *maximum* radiation is going e/w...
Not all of it...

and it's
> only 20-25 feet above ground.

Well, at least it taller than I can reach...
>
> The antenna is a coax fed (no balun), 220' long 80/160
> trap dipole.
>
> By my way of thinking, this antenna should almost be a
> NVIS antenna.

No almost about it...It is...
>
> If so, how did I manage a QSO with K7NN on 1.893
> last night? Tuscon, AZ from Wichita, KS on 100w.
> EM17ip to DM42li on 160m at 04:00z

The same way I've been working EU, JA, etc, etc using
a 40 ft high dipole on 160, 80......The bands are in
better than usual shape...I don't usually hear JA's
on 160m, with a 40 ft dipole very well...But lately,
I am...
>
> Am I missing something here?

Dunno...If you are, I'm too far away to be a likely
suspect...MK

1971. Re: Low dipole performance question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 09:18:01 UTC
From: nm5k@wt.net
Message-ID: <1107595081.021712.152370@l41g2000cwc.googlegroups.com>
Source record: 82560

ooops....I said.,
it's laid out running east / west so
> the radiation should be going north and south

It's *maximum* radiation is going e/w...
Not all of it...

typing too fast for my own good....
yea, if it's e/w, *maximum* radiation is broadside
at n/s like you say...Assuming it's pretty close to
a 1/2 wave or so, and not real long for the WL...

1972. average signal amplitude

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 10:21:06 UTC
From: Galilea <iportu@hotmail.com>
Message-ID: <IBFor6.I92@bath.ac.uk>
Source record: 82562

When recording impulsive wideband signals I have noticed that the mean value of the signal is sometimes not equal to zero from the start to the end of the impulse. Is this possible and if so, why?

Thank you for your help

1973. Mean signal amplitude

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 10:21:08 UTC
From: Galilea <iportu@hotmail.com>
Message-ID: <IBFor8.IA5@bath.ac.uk>
Source record: 82563

Hello, thank you for reading this post.

When analysing wideband impulse signals from a wideband antenna I have realised that the average signal magnitude is not zero. I have thought this is because the reactance of the antenna at different frequencies varies and since it is a wideband antenna there can be energy measured since it is only for an extremely small period of time of 2-4 us. However, I am not sure and would greatly appreciate the views of this newsgroup.

1974. average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 10:21:24 UTC
From: Galilea <iportu@hotmail.com>
Message-ID: <IBForo.IBF@bath.ac.uk>
Source record: 82561

Hello, thank you for reading this post.

When analysing wideband impulse signals from a wideband antenna I have realised that the average signal magnitude is not zero. I have thought this is because the reactance of the antenna at different frequencies varies and since it is a wideband antenna there can be energy measured since it is only for an extremely small period of time of 2-4 us. However, I am not sure and would greatly appreciate the views of this newsgroup.

1975. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 11:38:29 UTC
From: Jason <cheanglong@gmail.com>
Message-ID: <1107603509.539446.240130@c13g2000cwb.googlegroups.com>
Source record: 82564

But why we can add or minus gain and IP3 which are in different unit(db
and dbm)?
Anyone knows?
Thank you

rgds
Jason

1976. Re: Low dipole performance question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 11:59:01 UTC
From: KC1DI <elbc2@pivot.net>
Message-ID: <4204B505.6050206@pivot.net>
Source record: 82565

Ken Bessler wrote:
> As I understand it, my dipole shoudn't work - it's flat
> (non inverted V), it's laid out running east / west so
> the radiation should be going north and south and it's
> only 20-25 feet above ground.
>
> The antenna is a coax fed (no balun), 220' long 80/160
> trap dipole.
>
> By my way of thinking, this antenna should almost be a
> NVIS antenna.
>
> If so, how did I manage a QSO with K7NN on 1.893
> last night? Tuscon, AZ from Wichita, KS on 100w.
> EM17ip to DM42li on 160m at 04:00z
>
> Am I missing something here?

Hi Ken,

As many have already pointed out. Propagation conditions account for a lot. but you also have some misconceptions.. a dipole on 80 or 160m that low to the ground exhibits almost omni directional patter not much of a lobe off the sides. So the orientation is not all that important.

high angle radiation can work out quite well on the low bands at times, and is useful under certain conditions. I've found here that my Vertical on 160m is not always the best dx catcher. sometimes not often the dipole beats it out on DX signals.. it all depend upon propagation condx. As one old timer told me many years ago.. the Ionosphere is a get leveler of signals.

73 Dave Kc1di

P.S. the Moral is not give up trying if your antenna is only 40 or less feet in the air a great number of hams around the world are in the same boat. There calls may not ever be in the top 10 of the DXCC list or winner of the Weekend DX test , but they have lots of fun. and part of the fun is the unpredictable nature of radio waves.. I've always found it interesting to call CQ and have someone answer weather it's next door or around the world. it's still fun :) Sort of like fishing isn't it.

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

1977. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 12:17:29 UTC
From: Dave <noone@nowhere.com>
Message-ID: <GaOdnSfwz8_BJJnfRVn-tg@crocker.com>
Source record: 82566

is this surprising? what did you expect to find, and why?? why do you think 2-4us is a small period of time, and why does that matter?? what is an 'impulse' signal that you are measuring?? and how do you define 'signal magnitude??

"Galilea" <iportu@hotmail.com> wrote in message news:IBForo.IBF@bath.ac.uk...
> Hello, thank you for reading this post.
>
> When analysing wideband impulse signals from a wideband antenna I have
> realised that the average signal magnitude is not zero. I have thought this
> is because the reactance of the antenna at different frequencies varies and
> since it is a wideband antenna there can be energy measured since it is only
> for an extremely small period of time of 2-4 us. However, I am not sure and
> would greatly appreciate the views of this newsgroup.
>
>

1978. Re: average signal amplitude

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 12:19:05 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Aa6dnaC1soomJJnfRVn-pg@crocker.com>
Source record: 82567

answer my questions asked in one of your other postings... asking the same questions more or less in 3 postings with different subject lines within 1 minute does not enhance your chances of getting a reply.

"Galilea" <iportu@hotmail.com> wrote in message news:IBFor6.I92@bath.ac.uk...
> When recording impulsive wideband signals I have noticed that the mean value
> of the signal is sometimes not equal to zero from the start to the end of
> the impulse. Is this possible and if so, why?
>
> Thank you for your help
>
>

1979. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 13:24:39 UTC
From: CWB <cboone@nospam.earthlink.net>
Message-ID: <rO3Nd.13831$uL5.9486@fe2.texas.rr.com>
Source record: 82568

I dont know where YOU got your antenna info from....but just because a dipole has wide b/w (low Q) does not lower its gain unless the diameter of the dipole causes the resonant length to be much shorter than 1/2 wavelength...but in practical terms, that wont happen (unless he makes the dipole out of 4 ft pipe for instance! ;)

A wide b/w (fat) dipole made for 80m (a cage dipole) does not have any less signal strength than a single wire dipole (2.15 dbi).....sorry.

Chris
WB5ITT
PG-9-5322 FCC Commercial
Telecom/Broadcast engineer for 30 years

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:16518-41FE5CDA-77@storefull-3256.bay.webtv.net...
> Roy, W7EL wrote:
> "That`s interesting.(I don`t know why you want fat. It will give you
> lower gain.) How much lower? Why?"
>
> It`s a fact. Fat antennas have more bandwidth, and that is inversely
> proportional to Q. Teducing antenna Q, by fattening the antenna, reduces
> the antenna potential by about the same factor.
>
> Best regards, Richard Harrison, KB5WZ

1980. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 13:29:44 UTC
From: CWB <cboone@nospam.earthlink.net>
Message-ID: <cT3Nd.13833$uL5.10947@fe2.texas.rr.com>
Source record: 82569

The formula for a DIPOLE is 468/freq in Mhz = length in ft.....the formula
234/freq is for one leg OR usually quoted for a 1/4wave vertical but the
standard dipole formula is 1/2 wave (just to clarify that).

As for a good FM omni antenna, he should build a simple 1/4 ground plane or
coaxial sleeve antenna.....OR a turnstile (cross dipoles)..

FM stations USUALLY use Circular Polarization.....(similar to horiz and
vertical at the same time...)
so an antenna set for horiz or vertical will work (but lose 3db of signal
compared to a CP antenna!)

Chris
WB5ITT

"Buck" <iam@this.site> wrote in message
news:hknrv0pmfqlklg6v1t5oj15183vio29b6k@4ax.com...
> On 30 Jan 2005 17:14:42 -0800, bradmanz@comcast.net wrote:

> I don't know why you want FAT. It will give you lower gain. However,
> you might consider building a dipole out of 1/2 copper tubing. A
> piece of PVC T connector and two elements about 2.4 feet long each can
> be connected to the coax, painted (if desired) and mounted inside the
> attic or outside if desired.
>
> The formula for a dipole is 234/frequency in Mhz = 1 leg of a dipole
> or 1/4 wave length approximately. (Each dipole needs two legs.)
>
> the copper pipe will give plenty of band width and do as well or
> better than three inches.
>
> You don't have to be worried about perfect dimensions as you aren't
> worried about SWR so the elements I showed you will work very well.
>
> Someone correct me, but don't FM stations transmit both vertical and
> horizontal?
>
> I hope this helps.
>
>
> --
> 73 for now
> Buck
> N4PGW
>

1981. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 13:50:21 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <36k197F52o2dpU1@individual.net>
Source record: 82570

"Jason" wrote
> But why we can add or minus gain and IP3
> which are in different unit (db and dbm)?

The algebraic summation of decibel values is a mathematically legitimate, and convenient way to determine system performance. Decibels are based on logarithms. Adding/subtracting logs or (decibels) is easier than manipulating the real values they represent. The final dB value in an analysis can be converted back to whatever units are desired.

For example, below is an analysis of a UHF radio link system over a free-space path. The 5 watt power of the transmitter is first converted to dBm so it can be used with other dB values present to analyze the system. The same result is reached when multiplying tx power in watts by system gains and losses expressed as decimal values, but that process is more awkward -- at least when using a pencil & paper or a pocket calculator (computers don't care).

TX PWR OUTPUT 36.99 dBm
TX ANT 19.20 dBi
RX ANT 19.20 dBi
TOTAL GAINS 75.39 dB

DISTANCE 18.00 Miles
FREQ 950.00 MHz
PATH LOSS 121.26 dB
LINE LOSS TX 1.80 dB
LINE LOSS RX 3.00 dB
CONN LOSS 1.00 dB
OTHER 0.00 dB
TOTAL LOSSES 127.06 dB

RX SIGNAL -51.67 dBm (584 uV)
RX SIGNAL REQ'D -90.00 dBm
RAW FADE MARGIN 38.33 dB

RF

Visit http://rfry.org for FM transmission system papers.

1982. Re: Low dipole performance question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 14:06:22 UTC
From: garigue <garigue@comcast.net>
Message-ID: <vtqdncxdLdnBT5nfRVn-hw@comcast.com>
Source record: 82571

> As I understand it, my dipole shoudn't work - it's flat
> (non inverted V), it's laid out running east / west so
> the radiation should be going north and south and it's
> only 20-25 feet above ground.

Hello Ken ....My OCF dipole at the same height can only be categorized as a real piece of crap.
Hopefully I can get something up better in the near future but that depends on the neighbor's cooperation
with using a maple tree in her yard. I ran inverted vees for 30 years at 40 to 50 feet and have had excellent results
on 80 and 40. I am glad to hear that your set up is working.

God Bless ... 73 Tom Popovic KI3R Belle Vernon Pa.

1983. Balun for loopstick antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 14:14:37 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <shk901tms4j3qvc9m82mrp94nimnv0bulq@4ax.com>
Source record: 82372

Concerning the loopstick RX antenna identified as "VLF to Longwave:
Wideband Tuner" shown at:
http://www.stormwise.com/widetune.htm

I was told that the tap at 10% was to provide a match for a receiver
expecting a 50-ohm antenna.

Would I achieve the same result by using 405 turns, no tap, and a 9:1
current balun?

I am building a tuning cap box that covers from 25pF to 2uF in 25pF
increments. I am hoping to cover from 9kHz to 30mHz using the
variable capacitor box and 1,000 turns, with intermediate taps at 10,
33, 100, and 333 turns -- to be used as appropriate for each band.

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

1984. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 14:21:41 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <36k33qF53hro7U1@individual.net>
Source record: 82373

"CWB" wrote
> FM stations USUALLY use Circular Polarization.....
>(similar to horiz and vertical at the same time...)
> so an antenna set for horiz or vertical will work
> (but lose 3db of signal compared to a CP antenna!)

FM broadcast stations in the US _must_ radiate their licensed h-pol ERP regardless of the ERP they radiate in other polarization planes. However for most omni FM stations, v-pol RMS ERP cannot (legally) exceed h-pol RMS ERP.

The gain of a true c-pol transmit antenna is 3dB lower than for the same configuration of linearly polarized radiators. However in FM broadcast, the transmitter power is increased by 3dB to make up for that, and h-pol ERP is the same for either antenna configuration. Therefore the h-pol field strength produced by either transmit antenna over the same path should be the same.

Using a c-pol antenna to receive a c-pol FM station would add 3dB to the signal seen by rx (over a free space path), as well as reduce the self-interference caused by multipath.

RF

Visit http://rfry.org for FM transmission system papers.

1985. fiberglass mast

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 14:33:52 UTC
From: ml <m@di.net>
Message-ID: <m-C96001.09334705022005@news.verizon.net>
Source record: 82374

does anyone know a good place that sells fiberglass mast

i need a 5ft section approx 1 1/2in tv mast style

tnx

1986. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 14:56:17 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <$g5qo0BR6NBCFwud@g3ohx.demon.co.uk>
Source record: 82375

In message <1107603509.539446.240130@c13g2000cwb.googlegroups.com>,
Jason <cheanglong@gmail.com> writes
>But why we can add or minus gain and IP3 which are in different unit(db
>and dbm)?
>Anyone knows?
>Thank you
>
>rgds
>Jason
>

Think of it this way:
dBm indicates an absolute value. db indicates a relative value.
For example:
0dBm = 1mW
0dBm + 3dB = 1mW x 2 = 2mW = 3dBm
0dBm + 10dB = 1mW x 10 = 10mW = 10dBm
3dBm + 10dB = 2mW x 10 = 20mW = 13dBm
20dBm - 30dB = 100mW/1000 = 0.1mW = -10dBm

What you can't do is to add dBm values directly.
If you have power combiner, and add 10dBm and 13dBm, you can't add 10dBm
and 13dBm and get 23dBm. 23dBm would be 200mW (because 20dB is x 100,
3dB is x 2, so 100 x 2 =200), and this is incorrect.

What you have to do is to convert the dBm values into mW, then add the
mW.
10dBm = 10mW
13dBm = 20mW
Total power = 30mW (and not 200mW)
30mW can then be converted back into dBm (= appx 14.5dBm)

Do you see the pattern?
Ian.
--

1987. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 15:19:36 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <Pdednfn1wMqaeZnfRVn-vQ@comcast.com>
Source record: 82376

"Galilea" <iportu@hotmail.com> wrote in message
news:IBForo.IBF@bath.ac.uk...
> Hello, thank you for reading this post.
>
> When analysing wideband impulse signals from a wideband antenna I have
> realised that the average signal magnitude is not zero. I have thought
> this
> is because the reactance of the antenna at different frequencies varies
> and
> since it is a wideband antenna there can be energy measured since it is
> only
> for an extremely small period of time of 2-4 us. However, I am not sure
> and
> would greatly appreciate the views of this newsgroup.
>
>
Are you saying the DC value is not 0 ?

Tam/WB2TT

1988. Re: fiberglass mast

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 15:31:42 UTC
From: Jim Phelps <Jim.Phelps@mi.com>
Message-ID: <cu2obc$b7h$04$1@news.t-online.com>
Source record: 82377

"ml" <m@di.net> wrote in message
news:m-C96001.09334705022005@news.verizon.net...
> does anyone know a good place that sells fiberglass mast
>
> i need a 5ft section approx 1 1/2in tv mast style
>
>
> tnx

Have you tried Cubex? www.cubex.com They make Quads and sell fiberglass spreaders and have a boom listed for 44.95. It's 13' however. Contacting them may be helpful as they may have a crushed/broken mast where 5' or so is good and sell it to you to recover some of the loss.

1989. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 15:32:28 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4204e899$1_1@127.0.0.1>
Source record: 82378

Tam/WB2TT wrote:
> "Galilea" <iportu@hotmail.com> wrote
>>When analysing wideband impulse signals from a wideband antenna I have
>>realised that the average signal magnitude is not zero. I have thought
>>this
>>is because the reactance of the antenna at different frequencies varies
>>and
>>since it is a wideband antenna there can be energy measured since it is
>>only
>>for an extremely small period of time of 2-4 us. However, I am not sure
>>and
>>would greatly appreciate the views of this newsgroup.
>>
> Are you saying the DC value is not 0 ?

He seems to be saying the DC value is not 0 for a sampling
time period of 2-4 uS which would of course be true for a
sine wave if, e.g., an odd number of positive cycles were
sampled along with an even number of negative cycles. Or
if the frequency was lower than 250 kHz. Plus all the
signals and noise are superposed.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

1990. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 15:50:56 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <4204e9e1.6903096@news.crosslink.net>
Source record: 82379

On 4 Feb 2005 21:04:19 -0800, "Jason" <cheanglong@gmail.com> wrote:

>Dear Bob,
>
>I understand what you mean. But in the RF lecture, gain is given in db
>unit, while IP3 is in dbm unit, then in order to find overall IP3 for a
>cascaded system, the gain and IP3 which in different db unit are add or
>deduct from one another without effort to change the unit. WHy is it
>so?
>Anyone can help?
>By the way, how can I get notification from this newsgroup whenever
>there is new contribution? No email notify me on this. How to do the
>correct setting?

Assume that your system has IP3 = X dBm measured at point Y in the
system.

Assume further that there are amplifier stages A and B following point
Y, and that those amplifiers contribute a gain of A dB and B dB.

At the output of B the power level, in dBm, will be X + A + B.

In this way you avoid the confusion by clearly stating that the power
level at the output is X + A + B. In that context, the values can be
added, because you have made it clear that it is a power level in dBm
- not a gain in dB.

Regarding the auto-notification. I do not know of any such system.
Perhaps that is an opportunity for someone to develop a valuable
product.

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

1991. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 16:03:19 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <36kb2tF52fdruU1@individual.net>
Source record: 82385

The higher the IP3, the higher is the implied 1dB Compression
Point and therefore the higher up the straight line before
curvature starts and therefore the bigger signal handling
capability before in wanted products come along/

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cu0d62$9b2$1@sparta.btinternet.com...
> "Airy R.Bean" wrote -
> > The better a mixer is, the higher is IP3 for the outputs of the mixer.
> From a circuit operational point of view, could you please summarise in
what
> way a high IP3 makes a better mixer?

1992. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 16:04:42 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <36kb2uF52fdruU2@individual.net>
Source record: 82382

I don't know the answer to that, and you are as capable of
looking it up as I am.

If an amplifier, then perhaps you'd run into clipping problems
or rail problems before non-linearity?

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cu0d62$9b2$1@sparta.btinternet.com...
> "Airy R.Bean" wrote -
> > The better a mixer is, the higher is IP3 for the outputs of the mixer.
> Am I correct in assuming the device need not be a mixer? Could it be an
> amplifier? In which case some of the better or worse parameters would
just
> become meaningless.

1993. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 16:07:28 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <36kb2uF52fdruU3@individual.net>
Source record: 82387

If the poster is "Airy" or "Reg" then it is likely to be
a genuine question and answer session, or an attempt
to promote discussion.

If the poster is "Brian Reay", "Spike" or "Frank Turner-Smith", then
it will be a rather silly and childish attempt at baiting.

"Old Ed" <eXseniorsDeleteThisAndTheX@earthlink.net> wrote in message
news:roUMd.520$UX3.200@newsread3.news.pas.earthlink.net...
> It looks like I saw your post before Airy, so I'll respond.
> (Note: I sometimes have difficulty telling when some of the posters here
> are really looking for answers, and when they are just trying to bait each
> other

1994. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 16:14:37 UTC
From: Galilea <iportu@hotmail.com>
Message-ID: <IBG54D.4ut@bath.ac.uk>
Source record: 82380

First of all, my apologies. As you can gather it is the first time I post in this newsgroup. In the process, the computer kept on telling me that I required authentification (I had forgotten to click on one of the boxes) and said that it could not send the message. I therefore ended up writting it several times. As it turned out, two of the times where it told me it had not sent it, it had. I greatly apologise for all the inconvenience.

Secondly, yes, I mean to say the signal has a DC component. I would have thought that impulsive noise, being cause by electron movement would produce an AC signal, otherwise where does the DC come from? The importance of the time is because I would have thought that in the long term the antenna would resonate so as to produce a zero mean signal (AC). Sorry, the answer might be common sense but I just fail to see it.

Thank you for your time and once again, sorry.

"Galilea" <iportu@hotmail.com> wrote in message
news:IBForo.IBF@bath.ac.uk...
> Hello, thank you for reading this post.
>
> When analysing wideband impulse signals from a wideband antenna I have
> realised that the average signal magnitude is not zero. I have thought
this
> is because the reactance of the antenna at different frequencies varies
and
> since it is a wideband antenna there can be energy measured since it is
only
> for an extremely small period of time of 2-4 us. However, I am not sure
and
> would greatly appreciate the views of this newsgroup.
>
>

1995. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 16:15:31 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <36kb2uF52fdruU4@individual.net>
Source record: 82381

You could start off with a signal measured in dBm, perhaps
the output of a transmitter.

Thereafter you could add and subtract anything in dB (but NOT dBm).

Here's an example (my figures are made-up and not intended to
be realistic). let us calculate the E-M-E signal strength of our
transmission bounced off the moon.

TX output = 1000W = 60dBm.

Antenna gain (Assume a big dish) = 50dB

Effected Radiated Power (ERP) = 110dBm

Path loss to Moon = 80dB

Path loss due to bouncing off Green Cheese = 30dB

Path loss back from Moon = 80 dB again

Total path loss = 190dB

Antenna Gain = 50dB

Received Signal Strength = 110 -190 + 50 = -30dBm = 1 uWatt.

So, we started off with dBm, then added or subtracted dB (which
gave us dBm again, but we only added or subtracted dB)

"jason" <cheanglong@gmail.com> wrote in message
news:1107575395.192658.94390@f14g2000cwb.googlegroups.com...

> So from what you have all explained, can I bold enough to say that I
> can add any value in db and any value in dbm together without
> converting to one db or dbm unit because they are in the ratio form and
> having virtually the same 10log (P1/P2) formula and nothing else more??

1996. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 16:19:25 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <36kb2vF52fdruU5@individual.net>
Source record: 82386

It's just a continuation of humorous electrical loose-talk.
For example. no change to anything, such as moving
all the gear around in the shack, is worthwhile
unless it produces a "3dB Improvement"

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:rec7011iu1iuguppkio5a5kttkb9n7sfd8@4ax.com...
> On Fri, 04 Feb 2005 17:19:29 GMT, Jim - NN7K
> <nn7kexk7zfg@NOSPAMsbcglobal.net> wrote:
> >Cecil is CORRECT
> >> A web search for "decibel" uncovered 100 dB of information.
>
> I must've missed something here with this dimensionless, referenceless
> declaration. I'm not even sure if there isn't an implicit negative
> sign to it.

1997. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 16:21:34 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <36kb2vF52fdruU6@individual.net>
Source record: 82388

Why, Thank-you!

In the case of amplifiers, presumably we are talking
about the effects of unwanted strong signals driving the
amplifier into its non-linear region (and therefore acting
as a mixer)?

"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:nt2801dnie82ccv8dptk0c05g6q2n3ikti@4ax.com...
> On Fri, 4 Feb 2005 16:31:00 -0000, "Airy R.Bean" <Me@privacy.net>
> wrote:
> >From off the top of my head, without any revision.....
> >
>
> Pretty good explanation for a mixer, however, IP3 relates equally well
> to amplifiers.
>
> In receivers, IP3 is used as a figure of merit and describes how a
> receiver will handle weak signals in the presence of other stronger
> signals. It is as explained earlier, a theoretical value.

1998. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 16:25:03 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <36kb2vF52fdruU7@individual.net>
Source record: 82384

I think that you are confusing the _RATE_
or _SLOPE_ of each individually with
the differential increase per dB of input signal

"Ian Jackson" <IanJacksonRemoveThisBit@g3ohx.demon.co.uk> wrote in message
news:kkIs58GVTIBCFwcq@g3ohx.demon.co.uk...
> In message <qoUMd.519$UX3.168@newsread3.news.pas.earthlink.net>, Old Ed
> <eXseniorsDeleteThisAndTheX@earthlink.net> writes
> >The original author observed that many practical devices
> >(e.g., mixers) exhibit distortion levels that rise as the "power"
> >of the product in question. For example, third-order distortion
> >rises 3 times as fast (dB scale) as the desired (linear) signal.
> <Snip>
> Ed, where the increasing intermodulation distortion is simply a result
> of increasing the level of the signals at the input of the mixer (or
> amplifier), third order distortion actually rises TWICE as fast as the
> desired signal. Third order distortion DOES rise on a 'three dB per dB'
> basis, but the wanted signal also rises - at 1dB per dB. The difference
> is 2dB. So the relationship is 2dB per dB.

1999. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 16:34:29 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <36kb30F52fdruU8@individual.net>
Source record: 82383

Let's talk loosely, and talk about money.

If I've got twice as much money than Ian has, then
I've got 3dB more.

How much do I have? Don't know.

If Ian has three times as much as Richard, then he
has 4.7 dB more than Richard, and I have 3 + 4.7 =7.7dB
more than Richard.

How much do I have? Don't know.
How much does Ian have? Don't know.
How much does Richard have? Don't know.

OK, assuming that we could deal in 1/10ths of a cent (1 milli-dollar!)
let's assume that Richard has $100 = 50dBm.

Ian therefore has 50 + 4.7 = 54.7 dBm.
And I have 54.7 + 3 = 57.7 dBm.

The answer to your question is that you can start off with an
actual reading in dBm, but everything else relative to that is
in dB only (although it does give a result in dBm).

If the above doesn't answer your question, then, sorry,
but I give up. (Which doesn't mean that my interest is 0dBm
but -173 dBm, ie, indiscernible below the noise)

"Jason" <cheanglong@gmail.com> wrote in message
news:1107603509.539446.240130@c13g2000cwb.googlegroups.com...
> But why we can add or minus gain and IP3 which are in different unit(db
> and dbm)?
> Anyone knows?
> Thank you
>
> rgds
> Jason
>

2000. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 16:44:11 UTC
From: Dave <noone@nowhere.com>
Message-ID: <B5CdnUP1W-B9apnfRVn-qg@crocker.com>
Source record: 82389

yes, a signal can have a dc component, even from a small antenna. (just watch the arguments over this one) it gets even worse if you sample over a short period like a few microseconds depending on the characteristics of the signal you are measuring. and it can get much worse over a long period because of numeric integration errors accumulating, or small measurement bias in instrumentation accumulating.

"Galilea" <iportu@hotmail.com> wrote in message news:IBG54D.4ut@bath.ac.uk...
> First of all, my apologies. As you can gather it is the first time I post in
> this newsgroup. In the process, the computer kept on telling me that I
> required authentification (I had forgotten to click on one of the boxes) and
> said that it could not send the message. I therefore ended up writting it
> several times. As it turned out, two of the times where it told me it had
> not sent it, it had. I greatly apologise for all the inconvenience.
>
> Secondly, yes, I mean to say the signal has a DC component. I would have
> thought that impulsive noise, being cause by electron movement would produce
> an AC signal, otherwise where does the DC come from? The importance of the
> time is because I would have thought that in the long term the antenna would
> resonate so as to produce a zero mean signal (AC). Sorry, the answer might
> be common sense but I just fail to see it.
>
> Thank you for your time and once again, sorry.
>
>
> "Galilea" <iportu@hotmail.com> wrote in message
> news:IBForo.IBF@bath.ac.uk...
> > Hello, thank you for reading this post.
> >
> > When analysing wideband impulse signals from a wideband antenna I have
> > realised that the average signal magnitude is not zero. I have thought
> this
> > is because the reactance of the antenna at different frequencies varies
> and
> > since it is a wideband antenna there can be energy measured since it is
> only
> > for an extremely small period of time of 2-4 us. However, I am not sure
> and
> > would greatly appreciate the views of this newsgroup.

> >
> >
>
>

2001. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 16:55:35 UTC
From: Galilea <iportu@hotmail.com>
Message-ID: <IBG70n.6DB@bath.ac.uk>
Source record: 82390

I can understand all you are saying but in this case it is am impulsive wideband signal (500 - 2.5 GHz), with a defined start and finish, caused by, say things like car ignition systems and faulty thermostats. Surely a signal like that would have all frequency components starting and ending at a zero-crossing and then have full cycles, wouldn't it? Or maybe not because of the multipath effects? Do you believe this can be the case in my situation?

Thank you.

"Galilea" <iportu@hotmail.com> wrote in message
news:IBForo.IBF@bath.ac.uk...
> Hello, thank you for reading this post.
>
> When analysing wideband impulse signals from a wideband antenna I have
> realised that the average signal magnitude is not zero. I have thought
this
> is because the reactance of the antenna at different frequencies varies
and
> since it is a wideband antenna there can be energy measured since it is
only
> for an extremely small period of time of 2-4 us. However, I am not sure
and
> would greatly appreciate the views of this newsgroup.
>
>

2002. Re: fiberglass mast

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 17:06:40 UTC
From: k9sqg@aol.com
Message-ID: <20050205120640.05913.00000325@mb-m20.aol.com>
Source record: 82391

Allan at Max Gain Systems is #1 in my book. I've bought several things from him.

2003. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 17:07:48 UTC
From: Jason <cheanglong@gmail.com>
Message-ID: <1107623268.852039.74820@c13g2000cwb.googlegroups.com>
Source record: 82392

Hello All the Kind and Clever People

I think I got what you all explained for me. I will reread them
carefully before asking more in order to save your precious time.
I am thankful to you all.
Thank you so much for people who wrote above with great efforts

Jason

2004. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 17:11:56 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <36kd97F523mclU1@individual.net>
Source record: 82393

Thank-you for promoting a genuine discussion in this NG.

"Jason" <cheanglong@gmail.com> wrote in message
news:1107623268.852039.74820@c13g2000cwb.googlegroups.com...
> Hello All the Kind and Clever People
> I think I got what you all explained for me. I will reread them
> carefully before asking more in order to save your precious time.
> I am thankful to you all.
> Thank you so much for people who wrote above with great efforts

2005. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 18:03:02 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42050be3$1_1@127.0.0.1>
Source record: 82394

Galilea wrote:
> Secondly, yes, I mean to say the signal has a DC component. I would have
> thought that impulsive noise, being cause by electron movement would produce
> an AC signal, otherwise where does the DC come from?.

The DC is the result of your 2-4 uS sampling window. Make
your sampling window one second long and see what you get.

For instance, if you sample a 250 kHz signal for 2 uS and
if you happen to hit it at a zero-crossing going positive,
you will read the DC RMS value of the wave, having sampled
only 1/2 cycle.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2006. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 18:09:20 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42050d5d$1_1@127.0.0.1>
Source record: 82395

Airy R.Bean wrote:
> Thank-you for promoting a genuine discussion in this NG.

We had a lot of gin-ur-wine discussions in college.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2007. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 18:13:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <kf0a015l6sicseh9dtirhdtkepb21n1lr1@4ax.com>
Source record: 82396

On Sat, 5 Feb 2005 16:55:35 GMT, "Galilea" <iportu@hotmail.com> wrote:

Hi Galilea,

You give the impression of being under the spell of a lot of
illusions. As you appear to be writing from an academic institution,
you should have been educated in the first principles of engineering:
a well described problem contains its own solution.

What you have been describing through your series of postings are
simple musings or rambling thoughts, nothing really coherent.
Stringing facts together does not really describe what you are
seeking. Let's examine this by parts:
>I can understand all you are saying but in this case it is am impulsive
>wideband signal (500 - 2.5 GHz), with a defined start and finish,
This is specific, detailed and uninformative. By definition, an
impulse has a defined start and finish, so nothing of value is added
by making such a declaration unless this start and finish are somehow
out of the ordinary. When you continue with:
> caused by,
>say things like car ignition systems and faulty thermostats.
"Like?" This is inspecific. Further, ignition systems and
thermostats have very little power in the spectrum you describe
(unless picoWatt levels are a disturbance to your true concern - if
so, this should be put on the table and all these abstractions swept
aside).
>Surely a signal like that
Like what? This is becoming speculative without a basis.
>would have all frequency components starting and ending at a
>zero-crossing and then have full cycles, wouldn't it? Or maybe not because
>of the multipath effects?
Here is every evidence of intellectual fishing because the answers to
your questions should be reasonably yes, but in actuality is no.
However, that yes/no aside, it is immaterial as this answer relates to
no larger over-riding question:
> Do you believe this can be the case in my
>situation?
No one knows your situation because you have no where described any
context to this string of statements, conflicting observations, and
speculations.

Basically you have offered a story with all middle and no beginning
and no end (somewhat mirroring much of the angst of your internal
conflict). Discard all these answers you are trying to force into
your problem and simply describe your problem.

First, how did you become aware you had a problem? Describe the first thing that seemed unusual. Don't give us the theory of why - subjectivity will always dominate the first impression and is fine as an introduction.
Good Example: "I saw smoke."
Bad Example: "It was violating entropy."

Second, What else did you observe? Describe all other characteristics, good and bad.
Good Example: "There were no flames, and it was unplugged."
Bad Example: "The Butterfly Effect would suggest that perhaps a nova might be contributing to the imbalance of energy."

Third, Offer supporting details of measurement. Describe your configuration, your tools, your method, and your results.
Good Example: "I examined my hair dryer; using a thermometer that I placed at the exhaust; and found it read 300ï¿½C Over several minutes it fell to 100ï¿½C and continued smoking."
Bad Example: "The thermal emission did not balance with the absence of the standard power application of 900W."

Fourth, Describe those components that are directly involved in conjunction with the observations and those that bear no relation, but are supported by normal observations.
Good Example: "Cooling is evident from it not being plugged in, however smoke is evidence of a continued process related to the heater."
Bad Example: "Since there was no power in, there should have been no power out. Isn't this a violation of the conservation of energy?"

Fifth, Localize the problem through refinement of measurements. Split the problem in two and examine characteristics. If you obtain normal data, split the problem in two again between this point and the source of problematic data and repeat.
Good Example: "On close inspection I observed a long ash."
Bad Example: "I plugged it in and the imbalance of entropy became dramatic."

Sixth, Describe the probable cause.
Good Example: "Hair had been drawn into the inlet and ignited by the heater."
Bad Example: "There is every indication that a possible nova, through the Butterfly Effect, created an imbalance in the continuum of energy such that local effects produced a surplus bias of caloric emanation."

73's
Richard Clark, KB7QHC

2008. Re: Wrong? - dogie04.jpg (0/1)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 18:19:55 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd0a3ib.1hau.bit-bucket@shell.config.com>
Source record: 82397

```
On Wed, 02 Feb 2005 16:01:10 -0500, KC8QJP Kathy Lee wrote:
> I tried to tell my better half (n8wwm) that he
> could do a better job of putting up our antenna.
> Please take a look at his install and see what you
> think. TIA

Wrong? Yes.
Binaries are rarely distributed by newsservers for text-only newsgroups.

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK
```

2009. Re: Balun for loopstick antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 18:38:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <124a01p2tqupvj08mvlg3thm4l9n5r289r@4ax.com>
Source record: 82398

On Sat, 05 Feb 2005 09:14:37 -0500, Ken <cprstn54zz@att.net> wrote:

>Concerning the loopstick RX antenna identified as "VLF to Longwave:
>Wideband Tuner" shown at:
>http://www.stormwise.com/widetune.htm
>
>I was told that the tap at 10% was to provide a match for a receiver
>expecting a 50-ohm antenna.
>
>Would I achieve the same result by using 405 turns, no tap, and a 9:1
>current balun?
>
>I am building a tuning cap box that covers from 25pF to 2uF in 25pF
>increments. I am hoping to cover from 9kHz to 30mHz using the
>variable capacitor box and 1,000 turns, with intermediate taps at 10,
>33, 100, and 333 turns -- to be used as appropriate for each band.

Hi Ken,

I wasn't sure if your 30mHz was meant to be milliHertz or not, but given the focus found at your link above, I presume you seek to listen at the ELF and below.

When I looked at the truly meager coil offered at that site, I took up my pen (metaphorically) to suggest you need something very, very, very much bigger. 450 turns is truly pathetic. Some years ago, Scientific American's column described a project that required 10000 to 20000 turns on a three foot ferrite rod.

However, none of this actually responds to your question about a 9:1 BalUn (and a current BalUn no less). This is waaaaaay out of the common. (Read this will not be found off-the-shelf except at a specialty store.) At these frequencies, standard transformer design is suitable to design and construction details. Your stated need for it to be a current BalUn would suggest your need for isolation. Consider that those leads will need at least 3X and preferably 10X the impedance observed in the coil you construct if that is what you are trying to isolate. This means 50000 to 100000 turns of a wire pair around a similarly long ferrite. Do you have the patience? ;-)

73's
Richard Clark, KB7QHC

2010. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 18:44:55 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <Hu8Nd.1126$ZZ.34@newssvr23.news.prodigy.net>
Source record: 82399

Galilea wrote:
> I can understand all you are saying but in this case it is am impulsive
> wideband signal (500 - 2.5 GHz), with a defined start and finish, caused by,
> say things like car ignition systems and faulty thermostats. Surely a signal
> like that would have all frequency components starting and ending at a
> zero-crossing and then have full cycles, wouldn't it? Or maybe not because
> of the multipath effects? Do you believe this can be the case in my
> situation?
>
> Thank you.
>
>
>
> "Galilea" <iportu@hotmail.com> wrote in message
> news:IBForo.IBF@bath.ac.uk...
>
>>Hello, thank you for reading this post.
>>
>>When analysing wideband impulse signals from a wideband antenna I have
>>realised that the average signal magnitude is not zero. I have thought
>
> this
>
>>is because the reactance of the antenna at different frequencies varies
>
> and
>
>>since it is a wideband antenna there can be energy measured since it is
>
> only
>
>>for an extremely small period of time of 2-4 us. However, I am not sure
>
> and
>
>>would greatly appreciate the views of this newsgroup.
>>
>>
>
>
>

If the antenna is very wideband and isn't acting like a filter,
you can do a Fourier analysis on a series of pulses and decide for

yourself whether there is a DC component or not. Or, if there's only one pulse, you can use the Fourier integral to find the amplitude distribution across the frequency spectrum. I don't think you should be too surprised to find a DC component in a series of pulses, or even in a single pulse.
73,
Tom Donaly, KA6RUH

2011. (",) NEAT MOVIE FLICK ! (it starts up quickly)(awesome introduction)...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 18:59:51 UTC
From: AttWireless_ATTW@yahoo.com
Message-ID: <1107629991.950639.276800@f14g2000cwb.googlegroups.com>
Source record: 82400

Please reply with your comments about the movie.

This video hosted by Dr. Maurice Rawlings,
a noted cardiologist, investigates life after
death and his experiences with patients
that actually saw 'the other side!'

http://www.tbn.org/films/videos/To_Hell_And_Back.ram

2012. hight above roof or ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 19:03:47 UTC
From: ml <m@di.net>
Message-ID: <m-70A1AB.14034205022005@news.verizon.net>
Source record: 82401

Just wondering i am putting a dipole on the roof of a 12 story building
i'll mount it around 30ft off the flat surface of that roof

my antena will be about 150 ft off the sidewalk

when trying to calculate my dipoles hight is it above the roof surface
or 'real' earth /sidewalk ground that 'counts'??

thanks

2013. copper plate antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 19:08:42 UTC
From: ml <m@di.net>
Message-ID: <m-53DC71.14084205022005@news.verizon.net>
Source record: 82402

i just discovered a part of my roof which is flat, is covered with copper, it measures about 50ft by 75ft and soldered it's still new so it shows good w/my ohmmeter

just wondering as it's not grounded, if i tried to tune this up w/my tuner , how effective would this by on hf??

tnx

2014. Re: hight above roof or ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 19:33:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vc7a01hm01ivoiko6hrrj5k2300ds5nop4@4ax.com>
Source record: 82403

On Sat, 05 Feb 2005 19:03:47 GMT, ml <m@di.net> wrote:

>when trying to calculate my dipoles hight is it above the roof surface
>or 'real' earth /sidewalk ground that 'counts'??

Hi OM,

If you were on a step ladder putting up the antenna, which would feel worse if you fell? Hitting the roof or hitting the sidewalk? That is how much it counts.

Another point of view is if you were to shine a flash light from your roof, or from the sidewalk, which would offer a greater chance of being seen a mile away? That is how much it counts.

However, there are complexities beyond these sophisms. How much chance would your flashlight have being seen if you were obstructed by a penthouse? Hence there are factors that reduce the effectiveness of your antenna on the roof. The question is how much - which is a question everyone has to answer for their own situation. The difference here is that even if you suffer equally with everyone else, you still have the advantage of height. So, barring a horrible situation on the roof, you enjoy a net sum gain.

73's
Richard Clark, KB7QHC

2015. Re: copper plate antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 19:35:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5t7a01tfj885jotpd0mduv6ue4qlm0jldp@4ax.com>
Source record: 82405

On Sat, 05 Feb 2005 19:08:42 GMT, ml <m@di.net> wrote:

>just wondering as it's not grounded, if i tried to tune this up w/my
>tuner , how effective would this by on hf??

Hi OM,

This conjures up the Zen of "what is the sound of one hand clapping?"

You have this humongous plate to play with, but what is the other half
of the antenna?

73's
Richard Clark, KB7QHC

2016. Re: copper plate antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 19:35:22 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <cu375q$j5u$1@mail.specsol.com>
Source record: 82404

ml <m@di.net> wrote:
> i just discovered a part of my roof which is flat, is covered with
> copper, it measures about 50ft by 75ft and soldered it's still new so
> it shows good w/my ohmmeter

> just wondering as it's not grounded, if i tried to tune this up w/my
> tuner , how effective would this by on hf??

> tnx

You would most likely get better results using the roof as a ground plane
for a vertical.

--
Jim Pennino

Remove -spam-sux to reply.

2017. Re: hight above roof or ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 19:43:35 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cu37l7kub1@hercules.btinternet.com>
Source record: 82406

"ml" <m@di.net> wrote in message
news:m-70A1AB.14034205022005@news.verizon.net...
> Just wondering i am putting a dipole on the roof of a 12 story building
> i'll mount it around 30ft off the flat surface of that roof
>
> my antena will be about 150 ft off the sidewalk
>
>
> when trying to calculate my dipoles hight is it above the roof surface
> or 'real' earth /sidewalk ground that 'counts'??
>
> thanks

==========

Just take the geometric mean.

Effective Height = Sqrt(150 * 30) = 67 feet.

But what you do with this number hardly matters two hoots. What do you have
in mind to use the number for?

Just continue to do as you intend and I'm sure the antenna will work fine.
It's very few people who have a starting point of 150 feet.

Reg.

2018. Re: Balun for loopstick antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 19:58:06 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <iu8a019cjlpls104vkb3nu5ku1os5p4o1u@4ax.com>
Source record: 82407

On Sat, 05 Feb 2005 10:38:29 -0800, Richard Clark <kb7qhc@comcast.net>
wrote:

>I wasn't sure if your 30mHz was meant to be milliHertz or not, but
>given the focus found at your link above, I presume you seek to listen
>at the ELF and below.

This is for manmade RF from 9 kiloHertz to 30 megaHertz. So, we are
talking VLF, LF and HF. A member of my ARC has temporarily wrapped
one of these ferrites with 50 turns of 22 ga. and is getting terrific
reception all over the shortwave bands.

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

2019. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 20:05:00 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <MF9Nd.29160$xt.24350@fed1read07>
Source record: 82408

Wow -- well written Ian

--
Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?

"Ian Jackson" <IanJacksonRemoveThisBit@g3ohx.demon.co.uk> wrote in message
news:$g5qo0BR6NBCFwud@g3ohx.demon.co.uk...
> In message <1107603509.539446.240130@c13g2000cwb.googlegroups.com>, Jason
> <cheanglong@gmail.com> writes
>>But why we can add or minus gain and IP3 which are in different unit(db
>>and dbm)?
>>Anyone knows?
>>Thank you
>>
>>rgds
>>Jason
>>
>
> Think of it this way:
> dBm indicates an absolute value. db indicates a relative value.
> For example:
> 0dBm = 1mW
> 0dBm + 3dB = 1mW x 2 = 2mW = 3dBm
> 0dBm + 10dB = 1mW x 10 = 10mW = 10dBm
> 3dBm + 10dB = 2mW x 10 = 20mW = 13dBm
> 20dBm - 30dB = 100mW/1000 = 0.1mW = -10dBm
>
> What you can't do is to add dBm values directly.
> If you have power combiner, and add 10dBm and 13dBm, you can't add 10dBm
> and 13dBm and get 23dBm. 23dBm would be 200mW (because 20dB is x 100, 3dB
> is x 2, so 100 x 2 =200), and this is incorrect.
>
> What you have to do is to convert the dBm values into mW, then add the mW.
> 10dBm = 10mW
> 13dBm = 20mW
> Total power = 30mW (and not 200mW)
> 30mW can then be converted back into dBm (= appx 14.5dBm)
>
> Do you see the pattern?
> Ian.
> --
>

2020. (",) NEAT MOVIE FLICK ! (it starts up quickly)(awesome introduction)...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 20:33:32 UTC
From: AttWireless_ATTW@yahoo.com
Message-ID: <1107635612.305157.195050@l41g2000cwc.googlegroups.com>
Source record: 82409

Please reply with your comments about the movie.

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death and his experiences with patients
that actually saw 'the other side!'

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2021. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 21:05:20 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <UuJArgBQUTBCFwKk@g3ohx.demon.co.uk>
Source record: 82410

In message <MF9Nd.29160$xt.24350@fed1read07>, Caveat Lector
<CL@barahmas.com> writes
>Wow -- well written Ian
>
After over 40 years in Cable TV, I think I am beginning to get the hang
of it!
Ian ; >))
--

2022. Re: Mini Beams

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 21:47:40 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <0abNd.5642$uc.346@trnddc02>
Source record: 82411

"Dave" <myself@yourself.ie> wrote in message
news:E8_Md.19$zQ2.11@newsfe2-gui.ntli.net...
> Hi All
> I only have a small plot and unable to get a big triband beam
up
> due to the elements hanging over my neighbours garden so the only beam I
am
> able to put up is a mini beam which one in your opinion is the best the
TGM
> MQ series or the cushcraft MA5B. Has anybody had any experience with both
of
> them
> Dave
> Check out Traffie's Hexbeam before you spend money on either of those 2.

Dale W4OP
>

2023. (",) NEAT MOVIE FLICK ! (it starts up quickly)(awesome introduction)...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 22:07:07 UTC
From: AttWireless_ATTW@yahoo.com
Message-ID: <1107641227.617220.286820@f14g2000cwb.googlegroups.com>
Source record: 82412

Please reply with your comments about the movie.

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death and his experiences with patients
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2024. Re: Coax Antenna Lead

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 22:07:26 UTC
From: Bill <ojiisan@bellsouth.net>
Message-ID: <4obNd.17124$qJ3.6427@bignews1.bellsouth.net>
Source record: 82413

jimbo wrote:
> How many of the eight runs do you use at one time? And I guess the
> other runs are spares? Did you consider conduit, so you could replace
> cables if required rather than spare runs?
>
> Thanks, jimbo
>
> Bill wrote:
>
>>jimbo wrote:
>>
>>>I am building a new house. I need two coax runs inside the house
>
> for
>
>>>two uses. First, for 2 meter, 440 MHz dual band. Second for 2-30
>
> MHz
>
>>>HF. I am considering using RG213/U for both runs. I know this coax
>
> is
>
>>>suitable for 440 MHz on runs less than 100 feet. Would there be any
>>>problems for the 2 meter or HF using this coax? Or are there any
>>>suggestions for this project?
>>>
>>>Thanks, jimbo
>>>
>>
>>I did the same thing when I put in the ham shack but I ran 8 runs of
>>LMR400 cable and also two runs of 8 conductor cable for rotor's.
>>The outside panel is under the eve of the house and I have another
>>panel on the wall of the shack.
>>Tye LMR 400 Ultra Flex is what I used.
>
>
I have seven antennas up right now so there is only one spare run and
one spare run for a rotator.
I would guess conduit would be ok but for what I have it's not needed.
I can replace a run here by soldering the center and outer shield to the
new piece and pull it through with out any problems, if the cables had
been run other than the way they are now then conduit would have made
things easier.

2025. Have you joined?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 22:26:11 UTC
From: Goetz <goetz@goetz-von.com>
Message-ID: <cu3h63mao1@titan.btinternet.com>
Source record: 82414

The PMR / Amateur Radio forum at http://www.euronium.de/phpbb2/index.php now has just under 500 members.

Why not join? Its free and is funded entirely by Radio Amateurs for Radio Amateurs with no pop up ads or commercial backing.

Support your fellow Amateur. You may be able to help someone or someone help you.

G&#65533;etz.

2026. Re: I LOVE COCK!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 22:33:04 UTC
From: KC8QJP KATHY LEE <N8WWM@arrl.net>
Message-ID: <42054b11@news.usenetzone.com>
Source record: 82415
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

<WA3MOJ@aol.com> wrote in message news:41ffaac7@news.usenetzone.com...
>I love nigger cock!
>
I love cock too but the doctor won't let doug butt bang me anymore.....he
has a really bad heart.

Usenet Zone Free Binaries Usenet Server
More than 120,000 groups
Unlimited download
http://www.usenetzone.com to open account

2027. Re: Mini Beams

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 22:58:38 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <AccNd.6284$GT.2232@okepread01>
Source record: 82416

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:0abNd.5642$uc.346@trnddc02...
>
>> Check out Traffie's Hexbeam before you spend money on either of those 2.
>
> Dale W4OP
>>

Yea but the Hex Beam is almost $900!!!

I'll take the Cushcraft and spend the difference on a taller
tower.

--
73's es gd dx de Ken KG&#65533;WX
Grid EM17ip, Flying Pigs #1055,
List Owner, Yahoo! E-groups:
VX-2R & FT-857

2028. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 23:17:49 UTC
From: Old Ed <eXseniorsDeleteThisAndTheX@earthlink.net>
Message-ID: <xucNd.1293$UX3.507@newsread3.news.pas.earthlink.net>
Source record: 82417

Hi Ian -

Thanks for trying to clarify, but I think you misread my post
somehow.

I said "...third-order distortion rises 3 times as fast (dB scale)
as the desired (linear) signal."

You said "Third order distortion DOES rise on a 'three dB
per dB' basis, but the wanted signal also rises - at 1dB per dB."

The content of our statements is the same. But you went on
to address the slope DIFFERENCE, which I did not discuss.

I believe Airy is making the same point I am making here
with his (2/5/05 8:25) post.

73, Ed, W6LOL

"Ian Jackson" <IanJacksonRemoveThisBit@g3ohx.demon.co.uk> wrote in message
news:kkIs58GVTIBCFwcq@g3ohx.demon.co.uk...
> In message <qoUMd.519$UX3.168@newsread3.news.pas.earthlink.net>, Old Ed
> <eXseniorsDeleteThisAndTheX@earthlink.net> writes
>
> <SNIP>
> >
> >The original author observed that many practical devices
> >(e.g., mixers) exhibit distortion levels that rise as the "power"
> >of the product in question. For example, third-order distortion
> >rises 3 times as fast (dB scale) as the desired (linear) signal.
> <Snip>
>
> Ed, where the increasing intermodulation distortion is simply a result
> of increasing the level of the signals at the input of the mixer (or
> amplifier), third order distortion actually rises TWICE as fast as the
> desired signal. Third order distortion DOES rise on a 'three dB per dB'
> basis, but the wanted signal also rises - at 1dB per dB. The difference
> is 2dB. So the relationship is 2dB per dB.
>
> If you continued to increase the signal levels, you might expect that
> the level of the intermodulation would eventually catch up with - and
> overtake - the level of the wanted signal (it doesn't, of course).
>
> The third order intercept point is simply the hypothetical level where
> the level of the intermodulation would have risen so much (at 2dB per
> dB) that it equals the level of the wanted signal.

>
> Ian.
> --
>

2029. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 23:17:50 UTC
From: Old Ed <eXseniorsDeleteThisAndTheX@earthlink.net>
Message-ID: <yucNd.1294$UX3.1052@newsread3.news.pas.earthlink.net>
Source record: 82418

Hi again -

A couple of added thoughts here:

1. The term "mixer" has at least two quite different definitions
in the electronics world. To the RF guy, "mixer" means a nonlinear
and/or time-variant device that is used to create sum and
difference frequencies between an input signal and a local
oscillator. But to the audio guy, "mixer" means a highly linear
device used to add or combine audio signals WITHOUT
producing distortion products.

2. As implied above, an RF mixer does not have to be nonlinear;
it can also be implemented as a linear/time-variant device.
(Think of a highly linear switch being chopped at the LO frequency.)
However, the most common practical mixers are those that can be
modelled as non-linear/time-invariant and those that can be modelled
as non-linear/time-variant.

73, Ed, W6LOL

"Airy R.Bean" <Me@privacy.net> wrote in message
news:36kb2vF52fdruU6@individual.net...
> Why, Thank-you!
>
> In the case of amplifiers, presumably we are talking
> about the effects of unwanted strong signals driving the
> amplifier into its non-linear region (and therefore acting
> as a mixer)?
>
> "Wes Stewart" <n7ws_@*yahoo.com> wrote in message
> news:nt2801dnie82ccv8dptk0c05g6q2n3ikti@4ax.com...
> > On Fri, 4 Feb 2005 16:31:00 -0000, "Airy R.Bean" <Me@privacy.net>
> > wrote:
> > >From off the top of my head, without any revision.....
> > >
> >
> > Pretty good explanation for a mixer, however, IP3 relates equally well
> > to amplifiers.
> >
> > In receivers, IP3 is used as a figure of merit and describes how a
> > receiver will handle weak signals in the presence of other stronger
> > signals. It is as explained earlier, a theoretical value.
>
>

2030. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 23:17:51 UTC
From: Old Ed <eXseniorsDeleteThisAndTheX@earthlink.net>
Message-ID: <zucNd.1295$UX3.993@newsread3.news.pas.earthlink.net>
Source record: 82419

Hi Airy -

I'm not sure what "answer" you're referring to here. But if you're referring to the question about IP3 applying to amplifiers, the answer is a resounding "yes"--as noted in posts above.

As a matter of fact, IP3 is often most useful when applied to an entire chain of cascaded devices such as mixers and amplifiers.

Regarding your comment about an amplifier possibly "clipping... before non-linearity," that is impossible by definition--because clipping IS a non-linearity.

But it is possible to find amplifiers that are extremely linear below clipping, and which clip very abruptly. Such amplifiers may show relatively poor conformity to the intercept point model, which was based on more gradual nonlinearities.

73, Ed, W6LOL

"Airy R.Bean" <Me@privacy.net> wrote in message
news:36kb2uF52fdruU2@individual.net...
> I don't know the answer to that, and you are as capable of
> looking it up as I am.
>
> If an amplifier, then perhaps you'd run into clipping problems
> or rail problems before non-linearity?
>
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> news:cu0d62$9b2$1@sparta.btinternet.com...
> > "Airy R.Bean" wrote -
> > > The better a mixer is, the higher is IP3 for the outputs of the mixer.
> > Am I correct in assuming the device need not be a mixer? Could it be an
> > amplifier? In which case some of the better or worse parameters would
> just
> > become meaningless.
>
>

2031. (",) NEAT MOVIE FLICK ! (it starts up quickly)(awesome introduction)...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-05 23:40:39 UTC
From: AttWireless_ATTW@yahoo.com
Message-ID: <1107646839.335484.97560@g14g2000cwa.googlegroups.com>
Source record: 82420

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http://www.tbn.org/films/videos/To_Hell_And_Back.ram

2032. Re: Testing for gain/loss in an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 01:08:37 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <p6eNd.26615$by5.18739@newssvr19.news.prodigy.com>
Source record: 82421

Buck,
Using more than one 'station' for the FSM should take care
of the radiation pattern variatons. The more 'stations', the
better (as in 180 of them, or more, depending on the antenna?).
'Doc

2033. (",) NEAT MOVIE FLICK ! (it starts up quickly)(awesome introduction)...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 01:14:11 UTC
From: AttWireless_ATTW@yahoo.com
Message-ID: <1107652451.734383.92570@g14g2000cwa.googlegroups.com>
Source record: 82422

Please reply with your comments about the movie.

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2034. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 02:22:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110avqvm87pke8d@corp.supernews.com>
Source record: 82423

The average value of a signal is its DC value. To receive and reproduce a signal with a non-zero DC component means that your antenna, as well as your receiver, has to have response to DC. To generate such a signal would require a static electric and/or magnetic field, which can't propagate. So it's not possible for a signal you're receiving to have a non-zero average value.

If it doesn't seem to be zero, there's something wrong with your measurement system.

Roy Lewallen, W7EL

2035. Re: Fat dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 02:26:18 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110b02dj2nk9m39@corp.supernews.com>
Source record: 82424

CWB wrote:
> I dont know where YOU got your antenna info from....but just because a
> dipole has wide b/w (low Q) does not lower its gain unless the diameter of
> the dipole causes the resonant length to be much shorter than 1/2
> wavelength...

Here's a quiz question: Suppose the dipole could be made fat enough to reduce the resonant length to 0.01 wavelength. How much would the gain be reduced?

Part 2: Suppose the dipole remained the same diameter and was reduced in length to 0.01 wavelength. If the conductor were perfect, how much would the gain be reduced?

Hint for Part 2: This is easily answered using the free EZNEC demo program, another modeling program of your choice, or a few minutes' reading of just about any antenna textbook.

Roy Lewallen, W7EL

2036. (",) NEAT MOVIE FLICK ! (it starts up quickly)(awesome introduction)...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 02:47:41 UTC
From: AttWireless_ATTW@yahoo.com
Message-ID: <1107658061.281022.162710@c13g2000cwb.googlegroups.com>
Source record: 82425

Please reply with your comments about the movie.

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2037. Re: Testing for gain/loss in an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 04:27:07 UTC
From: Buck <iam@this.site>
Message-ID: <i07b01hlh2acevobg5gkkl63ea7cl36b30@4ax.com>
Source record: 82426

On Sun, 06 Feb 2005 01:08:37 GMT, 'Doc <w5lz@cwis.net> wrote:

>Buck,
> Using more than one 'station' for the FSM should take care
>of the radiation pattern variatons. The more 'stations', the
>better (as in 180 of them, or more, depending on the antenna?).
> 'Doc

I think you are correct. Either that or a rotatable antenna. :)

If the antenna is supposed to have a clover leaf pattern, then maybe
just setting up the FSM in the angle of the lobe.

Just a thot.

--
73 for now
Buck
N4PGW

2038. Re: Balun for loopstick antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 06:26:48 UTC
From: nm5k@wt.net
Message-ID: <1107671208.659697.187520@g14g2000cwa.googlegroups.com>
Source record: 82427

Not unusual really.
I wonder if he's actually resonant through the
whole HF spectrum though. Doesn't always actually
have to be resonant to "work". But tuned is much
better, naturally. I have to wonder why
they call it a tuner...?? It's an antenna as far
as I'm concerned.
Along the same lines as a ferrite antenna in a
radio, just bigger, or box loop, etc...
I did try making a MW antenna on a PVC form for MW.
Actually, it was a coil wound on PVC that was once
used for a short 160 dipole...
About 90 turns of 14 about a foot long. Tuned it
with a variable cap..It worked ok..
But a box loop is much better I think...You think one
of those little PVC wound loops is good?
Wait till you try a big box loop. But I don't normally
expect to cover the whole HF spectrum with a box loop.
I have one loop in the room here, that is a 44x44 inch
diamond, on a rotating stand. I use a multi gang
variable, that has a switch to allow using only a
single low value cap for the upper range of the loop.
I also have fixed caps I can tack in parallel to drop
down into LW. The loop has 7 turns, and is basically
designed for MW, using the average cap, but in all,
mine tunes from about 200kc to about 2150 kc in it's
present form. On LW, MW, or even 160m, it's quite a
bit better than the small PVC loop. It can be fed
indirectly using a built in ferrite loop as the
coupling loop, or can be fed with coax, etc...Mine are
all fed with coax to a coupling loop inside the main
loop, and I don't bother with baluns, etc.
They are not needed in most cases.
I don't normally use small loops for anything above say
2.5 mhz...A dipole, or even a random wire is usually
much better above that freq.
There are many designs for box loops, and Reg has
a good program for calculating the turns needed, etc.
I think it's rjeloop3.exe, if I remember right...
I have one fairly simple PVC design at:
http://web.wt.net/~nm5k/loop5.jpg
It's pretty easy to slap together. I never cared
much for the overly complex octagon designs much..
More work than is required...:/

BTW, the VLF natural noise stuff is kinda
interesting.. I might try to cook up something
for that...Never have listened down there.
MK

2039. Re: Balun for loopstick antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 06:34:19 UTC
From: nm5k@wt.net
Message-ID: <1107671659.351187.293500@o13g2000cwo.googlegroups.com>
Source record: 82428

I said,
The loop has 7 turns, ...

Whoops...I was confusing with that loop on
the web page...
My loop has 5 turns, cuz it's bigger than the
35 inch a side version on that web page.. MK

2040. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 07:32:55 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110bi1aluabbd07@corp.supernews.com>
Source record: 82429

Cecil Moore wrote:
> Buck wrote:
>
>> Cecil Moore <w5dxp@hotmail.com> wrote:
>>
>>> EZNEC agrees. With four radials one foot above ground the gain
>>> is -0.53 dBi. With one radial one foot above ground the gain
>>> is -1.62 dBi in the direction of the one radial and - 6 dBi
>>> in the opposite direction.
>>
>>
>> How does it rate it with that one radial buried in the ground as in
>> the OP rather than above the ground?
>
>
> I don't have NEC-4 so I can't bury radials. Perhaps Roy will
> do the honors. Incidentally, the above simulation was done
> for a 33 ft vertical with 33 ft radials on 40m.

I've been extremely busy lately, but found a few minutes to run this.

This is for a 33 foot vertical with 33' ground wires buried 6 inches deep. The model was run with EZNEC/4 using the NEC-4 calculating engine. All are for average ground, and the gains are at the elevation angle where gain is the maximum -- 26 degrees in all cases.

With one radial, the gain in the direction of the radial is -5.94 dBi, -6.7 dBi in the opposite direction. It's interesting to see how much difference it makes to have the radial just a foot above the ground, as Cecil modeled, rather than six inches below. When the radial is above the ground, the current distribution looks pretty much the same as the vertical wire's. So it contributes significantly to the pattern. But when buried, the current decays rapidly in an exponential-looking fashion, so it doesn't contribute much to the radiation.

With one radial, the gain at right angles to the radial wire is -6.49 dBi.

With two radials, the gain in line with the radials is -4.33 dBi, and at right angles essentially the same, -4.58 dBi.

With four radials, the gain is -2.95 dBi essentially in all directions.

With 8 radials, the gain is -1.79 dBi. This is just about what you get in the favored direction with a single radial elevated one foot. According to NEC-4, anyway. These would be some interesting experiments to do with a real antenna.

And, running EZNEC using MININEC-type ground gives the gain you'd get
with a perfect radial system -- -0.02 dBi.

Roy Lewallen, W7EL

2041. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 10:46:48 UTC
From: Galilea <iportu@hotmail.com>
Message-ID: <IBHKM0.5v@bath.ac.uk>
Source record: 82430

Thank you for all your help.

Richard, just because someone writes from an academic institution doesn't mean they have had an academic education. This institution provides to anyone who is willing to pay from the whole city and its surroundings with a connection. I, for one, don't have one and it has just been recently, since I started to work here that I have become interested from looking around and talking to people during my shifts. Just because I am trying to learn by my own means doesn't mean you have to rub my lack of knowledge in.

Once again, thank you all for your help.

"Galilea" <iportu@hotmail.com> wrote in message
news:IBForo.IBF@bath.ac.uk...
> Hello, thank you for reading this post.
>
> When analysing wideband impulse signals from a wideband antenna I have
> realised that the average signal magnitude is not zero. I have thought
this
> is because the reactance of the antenna at different frequencies varies
and
> since it is a wideband antenna there can be energy measured since it is
only
> for an extremely small period of time of 2-4 us. However, I am not sure
and
> would greatly appreciate the views of this newsgroup.
>
>

2042. Re: copper plate antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 13:16:38 UTC
From: Sarge <sarge43@ev1.net>
Message-ID: <110c65msuj2o44d@corp.supernews.com>
Source record: 82431

"ml" <m@di.net> wrote in message
news:m-53DC71.14084205022005@news.verizon.net...
> i just discovered a part of my roof which is flat, is covered with
> copper, it measures about 50ft by 75ft and soldered it's still new so
> it shows good w/my ohmmeter
>
> just wondering as it's not grounded, if i tried to tune this up w/my
> tuner , how effective would this by on hf??
>
> Great reflector for a NVIS dipole.
> tnx

2043. SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 13:42:42 UTC
From: radio913@aol.com
Message-ID: <1107697362.650524.93750@z14g2000cwz.googlegroups.com>
Source record: 82432
Cross-posted to: rec.radio.amateur.antenna,alt.pirate.radio,alt.radio.pirate

Hi,

Well, our Super J-pole:
http://users.marktwain.net/aschmitz/antennas/jpolecalc.html

Is beating our Yagi in ALL directions,
even in the forward lobe!

Here is the theoretical H-plane plot of our Yagi:

http://www.drslick.org/Temp1/yagiplot.jpg

And a photo:

http://www.drslick.org/Temp1/yagi929.jpg

So if you assume the theoretical
2.5 dBi of a regular J-pole, then the Super
J-pole has about 3 dB over that, so about
5.5 dBi all around.

So we have about 4.52 dB in the
forward lobe of our Yagi, so even there,
we beat it by about 1 dB with the Super
J-pole. That's like 238 watts versus
300 watts.
It's even worse in the back
lobe, where it's a -12 dB difference.
That's like 19 watts versus 300 watts!

It's only a theoretical
yagi optimization plot, and i don't think
it sounded like 19 versus 300 watts in the
back, but it's a BIG difference, even in the
areas that were already strong....almost
full quieting.

And yeah, we didn't really optimize
the yagi for a strong, narrow lobe...it was
designed for a 180 degree pattern, so the
gain ain't great, but you still have some
control over directivity. It's still
not really a fair comparison.

At any rate, if you need an
omnidirectional, i highly recommend the
Super J-pole!

Here's another site if you are
interested:

http://www.geocities.com/n2uhc/jpole.html

Questions and comments appreciated!

Dr. Slick

2044. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 14:03:39 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <36mmdvF4e7smhU1@individual.net>
Source record: 82433

"Roy Lewallen" wrote
> The average value of a signal is its DC value. To receive and reproduce a
> signal with a non-zero DC component means that your antenna, as well as
> your receiver, has to have response to DC. To generate such a signal would
> require a static electric and/or magnetic field, which can't propagate. So
> it's not possible for a signal you're receiving to have a non-zero average
> value.

Pure DC doesn't radiate, but there can be a DC component in the modulation of an RF wave that does radiate. An example is analog broadcast television, which has a highly asymmetric RF waveform. It can transmit a constant (DC) video value of any amplitude between reference black at 75% modulation and reference white at 12-1/2% modulation.

RF

2045. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 14:36:11 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <36moavF54tmogU1@individual.net>
Source record: 82434
Cross-posted to: rec.radio.amateur.antenna,alt.pirate.radio,alt.radio.pirate

<radio913@aol.com> wrote >

> Well, our Super J-pole:
> Is beating our Yagi in ALL directions,
> even in the forward lobe!

Please explain how this design is directional. It should be essentially omnidirectional in the horizontal plane, unless it is side-mounted on a vertical metallic support, or has some other form of v-pol parasitic radiator near it.

And in that case, it's not your j-pole alone that is "beating" a yagi, but the combination of your j-pole and its mounting environment.

RF

Visit http://rfry.org for FM transmission system papers.

2046. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 15:02:43 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <nkqNd.26695$by5.18421@newssvr19.news.prodigy.com>
Source record: 82435

Dr. Slick,
It's fun to play with numbers, isn't it? you can
make them say almost anything you want if you "assume"
just one or two small points...
'Doc

2047. Re: Testing for gain/loss in an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 15:52:39 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <b3rNd.11092$6u.8986@fed1read02>
Source record: 82436

"Buck" <iam@this.site> wrote in message
news:h7f701d50v81rampj33ogferfk5vc1hl9v@4ax.com...
>I want to test a couple of antenna designs and compare them to a
> dipole antenna.
>
> I am wondering if my idea is a good way to measure gain or loss from
> an antenna. Here goes:
>
> Create a place in which to install the test antenna which will be
> consistent. For example, 40 foot high between two power poles (no
> power lines etc, though.)
>
> Setup a fixed location with a Field Strength Meter (FSM) that has a
> fixed antenna for testing at that location.
>
> Hang a dipole (the reference antenna) and transmit a signal that can
> be calibrated to a fixed location on the FSM. Then hang the
> experimental antenna in place of the dipole. Take the measurements
> without changing anything from the rig. Measuring the power output
> required to meet the same setting on the FSM as the dipole should give
> me a fair idea about the gain or loss from the experimental antenna.
>
> or maybe not.
>
> What am I overlooking?
>
> Thanks
> Buck
> N4PGW
>
> --
> 73 for now
> Buck
> N4PGW
>

Put some ferrite tubes (big beads) on the coax near each antenna; this will
minimize radiation off the feedlines. Also, put a 3 dB attenuator on each
antenna, to stabilize the system impedance. Secure the feedlines so that
they are hanging in the exact same position each time. And don't forget that
40' off the ground is not good for frequencies below about 50 MHz.If you
want to dig very deep, there's an IEEE standard on antenna calibration (but
it's not free). You might find an old SAE 958 (IIRC) document on antenna
calibration.

Ed
wb6wsn

2048. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 15:59:36 UTC
From: Dave <noone@nowhere.com>
Message-ID: <ro2dnSW4W_1xo5vfRVn-3g@crocker.com>
Source record: 82437

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:110avqvm87pke8d@corp.supernews.com...
> The average value of a signal is its DC value. To receive and reproduce
> a signal with a non-zero DC component means that your antenna, as well
> as your receiver, has to have response to DC. To generate such a signal
> would require a static electric and/or magnetic field, which can't
> propagate. So it's not possible for a signal you're receiving to have a
> non-zero average value.

sure it is. and while the 'static' field itself doesn't propagate the
leading edge of a step from 0 to some 'static' value can propagate and if
you measure as it passes you will see the received signal go from 0 to the
static value and then stay there.

2049. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 16:15:12 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <7fgc01pm2ulel9b8qncubptkocki4vgt7o@4ax.com>
Source record: 82438

>Hi,
>
> Well, our Super J-pole:
> http://users.marktwain.net/aschmitz/antennas/jpolecalc.html
>
>
> Is beating our Yagi in ALL directions,
>even in the forward lobe!
>>>>>>>>>>much snippage>>>>>>>>>>>>>>>>>>>>

Must be one horridly poor yagi. Most 3 eleemnt designs are better
than 8dBi and with a little effort an be 1 db better than that.

Most Stacked Jpoles do not perform as well as predicted on paper with
the upper added dipole contributing .5 to 1 db less than guessed at.

Allison

2050. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 16:41:11 UTC
From: Buck <iam@this.site>
Message-ID: <4lhc01lo5vrc6rqs70gk0imaok4g2s35uk@4ax.com>
Source record: 82439

On Sat, 05 Feb 2005 23:32:55 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Cecil Moore wrote:
>>> Cecil Moore <w5dxp@hotmail.com> wrote:
>>>
>>>> EZNEC agrees. With four radials one foot above ground the gain
>>>> is -0.53 dBi. With one radial one foot above ground the gain
>>>> is -1.62 dBi in the direction of the one radial and - 6 dBi
>>>> in the opposite direction.
snip
>
>This is for a 33 foot vertical with 33' ground wires buried 6 inches
>deep. The model was run with EZNEC/4 using the NEC-4 calculating engine.
>All are for average ground, and the gains are at the elevation angle
>where gain is the maximum -- 26 degrees in all cases.
>
>With one radial, the gain in the direction of the radial is -5.94 dBi,
>-6.7 dBi in the opposite direction. It's interesting to see how much
>difference it makes to have the radial just a foot above the ground, as
>Cecil modeled, rather than six inches below. When the radial is above
>the ground, the current distribution looks pretty much the same as the
>vertical wire's. So it contributes significantly to the pattern. But
>when buried, the current decays rapidly in an exponential-looking
>fashion, so it doesn't contribute much to the radiation.
>
>With one radial, the gain at right angles to the radial wire is -6.49 dBi.
>
>With two radials, the gain in line with the radials is -4.33 dBi, and at
>right angles essentially the same, -4.58 dBi.
>
>With four radials, the gain is -2.95 dBi essentially in all directions.
>
>With 8 radials, the gain is -1.79 dBi. This is just about what you get
>in the favored direction with a single radial elevated one foot.
>According to NEC-4, anyway. These would be some interesting experiments
>to do with a real antenna.
>
>And, running EZNEC using MININEC-type ground gives the gain you'd get
>with a perfect radial system -- -0.02 dBi.
>
>Roy Lewallen, W7EL

If I read this correctly, the more above ground radials (to a point),
the better. Until one gets to 8 radials, there is a significant drop

in antenna loss.

How do the gains/losses change when the radials are disproportionate? i.e., you have been working with essentially a 40 meter vertical with 40 meter radials. What if I were to place a 20 meter vertical (16 foot for example) on that 33 foot radial system vs placing a 20 meter vertical on the same 8 radials 16 foot long?

One of the things I would like to have for a multiband vertical is the separate elements using GAP technology or just using a common feed point as seen in some of the handbooks.

Thanks for all the info. I have a eznic and the ARRL version, but there is something that isn't registering with me when using it. Sometimes there are things I just can't seem to learn unless someone shows me what i am doing wrong or missing.

Buck
N4PGW

--
73 for now
Buck
N4PGW

2051. Re: Testing for gain/loss in an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 16:50:35 UTC
From: Buck <iam@this.site>
Message-ID: <e7ic01paul47a86lp1lccsmsrdeo601gbn@4ax.com>
Source record: 82440

On Sun, 6 Feb 2005 07:52:39 -0800, "Ed Price" <edprice@cox.net> wrote:

>
>"Buck" <iam@this.site> wrote in message
>news:h7f701d50v81rampj33ogferfk5vc1hl9v@4ax.com...
>>I want to test a couple of antenna designs and compare them to a
>> dipole antenna.
>>
>> I am wondering if my idea is a good way to measure gain or loss from
>> an antenna. Here goes:
>>
>> Create a place in which to install the test antenna which will be
>> consistent. For example, 40 foot high between two power poles (no
>> power lines etc, though.)
>>
>> Setup a fixed location with a Field Strength Meter (FSM) that has a
>> fixed antenna for testing at that location.
>>
>> Hang a dipole (the reference antenna) and transmit a signal that can
>> be calibrated to a fixed location on the FSM. Then hang the
>> experimental antenna in place of the dipole. Take the measurements
>> without changing anything from the rig. Measuring the power output
>> required to meet the same setting on the FSM as the dipole should give
>> me a fair idea about the gain or loss from the experimental antenna.
>>
>> or maybe not.
>>
>> What am I overlooking?
>>
>> Thanks
>> Buck
>> N4PGW
>>
>> --
>> 73 for now
>> Buck
>> N4PGW
>>
>
>Put some ferrite tubes (big beads) on the coax near each antenna; this will
>minimize radiation off the feedlines. Also, put a 3 dB attenuator on each
>antenna, to stabilize the system impedance. Secure the feedlines so that
>they are hanging in the exact same position each time. And don't forget that
>40' off the ground is not good for frequencies below about 50 MHz.If you

>want to dig very deep, there's an IEEE standard on antenna calibration (but
>it's not free). You might find an old SAE 958 (IIRC) document on antenna
>calibration.
>
>Ed
>wb6wsn
>

Thanks for the info. I am just doing this for personal information
more than professional. I will probably experiment with higher
frequency antennas such as 15-6 meters and then scale them to the
larger antennas as needed. I realize I won't learn much about the
TOA or other characteristics. It isn't for purely scientific research
as much as it is to get a measurement somewhere in the general
ballpark of the antenna.

You are correct about the ferrites, but I hadn't thought about the
attenuators. That sounds like a good idea too.

Thanks for your input.

Buck
N4PGW

--
73 for now
Buck
N4PGW

2052. Re: copper plate antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 16:57:17 UTC
From: Buck <iam@this.site>
Message-ID: <8ric01p9ib2hjk1f49p80npkq6aa5pr93g@4ax.com>
Source record: 82441

On Sat, 05 Feb 2005 19:08:42 GMT, ml <m@di.net> wrote:

>i just discovered a part of my roof which is flat, is covered with
>copper, it measures about 50ft by 75ft and soldered it's still new so
>it shows good w/my ohmmeter
>
>just wondering as it's not grounded, if i tried to tune this up w/my
>tuner , how effective would this by on hf??
>
>
>tnx

You might try it. Use some for of balanced line to the plate.
Connect one side of the balanced line to the plate and leave the other
empty. If you find another piece of metal there such as a gutter or
vent pipe, you might consider connecting to it.

While a balanced antenna might be best, you may find that just the
copper plate works well. In the antenna handbook or ARRL handbook are
end-fed antennas where the balanced line only feeds on one side to the
antenna.

This may not be the perfect antenna, but there is no reason it
shouldn't at least work some. I have loaded up the screen door and
talked across the country. It wasn't my ideal antenna, but it was fun
to play with :)

Good luck.

Buck
N4PGW

--
73 for now
Buck
N4PGW

2053. Re: fiberglass mast

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 17:31:08 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <aaqdnTbY3p7EyZvfRVn-sA@comcast.com>
Source record: 82442

"ml" <m@di.net> wrote in message
news:m-C96001.09334705022005@news.verizon.net...
> does anyone know a good place that sells fiberglass mast
>
> i need a 5ft section approx 1 1/2in tv mast style
>
>
> tnx

Do you really need fiberglass? I lookled at a 6 foot piece of white plastic water pipe, and it is quite rigid. It had been used as an antenna mast. My piece is about 1-3/4 OD.

Tam/WB2TT

2054. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 17:32:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2rkc01di0q59bpogc6opqvfbkcvlp23sqe@4ax.com>
Source record: 82443

On Sun, 6 Feb 2005 08:03:39 -0600, "Richard Fry" <rfry@adams.net>
wrote:

> It can transmit a constant (DC) video value of any amplitude

Hi OM,

This is absurd. Video is a modulation being carried on RF, no one
broadcasts baseband on anything but copper.

The equally absurd notion offered here originally of DC offset being
RECEIVED is another fanciful illusion. Any such measurement was
clearly an error of measurement or understanding.

73's
Richard Clark, KB7QHC

2055. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 17:37:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <88lc015eto6f7dq4o6ni3jlan4qk1t11hb@4ax.com>
Source record: 82444

On Sun, 6 Feb 2005 15:59:36 -0000, "Dave" <noone@nowhere.com> wrote:

>leading edge of a step from 0 to some 'static' value

Hi Dave,

...negates the usage of "static" - clearly.

A step pulse is not "static" and in fact contains an infinite range of
frequencies all of which are NOT DC. This is called the genii out of
the bottle and no one here can (but no doubt will try to) put it back.

73's
Richard Clark, KB7QHC

2056. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 17:56:25 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <dTsNd.2182$aW6.2075@newssvr22.news.prodigy.net>
Source record: 82445

Allison wrote:
>>>>>>>>>>>much snippage>>>>>>>>>>>>>>>>>>>>>
>
>
> Must be one horridly poor yagi. Most 3 eleemnt designs are better
> than 8dBi and with a little effort an be 1 db better than that.
>
> Most Stacked Jpoles do not perform as well as predicted on paper with
> the upper added dipole contributing .5 to 1 db less than guessed at.
>
> Allison

Not to mention, also, that that yagi is tuned to 92.9 MHz (in the FM
BROADCAST BAND)! --Jim NN7K

2057. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 18:06:38 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <36n4liF53h87nU1@individual.net>
Source record: 82446

"Richard Clark" wrote in message...
> On Sun, 6 Feb 2005 08:03:39 -0600,
> "Richard Fry" wrote:
>
>> It can transmit a constant (DC) video value of any amplitude
>
> Hi OM,
>
> This is absurd. Video is a modulation being carried on RF, no one
> broadcasts baseband on anything but copper.

Before calling this reality absurd, consider that a television station transmits a video signal in/on an RF channel. The demodulated video waveform in the TV receiver will be identical to the baseband video signal applied to the TV tx -- including its DC components (subject to any distortions along the transmission path).

If it wasn't ~ identical, a TV set could never "fade to black" when the original image did, and low-luminance colors such as blue, red, brown etc would be impossible to reproduce with their original chromaticity.

RF (ex-RCA Field Engineer, and installer of
hundreds of TV color studio and film cameras)

2058. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 18:12:40 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <36n50rF537qrtU1@individual.net>
Source record: 82447

"Richard Clark" wrote in message
> On Sun, 6 Feb 2005 15:59:36 -0000, "Dave" <noone@nowhere.com> wrote:
>
>>leading edge of a step from 0 to some 'static' value
>
> ...negates the usage of "static" - clearly.
>
> A step pulse is not "static" and in fact contains an infinite range of
> frequencies all of which are NOT DC. This is called the genii out of
> the bottle and no one here can (but no doubt will try to) put it back.

You mis-read. There is a DC component _required_ to convey the steady voltage values preceding and following the step pulse transition. He's not saying that the step pulse transition itself is comprised of "DC."

RF

2059. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 18:45:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jrlc01p6nm41j01eqt3tmoe3qkustr2j7f@4ax.com>
Source record: 82448

On Sun, 6 Feb 2005 10:46:48 GMT, "Galilea" <iportu@hotmail.com> wrote:

>Just because I am trying to learn by my
>own means doesn't mean you have to rub my lack of knowledge in.

This is reverse elitist soap opera.

Since you are unresponsive to technical discussion, let's talk about manners. Littering your posts with apologies does not excuse rude behavior. This is rubbing your nose into your lack of knowledge in newsgroup etiquette (and teaching you about flaming). Responding to others (much as you've done to me here) through YOUR own postings quite clearly marks you as being indifferent to the standards of protocol and this arrives clearly through ignorance.

In any society, bohemian or in the dress circle of the opera, it doesn't take much native intelligence to FIRST observe how people conduct themselves and THEN participate after having noted the rules of the game.

73's
Richard Clark, KB7QHC

2060. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 19:10:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b0qc01l45j13rshgjktfj8ccgbfvmsdhnj@4ax.com>
Source record: 82449

On Sun, 6 Feb 2005 12:06:38 -0600, "Richard Fry" <rfry@adams.net>
wrote:

>Before calling this reality absurd, consider that a television station
>transmits a video signal in/on an RF channel. The demodulated video
>waveform in the TV receiver will be identical to the baseband video signal
>applied to the TV tx -- including its DC components (subject to any
>distortions along the transmission path).

Hi OM,

OK, this is after the reality: what you offer is either absurd, or
non-nutritive didacticism.

Throw enough capacitance on the output of a detector and you will get
nothing but D.C. and never observe an average of zero. So What? The
forced presumption that you should is laughable. The original
question is so clouded with speculation that elbowing fantasy into a
response allows for any statement to qualify as an "authoritative
answer." Save this stuff for White House Social Security math -
mathbonics?

73's
Richard Clark, KB7QHC

2061. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 19:18:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ivqc01t689s5nb9uv4ki4hbet4sigb4nrc@4ax.com>
Source record: 82450

```
On Sun, 6 Feb 2005 12:12:40 -0600, "Richard Fry" <rfry@adams.net>
wrote:
>"Richard Clark" wrote in message
>> On Sun, 6 Feb 2005 15:59:36 -0000, "Dave" <noone@nowhere.com> wrote:
>>>leading edge of a step from 0 to some 'static' value
>> ...negates the usage of "static" - clearly.
>You mis-read.

Hi OM,

Your failure to reconcile the meaning of static with a non-static
description is as much as I need read. This class of discussion is
revealed in the hallmark re-definition of terms to suit poor
arguments.

73's
Richard Clark, KB7QHC
```

2062. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 19:34:38 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <ivrc01h6n956qchbf2ckrcg3na7etpqg0j@4ax.com>
Source record: 82452

On Sun, 06 Feb 2005 17:56:25 GMT, Jim - NN7K
<nn7kexk7zfg@NOSPAMsbcglobal.net> wrote:

>Not to mention, also, that that yagi is tuned to 92.9 MHz (in the FM
>BROADCAST BAND)! --Jim NN7K

Yes, that will really help. ;-p

I'd add the picture I looked at appeared to have a metal mast mounting
a vertical oriented beam and my experience at VHF and up is that hurts
performance.

All the years of building and testing says, extroadinary claims are
simply that. It's interesting to check the CSVHF range tests of
antennas on real antennas seperate from their sometimes fanciful
claims.

Allison
KB1GMX

2063. Good News! -- Jesus Christ Went To The Cross So You Can Go To Heaven

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 19:34:52 UTC
From: Good_News_For_You_All@yahoo.com
Message-ID: <1107718492.484540.97930@c13g2000cwb.googlegroups.com>
Source record: 82451

Good News!

Do you know how simple it is to go to Heaven after this life has ended?

The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel supernaturally to a virgin Jewish woman named Mary. He lived a sinless life for thirty-three years and then sacrificed His sinless blood and died on a cross to pay the death penalty for our sins.

After Jesus died He rose from the dead three days later as He said He would. The Holy Bible also tells us that Jesus Christ ascended into Heaven and that all who accept Him as their Lord and Saviour will live forever with Him in Heaven where there is no more death, sorrow, sickness and pain.

The Holy Bible very clearly explains how simple it is to be saved and on your way to Heaven, "For if you confess with your mouth, "Jesus is Lord," and believe in your heart that God raised him from the dead, you WILL BE SAVED." (Romans 10:9)

You can be saved right now and on your way to Heaven if you will open your heart to Jesus and pray the following prayer:

Dear Jesus Christ, I want to be saved so that I can have a home in Heaven when I die. I agree with You that I am a sinner. I believe You love me and want to save me. I believe that You bled and died on the cross to pay the penalty for my sins. I believe that You rose from the dead. Please forgive my sins and come into my heart and be my Lord and Saviour. Thank You Lord Jesus Christ for forgiving me and saving me through Your merciful grace. Amen.

You are now a Christian if you said the prayer and allowed God to save you. Welcome to the family of God.

Have a great day!
Internet Evangelist R.L. Grossi

1. http://www.biblegateway.com << Free Online Bible
2. http://www.tbn.org/index.php/8/1.html << Free Online Movies
3. http://www.worshipmusic.com/0310263670.html << The Passion Of The Christ
4. http://www.gieson.com/Library/projects/animations/walk/index.html << Animation
5. http://www.carm.org/cults/cultlist.htm << Beware Of Cults
6. http://www.equip.org/free/DH198.htm << About Hell
7. http://www.powertochange.com/questions/qna2.html << Is Jesus God?

2064. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 19:35:55 UTC
From: Dave <noone@nowhere.com>
Message-ID: <XbKdnaWcl9sC7JvfRVn-vw@crocker.com>
Source record: 82453

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:88lc015eto6f7dq4o6ni3jlan4qk1t11hb@4ax.com...
> On Sun, 6 Feb 2005 15:59:36 -0000, "Dave" <noone@nowhere.com> wrote:
>
> >leading edge of a step from 0 to some 'static' value
>
> Hi Dave,
>
> ...negates the usage of "static" - clearly.
>
> A step pulse is not "static" and in fact contains an infinite range of
> frequencies all of which are NOT DC. This is called the genii out of
> the bottle and no one here can (but no doubt will try to) put it back.
>
> 73's
> Richard Clark, KB7QHC

you will of course note that i quoted the term 'static' to denote that it was indeed not static in the infinite sense of mathematics, but in the real sense of it being a constant value over some measured time period.

the other obvious thing you are missing is that DC is a frequency... and it does come out in the Fourier transform as a frequency of zero with some finite magnitude for any waveform who's average value is not zero. it does not even require that the waveform stay at some value forever, a short pulse going from 0v to 1v and back to 0v will have a DC component in its spectrum both mathematically and on any meter that can properly respond to it.

2065. FA: TUF-TUG FALL PROTECTION HARNESS W/ WIRE ROPE GRAB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 19:40:14 UTC
From: me <nospam@nospam.com>
Message-ID: <nksc01di5ru4d5iirfv9oq4p27p2hdjimj@4ax.com>
Source record: 82454

FA: TUF-TUG FALL PROTECTION HARNESS W/ WIRE ROPE GRAB
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=3872589682

2066. Re: Pvc ok for boom

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 19:48:47 UTC
From: Clarence_A <no@No.com>
Message-ID: <zwuNd.2198$aW6.268@newssvr22.news.prodigy.net>
Source record: 82455

"Topaz305RK" <k7sam@arrl.net> wrote in message
news:zNydnZTLOt9PNXDcRVn-iQ@vnet-inc.com...
> Have had CPVC break down and "go away" but never PVC.
>
> Sam
>
Me too.
BUT painting is a good idea!
I use zinc chromate to prime,
and pale blue to hide the antenna!

Can't decide on the trim color though!

2067. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 20:31:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7lsc01drn3pmvvs6vm8fk4ohq9ddgoacen@4ax.com>
Source record: 82456

On Sun, 6 Feb 2005 19:35:55 -0000, "Dave" <noone@nowhere.com> wrote:

>you will of course note that i quoted the term 'static' to denote that it
>was indeed not static in the infinite sense of mathematics, but in the real
>sense of it being a constant value over some measured time period.

Hi Dave,

This is fine as an elaboration that grows beyond the horizon of the
question. But it really serves no purpose but to embroider a glaring
lack of facts.

>the other obvious thing you are missing is that DC is a frequency... and it
>does come out in the Fourier transform as a frequency of zero with some
>finite magnitude for any waveform who's average value is not zero. it does
>not even require that the waveform stay at some value forever, a short pulse
>going from 0v to 1v and back to 0v will have a DC component in its spectrum
>both mathematically and on any meter that can properly respond to it.

After having done a quite rigorous contract with HP deeply involved in
both the strict math and the mechanics of Fourier, I am well versed to
know how not all Fourier Transforms offer equal outcomes - especially
with, or without D.C. as a product.

Pure Fourier mandates a waveform constant throughout all time (from
its inception to its end) and is strictly one of those "thought
experiments" when it comes to transients - obviously. This has been,
and is the first issue that comes with its classic requirements
clashing with utility.

Practical Fourier mandates that you remove all D.C. components through
what is called "windowing" your data. You can choose not to and enjoy
all the artifacts of spurious behavior (like frequency folding,
frequency blurring, and false baselines) and translate those results
into blighted proofs too. With transients, practical Fourier
techniques mandate the presumption that they are periodic through all
time by literally forcing the data set (through extensive reworking)
to fit this requirement (which returns us to classic expectation).
Such reworking of original data demands that you make a choice: you
either discard amplitude accuracy for the sake of frequency accuracy,
or discard frequency accuracy for the sake of amplitude accuracy. The
irony of this choice is that you have already discard D.C. and its
appearance within the product of results is imbued with error. Need I
ask if you know how much error? Ignorance to what accuracy your
transforms bring reduce arguments to platitudes.

Simple, day to day, practical applications of Fourier discard these issues as trivialities immediately and offer no pretense of "accuracy" because you couldn't appreciate it anyway (unless the designer of an IIR or FIR was so incompetent as to be that obvious).

However, this goes beyond the pale to justify a glaring presumption "average signal magnitude not zero" with the trappings of Fourier. For one, absolutely no one knows what is meant by "impulsive wideband signal (500 - 2.5 GHz)." This is so extremely vague as to be supportable by a multitude of waveforms that have wildly different Fourier results. For instance, there is the classic impulse of physics, lightning, which is notoriously low in frequency content over the interval cited. Clearly such impulsions suffered are not from nature. But this begs forcing the nomenclature to fit the problem. There are other impulses like a gated sine wave (which obviously renders a zero average), or a swept sine wave (same obvious average), or a ramp wave, or a saw tooth wave, or a triangle wave, or chirp wave. The list of impulsive wideband signals is exhausting, but hardly accommodating to the same universal expectation.

If our correspondent, Galilea, cannot come to terms with responding to technical issues when seeking help, the growth of forced speculation creates its own illusory discussion that is best limited to idle conversation overheard in a ticket line waiting for a movie box office to open.

73's
Richard Clark, KB7QHC

2068. Re: 12 v or 13.8?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 20:39:39 UTC
From: Terry <tsanford@nf.sympatico.ca>
Message-ID: <YfvNd.480$504.83256@news20.bellglobal.com>
Source record: 82457

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
news:24-dndptnKq7I57fRVn-gQ@comcast.com...
>
> "Rob Stampfli" <restamp@hotmail.com> wrote in message
> news:R_ZKd.7363$i42.3624@fe1.columbus.rr.com...
>> In article <10vd28fc38a79ee@corp.supernews.com>,
>> David G. Nagel <nagel@core.com> wrote:
>>>stryped@hotmail.com wrote:
>>>
>>>> When looking for a power supply for my Alinco dr-590, what type of
>>>> power supply would I look for? The radio says 13.8 v dc but if I get a
>>>> 12 volt power supply will it put out the same wattage at the radio?
>>>>
>>>12 VDC to 13.8 VDC are nominal voltages. Very few radios are sensitive
>>>to variation of voltage as long as the power supply can supply the amps.

The 'nominal' 12 volts is the voltage of the 6 two volt cells of a typical
auto battery, during normal discharge.
That is two volts per cell.
To charge a typical lead/acid battery a voltage of about 2.3 volts per cell
is required.
Therefore 6 x 2.3 = 13.8 volts.
Controlling to 13.8 volts is the job that the 'voltage regulator' does in an
automobile. To avoid overcharging and/or ruining the auto battery.
Therefore equipment which is designed to operate on nominally 12 volts is
usually designed to operate over the range 13.8 volts down to the point
where that battery is just about flat, at anything less than 12 volts. (If
your battery reads less than say 11.8 volts it's either shot or fully
discharged; BTW voltage is not a good indicator of whether or how well a
battery is charged!).
Large administrations e.g. AT&T, 'float' their large expensive battery
installations at around 2.15 to 2.17 volts per cell to offset 'local
chemical action' which causes batteries to slowly lose their state of charge
over time. For example 6 x 2.16 = 12.96 volts. This ensures the batteries
are fully charged at the start of a power interruption.

2069. Wireless Weather Station and Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 21:10:10 UTC
From: Randy Given <GivenRandy@aol.com>
Message-ID: <XIvNd.21036$Vg3.16644@lakeread05>
Source record: 82458

If I put a wireless weather station on the roof on a 6' mast on tripod, can I simply run a grounding wire down to an 8' copper grounding rod?

Randy Given
GivenRandy@aol.com

2070. Re: Coax Antenna Lead

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 21:11:29 UTC
From: The Masked Marvel <s_crook_remove_underbars_@comcast.net>
Message-ID: <w6ydnY3UtJFnGpvfRVn-3g@comcast.com>
Source record: 82459

I'd run lower loss coax for the UHF/VHF than RG-213/U, e.g. LMR400, Belden 9913F, etc, unless the run was less than 25 feet or so, maybe 50ft. For HF thru 10m (or even 6m) though the RG-213 should be just fine. It may be cheaper though to just buy a spool of the low loss and use it for the HF too than to buy two types of coax.

Like the conduit/EMT idea (make'm BIG and run a couple). Also, now's the time to run a *dedicated* circuit to the shack for a 240V amp supply. if not needed, it could be connected to 120V instead and the receptacle changed, but power only a single outlet box w/ it so you can easily switch to 240 V (duplex vs single breaker and new recepticle).

"Bill" <ojiisan@bellsouth.net> wrote in message
news:4obNd.17124$qJ3.6427@bignews1.bellsouth.net...
> jimbo wrote:
>> How many of the eight runs do you use at one time? And I guess the
>> other runs are spares? Did you consider conduit, so you could replace
>> cables if required rather than spare runs?
>>
>> Thanks, jimbo
>>
>> Bill wrote:
>>
>>>jimbo wrote:
>>>
>>>>I am building a new house. I need two coax runs inside the house
>>
>> for
>>
>>>>two uses. First, for 2 meter, 440 MHz dual band. Second for 2-30
>>
>> MHz
>>
>>>>HF. I am considering using RG213/U for both runs. I know this coax
>>
>> is
>>
>>>>suitable for 440 MHz on runs less than 100 feet. Would there be any
>>>>problems for the 2 meter or HF using this coax? Or are there any
>>>>suggestions for this project?
>>>>
>>>>Thanks, jimbo
>>>>
>>>
>>>I did the same thing when I put in the ham shack but I ran 8 runs of

>>>LMR400 cable and also two runs of 8 conductor cable for rotor's.
>>>The outside panel is under the eve of the house and I have another
>>>panel on the wall of the shack.
>>>Tye LMR 400 Ultra Flex is what I used.
>>
>>
> I have seven antennas up right now so there is only one spare run and one
> spare run for a rotator.
> I would guess conduit would be ok but for what I have it's not needed.
> I can replace a run here by soldering the center and outer shield to the
> new piece and pull it through with out any problems, if the cables had
> been run other than the way they are now then conduit would have made
> things easier.

2071. shortwave 47 meter

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 21:15:43 UTC
From: ploetsio@hotmail.com
Message-ID: <4ee37d0e.0502061315.67473084@posting.google.com>
Source record: 82460

Hallo.

I'm looking for a shortwave antenna which can be easy build on a 25
meter mast.
This antenna needs a resonant frequenty of +/- 6.7 mhz.
The reason wy i wanna build this antenna is that my wife's mother is
living in Sumatra Indonesia and workt a long time for the national
radio.
You can say she is a real radio freak and that's wy I pick up the plan
to start a radio station here from holland (europe)so she can here
here our dougther and my wife on here own shortwave radio.
I have allready design a final amp for this project and it will be
ready in about 9 month. It's a class A 4cx15000 exiter modulated Amp.
It will produce about 6KW. Now we need a good antenna which can
handle this kind of power and can put the signal into Indonesia and
the rest of the world.
I can build a 1/4 wave vertical but in my opinion the vertical opening
of this antenna will produce onely one skip. I need an antenna with a
wide fertical angle so it will deliver the signal all throu out the
country's at all time. (multy skip)
To produce the power is not so hard but when we start our transmitting
my grandmother have to here it. That will be so nice.
I'm sorry that my english is so bad to explane exactly what i need so
i hope somebody will understand it.

2072. Re: AM radio reception inside passenger planes?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 21:21:11 UTC
From: Terry <tsanford@nf.sympatico.ca>
Message-ID: <USvNd.507$504.90344@news20.bellglobal.com>
Source record: 82462
Cross-posted to: rec.travel.air,rec.radio.amateur.antenna,sci.electronics.equipment

> If you stretch a string on a globe from London to Florida, it will show
> the 'great circle' route that's the shortest, and that should be your
> plane's path, barring storme, hurricanes, etc. You'll see that it comes
> really close to the eastern Canadian provinces.
>
In fact the Avalon Peninsuala in the most eastern part of the island portion
of the province of Newfoundland and Labrador, Canada, is a 'Way Point' for
many transatlantic flights headed to/from Europe.
Clear days Transatlantic flight con-trails, at 30,000 feet etc. can be seen
almost continuously.
That is why so many of the flights that were prevented from entering US air
space 9/11 had to land in eastern Canada.
Many US/Canada friendships were founded between grounded travellers that day
and eastern and western Canadians who voluntarily accommodated them during
the delay.
Cape Spear near St John's is the most easterly point in North America.
Marconi received the first transatlantic wireless telegraph signal near St
John's in Dec. 1901.
French is one of the 'Official Languages' in Canada. A significant
percentage of the population, mainly in Quebec, New Brunswick, but also
elsewhere in Canada, is French speaking. Many/most are bilingual.
Same way Spanish is significant in the USA?
The word 'Cajun' in southern US comes from the French word "Acadian";
originally inhabitants of Acadia or what is now the eastern Canadian
Province of Nova Scotia.
Terry.
PS. Staff at the National Historic Park at Signal Hill, St. John's, which
incorporates the memorial and events which celebrate Marconi's first
wireless telegraph reception say that visitors unaware of the approximately
1800 miles across the Atlantic, (4.3 hours by jet to London-Heathrow) will
sometimes ask "Can you see across to England/Ireland etc.". The answer is;
"No, but sometimes you can see "Whales"! :-)
And sometimes icebergs as well.

2073. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 21:26:19 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <36ngbvF54t7s7U1@individual.net>
Source record: 82461

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:ivqc01t689s5nb9uv4ki4hbet4sigb4nrc@4ax.com...
> On Sun, 6 Feb 2005 12:12:40 -0600, "Richard Fry" <rfry@adams.net>
> wrote:
>>"Richard Clark" wrote in message
>>> On Sun, 6 Feb 2005 15:59:36 -0000, "Dave" <noone@nowhere.com> wrote:
>>>>leading edge of a step from 0 to some 'static' value
>>> ...negates the usage of "static" - clearly.
>>You mis-read.
>
> Hi OM,
>
> Your failure to reconcile the meaning of static with a non-static
> description is as much as I need read. This class of discussion is
> revealed in the hallmark re-definition of terms to suit poor
> arguments.
>
> 73's
> Richard Clark, KB7QHC

Your rhetoric is evasive and blustery -- no doubt so you won't have to admit publicly to an incomplete understanding of what you are responding to.

RF

2074. Re: Antennas vs Antennae

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 21:45:42 UTC
From: Terry <tsanford@nf.sympatico.ca>
Message-ID: <TdwNd.534$504.93564@news20.bellglobal.com>
Source record: 82463

Enjoyed this thread. It elevated the word 'aerial' to new heights!
Noting also that during it, no one, as a previous English teacher of mine used to say, "Demonstrated their inability to express themselves properly by descending into profanity".
The same teacher, however, also claimed, "Anyone using words such as 'sox' and 'foto' were definitely not using the English language"!
In the 1950s Broadway show 'My fair lady' based on G.B.Shaw's Pygmalion, there is the line, "There even are places where Engish completely disappears. In America they haven't used it for years!". It was good for a laugh.
Personally; if we can combine the American skill for inventing/designing/adapting words so that so that they are terse and descriptive with the British penchant for contrasting and 'punning' the various meanings of words, we will continue to have a rich and adaptive language which will, as from the time of Chaucer and Shakespeare, be the most powerful communicating language in the world. More power to us.
Terry.

2075. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 21:57:08 UTC
From: radio913@aol.com
Message-ID: <1107727028.810388.281720@c13g2000cwb.googlegroups.com>
Source record: 82464

nospam@nouce.bellatlantic.net wrote:
> On Sun, 06 Feb 2005 17:56:25 GMT, Jim - NN7K
> <nn7kexk7zfg@NOSPAMsbcglobal.net> wrote:
>
> >Not to mention, also, that that yagi is tuned to 92.9 MHz (in the FM
> >BROADCAST BAND)! --Jim NN7K
>

yes, indeed it is!!

> Yes, that will really help. ;-p
>
> I'd add the picture I looked at appeared to have a metal mast
mounting
> a vertical oriented beam and my experience at VHF and up is that
hurts
> performance.
>

We modeled the mast in the position it's in,
and changing the length doesn't affect the pattern
significantly.

> All the years of building and testing says, extroadinary claims are
> simply that. It's interesting to check the CSVHF range tests of
> antennas on real antennas seperate from their sometimes fanciful
> claims.
>

I presented the theoretical calculations,
not actual measurements, sure.

Anyone with a VHF anechoic chamber?

Slick

2076. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 21:58:05 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <42069318.2080500@att.net>
Source record: 82465

Richard,

Utter nonsense.

73,
Gene
W4SZ

Richard Clark wrote:
> On Sun, 6 Feb 2005 19:35:55 -0000, "Dave" <noone@nowhere.com> wrote:
>
>
>>you will of course note that i quoted the term 'static' to denote that it
>>was indeed not static in the infinite sense of mathematics, but in the real
>>sense of it being a constant value over some measured time period.
>
>
> Hi Dave,
>
> This is fine as an elaboration that grows beyond the horizon of the
> question. But it really serves no purpose but to embroider a glaring
> lack of facts.
>
>
>>the other obvious thing you are missing is that DC is a frequency... and it
>>does come out in the Fourier transform as a frequency of zero with some
>>finite magnitude for any waveform who's average value is not zero. it does
>>not even require that the waveform stay at some value forever, a short pulse
>>going from 0v to 1v and back to 0v will have a DC component in its spectrum
>>both mathematically and on any meter that can properly respond to it.
>
>
> After having done a quite rigorous contract with HP deeply involved in
> both the strict math and the mechanics of Fourier, I am well versed to
> know how not all Fourier Transforms offer equal outcomes - especially
> with, or without D.C. as a product.
>
> Pure Fourier mandates a waveform constant throughout all time (from
> its inception to its end) and is strictly one of those "thought
> experiments" when it comes to transients - obviously. This has been,
> and is the first issue that comes with its classic requirements
> clashing with utility.
>
> Practical Fourier mandates that you remove all D.C. components through
> what is called "windowing" your data. You can choose not to and enjoy

> all the artifacts of spurious behavior (like frequency folding,
> frequency blurring, and false baselines) and translate those results
> into blighted proofs too. With transients, practical Fourier
> techniques mandate the presumption that they are periodic through all
> time by literally forcing the data set (through extensive reworking)
> to fit this requirement (which returns us to classic expectation).
> Such reworking of original data demands that you make a choice: you
> either discard amplitude accuracy for the sake of frequency accuracy,
> or discard frequency accuracy for the sake of amplitude accuracy. The
> irony of this choice is that you have already discard D.C. and its
> appearance within the product of results is imbued with error. Need I
> ask if you know how much error? Ignorance to what accuracy your
> transforms bring reduce arguments to platitudes.
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> Simple, day to day, practical applications of Fourier discard these
> issues as trivialities immediately and offer no pretense of "accuracy"
> because you couldn't appreciate it anyway (unless the designer of an
> IIR or FIR was so incompetent as to be that obvious).
>
> However, this goes beyond the pale to justify a glaring presumption
> "average signal magnitude not zero" with the trappings of Fourier.
> For one, absolutely no one knows what is meant by "impulsive
> wideband signal (500 - 2.5 GHz)." This is so extremely vague as to be
> supportable by a multitude of waveforms that have wildly different
> Fourier results. For instance, there is the classic impulse of
> physics, lightning, which is notoriously low in frequency content over
> the interval cited. Clearly such impulsions suffered are not from
> nature. But this begs forcing the nomenclature to fit the problem.
> There are other impulses like a gated sine wave (which obviously
> renders a zero average), or a swept sine wave (same obvious average),
> or a ramp wave, or a saw tooth wave, or a triangle wave, or chirp
> wave. The list of impulsive wideband signals is exhausting, but
> hardly accommodating to the same universal expectation.
>
> If our correspondent, Galilea, cannot come to terms with responding to
> technical issues when seeking help, the growth of forced speculation
> creates its own illusory discussion that is best limited to idle
> conversation overheard in a ticket line waiting for a movie box office
> to open.
>
> 73's
> Richard Clark, KB7QHC

2077. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 21:59:48 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <42069380.7000400@att.net>
Source record: 82466

Richard,

Utter nonsense.

73,
Gene
W4SZ

Richard Clark wrote:
> On Sun, 6 Feb 2005 19:35:55 -0000, "Dave" <noone@nowhere.com> wrote:
>
>
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>>was indeed not static in the infinite sense of mathematics, but in the real
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> and is the first issue that comes with its classic requirements
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> what is called "windowing" your data. You can choose not to and enjoy

> all the artifacts of spurious behavior (like frequency folding,
> frequency blurring, and false baselines) and translate those results
> into blighted proofs too. With transients, practical Fourier
> techniques mandate the presumption that they are periodic through all
> time by literally forcing the data set (through extensive reworking)
> to fit this requirement (which returns us to classic expectation).
> Such reworking of original data demands that you make a choice: you
> either discard amplitude accuracy for the sake of frequency accuracy,
> or discard frequency accuracy for the sake of amplitude accuracy. The
> irony of this choice is that you have already discard D.C. and its
> appearance within the product of results is imbued with error. Need I
> ask if you know how much error? Ignorance to what accuracy your
> transforms bring reduce arguments to platitudes.
>
> Simple, day to day, practical applications of Fourier discard these
> issues as trivialities immediately and offer no pretense of "accuracy"
> because you couldn't appreciate it anyway (unless the designer of an
> IIR or FIR was so incompetent as to be that obvious).
>
> However, this goes beyond the pale to justify a glaring presumption
> "average signal magnitude not zero" with the trappings of Fourier.
> For one, absolutely no one knows what is meant by "impulsive
> wideband signal (500 - 2.5 GHz)." This is so extremely vague as to be
> supportable by a multitude of waveforms that have wildly different
> Fourier results. For instance, there is the classic impulse of
> physics, lightning, which is notoriously low in frequency content over
> the interval cited. Clearly such impulsions suffered are not from
> nature. But this begs forcing the nomenclature to fit the problem.
> There are other impulses like a gated sine wave (which obviously
> renders a zero average), or a swept sine wave (same obvious average),
> or a ramp wave, or a saw tooth wave, or a triangle wave, or chirp
> wave. The list of impulsive wideband signals is exhausting, but
> hardly accommodating to the same universal expectation.
>
> If our correspondent, Galilea, cannot come to terms with responding to
> technical issues when seeking help, the growth of forced speculation
> creates its own illusory discussion that is best limited to idle
> conversation overheard in a ticket line waiting for a movie box office
> to open.
>
> 73's
> Richard Clark, KB7QHC

2078. Good News! -- Jesus Christ Went To The Cross So You Can Go To Heaven

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 22:00:17 UTC
From: Good_News_For_You_All@yahoo.com
Message-ID: <1107727217.550681.295620@l41g2000cwc.googlegroups.com>
Source record: 82467

Good News!

Do you know how simple it is to go to Heaven after this life has ended?

The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel supernaturally to a virgin Jewish woman named Mary. He lived a sinless life for thirty-three years and then sacrificed His sinless blood and died on a cross to pay the death penalty for our sins.

After Jesus died He rose from the dead three days later as He said He would. The Holy Bible also tells us that Jesus Christ ascended into Heaven and that all who accept Him as their Lord and Saviour will live forever with Him in Heaven where there is no more death, sorrow, sickness and pain.

The Holy Bible very clearly explains how simple it is to be saved and on your way to Heaven, "For if you confess with your mouth, "Jesus is Lord," and believe in your heart that God raised him from the dead, you WILL BE SAVED." (Romans 10:9)

You can be saved right now and on your way to Heaven if you will open your heart to Jesus and pray the following prayer:

Dear Jesus Christ, I want to be saved so that I can have a home in Heaven when I die. I agree with You that I am a sinner. I believe You love me and want to save me. I believe that You bled and died on the cross to pay the penalty for my sins. I believe that You rose from the dead. Please forgive my sins and come into my heart and be my Lord and Saviour. Thank You Lord Jesus Christ for forgiving me and saving me through Your merciful grace. Amen.

You are now a Christian if you said the prayer and allowed God to save you. Welcome to the family of God.

Have a great day!
Internet Evangelist R.L. Grossi

1. http://www.biblegateway.com << Free Online Bible
2. http://www.tbn.org/index.php/8/1.html << Free Online Movies
3. http://www.worshipmusic.com/0310263670.html << The Passion Of The Christ
4. http://www.gieson.com/Library/projects/animations/walk/index.html << Animation
5. http://www.carm.org/cults/cultlist.htm << Beware Of Cults
6. http://www.equip.org/free/DH198.htm << About Hell
7. http://www.powertochange.com/questions/qna2.html << Is Jesus God?

2079. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 22:00:52 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <420693C0.8040004@att.net>
Source record: 82468

Richard,

Utter nonsense.

73,
Gene
W4SZ

Richard Clark wrote:
> On Sun, 6 Feb 2005 19:35:55 -0000, "Dave" <noone@nowhere.com> wrote:
>
>
>>you will of course note that i quoted the term 'static' to denote that it
>>was indeed not static in the infinite sense of mathematics, but in the real
>>sense of it being a constant value over some measured time period.
>
>
> Hi Dave,
>
> This is fine as an elaboration that grows beyond the horizon of the
> question. But it really serves no purpose but to embroider a glaring
> lack of facts.
>
>
>>the other obvious thing you are missing is that DC is a frequency... and it
>>does come out in the Fourier transform as a frequency of zero with some
>>finite magnitude for any waveform who's average value is not zero. it does
>>not even require that the waveform stay at some value forever, a short pulse
>>going from 0v to 1v and back to 0v will have a DC component in its spectrum
>>both mathematically and on any meter that can properly respond to it.
>
>
> After having done a quite rigorous contract with HP deeply involved in
> both the strict math and the mechanics of Fourier, I am well versed to
> know how not all Fourier Transforms offer equal outcomes - especially
> with, or without D.C. as a product.
>
> Pure Fourier mandates a waveform constant throughout all time (from
> its inception to its end) and is strictly one of those "thought
> experiments" when it comes to transients - obviously. This has been,
> and is the first issue that comes with its classic requirements
> clashing with utility.
>
> Practical Fourier mandates that you remove all D.C. components through
> what is called "windowing" your data. You can choose not to and enjoy

> all the artifacts of spurious behavior (like frequency folding,
> frequency blurring, and false baselines) and translate those results
> into blighted proofs too. With transients, practical Fourier
> techniques mandate the presumption that they are periodic through all
> time by literally forcing the data set (through extensive reworking)
> to fit this requirement (which returns us to classic expectation).
> Such reworking of original data demands that you make a choice: you
> either discard amplitude accuracy for the sake of frequency accuracy,
> or discard frequency accuracy for the sake of amplitude accuracy. The
> irony of this choice is that you have already discard D.C. and its
> appearance within the product of results is imbued with error. Need I
> ask if you know how much error? Ignorance to what accuracy your
> transforms bring reduce arguments to platitudes.
>
> Simple, day to day, practical applications of Fourier discard these
> issues as trivialities immediately and offer no pretense of "accuracy"
> because you couldn't appreciate it anyway (unless the designer of an
> IIR or FIR was so incompetent as to be that obvious).
>
> However, this goes beyond the pale to justify a glaring presumption
> "average signal magnitude not zero" with the trappings of Fourier.
> For one, absolutely no one knows what is meant by "impulsive
> wideband signal (500 - 2.5 GHz)." This is so extremely vague as to be
> supportable by a multitude of waveforms that have wildly different
> Fourier results. For instance, there is the classic impulse of
> physics, lightning, which is notoriously low in frequency content over
> the interval cited. Clearly such impulsions suffered are not from
> nature. But this begs forcing the nomenclature to fit the problem.
> There are other impulses like a gated sine wave (which obviously
> renders a zero average), or a swept sine wave (same obvious average),
> or a ramp wave, or a saw tooth wave, or a triangle wave, or chirp
> wave. The list of impulsive wideband signals is exhausting, but
> hardly accommodating to the same universal expectation.
>
> If our correspondent, Galilea, cannot come to terms with responding to
> technical issues when seeking help, the growth of forced speculation
> creates its own illusory discussion that is best limited to idle
> conversation overheard in a ticket line waiting for a movie box office
> to open.
>
> 73's
> Richard Clark, KB7QHC

2080. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 22:10:37 UTC
From: radio913@aol.com
Message-ID: <1107727837.664797.204920@g14g2000cwa.googlegroups.com>
Source record: 82469

nospam@nouce.bellatlantic.net wrote:
> >Hi,
> >
> > Well, our Super J-pole:
> >
http://users.marktwain.net/aschmitz/antennas/jpolecalc.html
> >
> >
> > Is beating our Yagi in ALL directions,
> >even in the forward lobe!
> >>>>>>>>>>much snippage>>>>>>>>>>>>>>>>>>>>
>
> Must be one horridly poor yagi. Most 3 eleemnt designs are better
> than 8dBi and with a little effort an be 1 db better than that.
>

8 dBi WITH a 180 degree pattern?
And WITH A F/B ratio that doesn't exceed 11 dB
or so?

I don't think so.

Do you have a design you can show us?

> Most Stacked Jpoles do not perform as well as predicted on paper with
> the upper added dipole contributing .5 to 1 db less than guessed at.

>
> Allison

How did you come to this conclusion? What
sort of field strength equipment did you use?

Again, i would be the first to say
that reality doesn't fit the math model,
sometimes not at all. But is this case,
you can really hear the difference.

Slick
Slick

2081. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 22:25:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <co5d0118qsh2f94q535bkcntpsp1a2negs@4ax.com>
Source record: 82470

On Sun, 06 Feb 2005 21:58:05 GMT, Gene Fuller <W4SZzzzzzz@att.net>
wrote:

>Utter nonsense.

Hi Gene,

You had to post that three times?

Oh well, seems the season for deeply insightful criticism that appears
to be following the value of the dollar in the world market. Was that
your 1ï¿½ï¿½ worth?

Barring any discussion of conflicting experience, I would say it was
worth every penny. You can put it into a privatized SS account and
recoup massive earnings - if the dollar would just tread water. Don't
invest in cotton or rice futures though.... [Feb. 5 - President Bush
will seek deep cuts in farm and commodity programs in his new budget]

73's
Richard Clark, KB7QHC

2082. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 22:38:26 UTC
From: Dave <noone@nowhere.com>
Message-ID: <hpednVPNx8P7AZvfRVn-ug@crocker.com>
Source record: 82322

obviously this discussion has ended... we are down to the 'just poo poo' what you don't understand level... next comes name calling and personal attacks, so its time to leave.

"Gene Fuller" <W4SZzzzzzz@att.net> wrote in message news:420693C0.8040004@att.net...
> Richard,
>
> Utter nonsense.
>
> 73,
> Gene
> W4SZ
>
> Richard Clark wrote:
> > On Sun, 6 Feb 2005 19:35:55 -0000, "Dave" <noone@nowhere.com> wrote:
> >
> >
> >>you will of course note that i quoted the term 'static' to denote that it
> >>was indeed not static in the infinite sense of mathematics, but in the real
> >>sense of it being a constant value over some measured time period.
> >
> >
> > Hi Dave,
> >
> > This is fine as an elaboration that grows beyond the horizon of the
> > question. But it really serves no purpose but to embroider a glaring
> > lack of facts.
> >
> >
> >>the other obvious thing you are missing is that DC is a frequency... and it
> >>does come out in the Fourier transform as a frequency of zero with some
> >>finite magnitude for any waveform who's average value is not zero. it does
> >>not even require that the waveform stay at some value forever, a short pulse
> >>going from 0v to 1v and back to 0v will have a DC component in its spectrum
> >>both mathematically and on any meter that can properly respond to it.
> >
> >

> > After having done a quite rigorous contract with HP deeply involved in
> > both the strict math and the mechanics of Fourier, I am well versed to
> > know how not all Fourier Transforms offer equal outcomes - especially
> > with, or without D.C. as a product.
> >
> > Pure Fourier mandates a waveform constant throughout all time (from
> > its inception to its end) and is strictly one of those "thought
> > experiments" when it comes to transients - obviously. This has been,
> > and is the first issue that comes with its classic requirements
> > clashing with utility.
> >
> > Practical Fourier mandates that you remove all D.C. components through
> > what is called "windowing" your data. You can choose not to and enjoy
> > all the artifacts of spurious behavior (like frequency folding,
> > frequency blurring, and false baselines) and translate those results
> > into blighted proofs too. With transients, practical Fourier
> > techniques mandate the presumption that they are periodic through all
> > time by literally forcing the data set (through extensive reworking)
> > to fit this requirement (which returns us to classic expectation).
> > Such reworking of original data demands that you make a choice: you
> > either discard amplitude accuracy for the sake of frequency accuracy,
> > or discard frequency accuracy for the sake of amplitude accuracy. The
> > irony of this choice is that you have already discard D.C. and its
> > appearance within the product of results is imbued with error. Need I
> > ask if you know how much error? Ignorance to what accuracy your
> > transforms bring reduce arguments to platitudes.
> >
> > Simple, day to day, practical applications of Fourier discard these
> > issues as trivialities immediately and offer no pretense of "accuracy"
> > because you couldn't appreciate it anyway (unless the designer of an
> > IIR or FIR was so incompetent as to be that obvious).
> >
> > However, this goes beyond the pale to justify a glaring presumption
> > "average signal magnitude not zero" with the trappings of Fourier.
> > For one, absolutely no one knows what is meant by "impulsive
> > wideband signal (500 - 2.5 GHz)." This is so extremely vague as to be
> > supportable by a multitude of waveforms that have wildly different
> > Fourier results. For instance, there is the classic impulse of
> > physics, lightning, which is notoriously low in frequency content over
> > the interval cited. Clearly such impulsions suffered are not from
> > nature. But this begs forcing the nomenclature to fit the problem.
> > There are other impulses like a gated sine wave (which obviously
> > renders a zero average), or a swept sine wave (same obvious average),
> > or a ramp wave, or a saw tooth wave, or a triangle wave, or chirp
> > wave. The list of impulsive wideband signals is exhausting, but
> > hardly accommodating to the same universal expectation.
> >
> > If our correspondent, Galilea, cannot come to terms with responding to
> > technical issues when seeking help, the growth of forced speculation
> > creates its own illusory discussion that is best limited to idle

> > conversation overheard in a ticket line waiting for a movie box office
> > to open.
> >
> > 73's
> > Richard Clark, KB7QHC

2083. Re: shortwave 47 meter

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 22:49:04 UTC
From: Eskay <sieb_k@yahoo.ca>
Message-ID: <1ds4lk48v97hn.5tevcd8xpld7$.dlg@40tude.net>
Source record: 82471

On 6 Feb 2005 13:15:43 -0800, Onno wrote:

> Hallo.
>
> I'm looking for a shortwave antenna which can be easy build on a 25
> meter mast.
> This antenna needs a resonant frequenty of +/- 6.7 mhz.
> The reason wy i wanna build this antenna is that my wife's mother is
> living in Sumatra Indonesia and workt a long time for the national
> radio.
> You can say she is a real radio freak and that's wy I pick up the plan
> to start a radio station here from holland (europe)so she can here
> here our dougther and my wife on here own shortwave radio.
> I have allready design a final amp for this project and it will be
> ready in about 9 month. It's a class A 4cx15000 exiter modulated Amp.
> It will produce about 6KW. Now we need a good antenna which can
> handle this kind of power and can put the signal into Indonesia and
> the rest of the world.
> I can build a 1/4 wave vertical but in my opinion the vertical opening
> of this antenna will produce onely one skip. I need an antenna with a
> wide fertical angle so it will deliver the signal all throu out the
> country's at all time. (multy skip)
> To produce the power is not so hard but when we start our transmitting
> my grandmother have to here it. That will be so nice.
> I'm sorry that my english is so bad to explane exactly what i need so
> i hope somebody will understand it.

Wat jij van plan bent is ilegaal.

Eskay.

2084. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 23:12:33 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <M8edne9Tpd38OZvfRVn-vA@adelphia.com>
Source record: 82323

Gene Fuller wrote:

> Richard,
>
> Utter nonsense.

I don't think so, Gene. I have to read Richards posts twice on
occasion, but this is pretty spot on.

- Mike KB3EIA -
> Richard Clark wrote:
>
>> On Sun, 6 Feb 2005 19:35:55 -0000, "Dave" <noone@nowhere.com> wrote:
>>
>>
>>> you will of course note that i quoted the term 'static' to denote
>>> that it
>>> was indeed not static in the infinite sense of mathematics, but in
>>> the real
>>> sense of it being a constant value over some measured time period.
>>
>>
>>
>> Hi Dave,
>>
>> This is fine as an elaboration that grows beyond the horizon of the
>> question. But it really serves no purpose but to embroider a glaring
>> lack of facts.

<rest snipped>

2085. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 23:15:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110d99cbei4n8de@corp.supernews.com>
Source record: 82324

Surely as a former broadcast engineer you're acquainted with a circuit called a "DC restorer". This is a circuit which is always present in a TV receiver. In its simplest form, it's just a diode clamping circuit, although I've made very good ones with an FET switch and hold capacitor. What it does is to set the sync pulse tip to a fixed DC value, which then causes the rest of the TV waveform to be at a fixed DC value. This is how the DC information is "transmitted". The actual TV waveform is AC coupled, as it must be, and its DC values are established in the receiver by the DC restorer.

No DC value is transmitted.

You should be able to find an explanation of this in any basic text on the principles of television transmission and reception.

Roy Lewallen, W7EL

Richard Fry wrote:
> _____________
>
> You mis-read. There is a DC component _required_ to convey the steady
> voltage values preceding and following the step pulse transition. He's
> not saying that the step pulse transition itself is comprised of "DC."
>
> RF

2086. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 23:20:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110d9hoind5hvc5@corp.supernews.com>
Source record: 82325

Richard Fry wrote:
>
> Before calling this reality absurd, consider that a television station
> transmits a video signal in/on an RF channel. The demodulated video
> waveform in the TV receiver will be identical to the baseband video
> signal applied to the TV tx -- including its DC components (subject to
> any distortions along the transmission path).
>
> If it wasn't ~ identical, a TV set could never "fade to black" when the
> original image did, and low-luminance colors such as blue, red, brown
> etc would be impossible to reproduce with their original chromaticity.
>
> RF (ex-RCA Field Engineer, and installer of
> hundreds of TV color studio and film cameras)

You perhaps never installed a receiver. Without its DC restorer circuit, the problems you mention do indeed exist. In a black-and-white set, a large white area will cause everything else to go black, to maintain a zero average. But the DC information is transmitted as a level difference between the sync tip and the "porches". At the receiver (as I mentioned in another post), this voltage *difference* is turned into a DC value. No DC is transmitted.

Surely a little bit of thought will establish why direct transmission of DC isn't possible beyond the range of a static field.

Roy Lewallen, W7EL

2087. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 23:29:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110da2720553l92@corp.supernews.com>
Source record: 82326

Buck wrote:
>
> If I read this correctly, the more above ground radials (to a point),
> the better. Until one gets to 8 radials, there is a significant drop
> in antenna loss.

Nope, you didn't. My analysis was for buried, not above ground, radials. And the loss increases, rather than drops, as the number increases. This has been well known since at least 1937.

> How do the gains/losses change when the radials are disproportionate?
> i.e., you have been working with essentially a 40 meter vertical with
> 40 meter radials. What if I were to place a 20 meter vertical (16
> foot for example) on that 33 foot radial system vs placing a 20 meter
> vertical on the same 8 radials 16 foot long?

There are an infinite number of such questions, each with its own answer. But a little research will show that the difference between 16 and 33 foot radials will make little difference on either 40 or 20 meters. There's been a lot posted on this newsgroup in the past about ground radial systems -- you'll find the answers to many of your questions by using groups.google.com for a search.

>
> One of the things I would like to have for a multiband vertical is the
> separate elements using GAP technology or just using a common feed
> point as seen in some of the handbooks.

You really want to use a lossy piece of coax to load your antenna as the GAP does instead of a more efficient method? Why? Fanned wires with a common feed point will be more efficient. If you bury the radials, you need only one ground system -- 8 or so radials will get you within a couple of dB of a perfect system.

>
> Thanks for all the info. I have a eznic and the ARRL version, but
> there is something that isn't registering with me when using it.
> Sometimes there are things I just can't seem to learn unless someone
> shows me what i am doing wrong or missing.

I've heard many good comments about the ARRL on-line course in antenna modeling. You might consider it.

Roy Lewallen, W7EL

2088. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-06 23:58:14 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <36np8qF53m2okU1@individual.net>
Source record: 82327

"Roy Lewallen" wrote
> Surely as a former broadcast engineer you're acquainted with a circuit
> called a "DC restorer". This is a circuit which is always present in a TV
> receiver. In its simplest form, it's just a diode clamping circuit,
> although I've made very good ones with an FET switch and hold capacitor.
> What it does is to set the sync pulse tip to a fixed DC value, which then
> causes the rest of the TV waveform to be at a fixed DC value. This is how
> the DC information is "transmitted". The actual TV waveform is AC coupled,
> as it must be, and its DC values are established in the receiver by the DC
> restorer....

I must respectfully disagree with that, Sir. The baseband video signal is *
DC coupled * through analog TV transmitters . The peak power of a
transmitted TV RF waveform is a fixed value, at the power corresponding to
the licensed ERP of the station, occurring at the peak of sync pulses, and
independent of program video. Transmitted _average_ power is a function of
the video envelope.

Video is transmitted with negative polarity; 75% modulation when video is
black, and 12-1/2% modulation when it is white. The video waveform AS
TRANSMITTED can contain a steady state (DC) value throughout the video field
for any amplitude at or between those values (actually the color subcarrier
can exceed these for some conditions).

The circuits in a TV receiver cannot pass the DC component, thus the need
for a DC restorer following the video demodulator. But the point remains
that the transmitted TV waveform can, and often does contain a DC component,
and that this DC component is required for accurate reproduction of the
original video on the TV display.

RF

PS: I still AM a broadcast engineer.

2089. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 00:07:12 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <36nppjF53uodpU1@individual.net>
Source record: 82328

"Roy Lewallen" wrote
>
> But the DC information is transmitted as a level difference
> between the sync tip and the "porches". At the receiver (as I mentioned in
> another post), this voltage *difference* is turned into a DC value. No DC
> is transmitted.

As I wrote in my slightly earlier post to you on this, the actual video waveform is DC coupled through an analog TV transmitter. Please refer to that post for more on this topic.

RF

2090. Re: Antennas vs Antennae

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 00:51:41 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <110detb7o1oso2a@corp.supernews.com>
Source record: 82329

Terry wrote:

> Enjoyed this thread. It elevated the word 'aerial' to new heights!
> Noting also that during it, no one, as a previous English teacher of mine
> used to say, "Demonstrated their inability to express themselves properly by
> descending into profanity".
> The same teacher, however, also claimed, "Anyone using words such as 'sox'
> and 'foto' were definitely not using the English language"!
> In the 1950s Broadway show 'My fair lady' based on G.B.Shaw's Pygmalion,
> there is the line, "There even are places where Engish completely
> disappears. In America they haven't used it for years!". It was good for a
> laugh.
> Personally; if we can combine the American skill for
> inventing/designing/adapting words so that so that they are terse and
> descriptive with the British penchant for contrasting and 'punning' the
> various meanings of words, we will continue to have a rich and adaptive
> language which will, as from the time of Chaucer and Shakespeare, be the
> most powerful communicating language in the world. More power to us.
> Terry.
>
>
Remember what that great american political leader, Winston Churchill,
said. "We are one people divided by a common language.

2091. Good News! -- Jesus Christ Went To The Cross So You Can Go To Heaven

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 01:18:00 UTC
From: Good_News_For_You_All@yahoo.com
Message-ID: <1107739080.778115.198200@g14g2000cwa.googlegroups.com>
Source record: 82330

^

2092. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 01:22:34 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <o0ed011k79cv9vb6avtucacsov7poe98as@4ax.com>
Source record: 82331

On 6 Feb 2005 14:10:37 -0800, radio913@aol.com wrote:

> How did you come to this conclusion? What
>sort of field strength equipment did you use?

Simple testing with a stable RF power source and a sensitive field strength meter in a very large yard. It's not hard to determine a 1Db difference and a 3db one is easy.

The other is a colinear design the second element cannot contribute 3db unless the first didn''t radiate any energy. Thats rarely the case. To get the gain you claim try a 8 or more segment colinear and note that would be about 18-20ft tall for a 2m antenna.

> Again, i would be the first to say
>that reality doesn't fit the math model,
>sometimes not at all. But is this case,
>you can really hear the difference.

Usually the math model is reality if its a real model. Often it's not. manyy of the simple shorthand models are far for accurate or complete. Also in some locations there are third order factors not considered. For a real model (NEC based) the stacked Jpole is 2.3->2.4dbi better than a plain J and ends up at about 7.4Dbi. [In real terms that's only about 2.4 DB better than a vertical dipole which a basic Jpole is.] That gain (7.4 DBI) is easy to beat with a 3 element beams on 2m (typical is 8dbi) though a simpler half square is 9.4dbi. Having built many antennas and examples of the three mentioned I find the models are accurate. However, if you cannot measure and test the antenna effectively you cannot evaluate if it's working as predicted or if its working at all. At VHF execution is everything and subbing 1/4 inch tube for a modeled 1/2 inch one will give error, sometimes significant. I'd add that at VHF the feed section is critical and if not done well the rest of the antenna is a waste of metal. The Jpole in this case is easier to evaluate because if the SWR is poor it's definately not working well and a lot of things have to be correct or the SWR will be poor.

For example, it may work better because its nearly 60inches taller and at a given location that could be the majik. Never ignore height as a significant factor at VHF.

If you care to read www.cebik.com/jp1.html all four sections. It's an indepth treatize and explanation of J-poles and varients. Based on my experience he's hit the nail accurately.

Oh, and I use two Jpoles (arrow OSJ146/440 and a Copper cactus
for 2m/440) and both match the model for performance in the real
world. Obviously I'm neither pro Jpole designs nor am I against them.
They work well to the designs limit if built carefully. I like them
for the ease of assembly of a rugged design that's reproduceable.

Allison

2093. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 01:48:45 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <rnhd011qsn1m5m1vbrdtk9p7r8t1ag2b48@4ax.com>
Source record: 82332

On 6 Feb 2005 05:42:42 -0800, radio913@aol.com wrote:

> Here is the theoretical H-plane plot of our Yagi:
>
>http://www.drslick.org/Temp1/yagiplot.jpg
>
> And a photo:
>
>http://www.drslick.org/Temp1/yagi929.jpg

After looking at the picture and the plot I fired up yo
and the only way I could get that low a gain was to
seriously mess up the antenna. The end effect was
a 2 element yagi witha spurious useless element.

This is further confirmed by the picture. It appears
the rightmost element is the fed element (very strange for a three
element design) and the proportions suggest a reflector close to the
driven and longer. The third element (the leftmost) would be spurious
as it's behind the reflector and far away.

Please explain that yagi, it's strange.

Allison

2094. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 02:02:15 UTC
From: radio913@aol.com
Message-ID: <1107741735.380646.159530@l41g2000cwc.googlegroups.com>
Source record: 82333

nospam@nouce.bellatlantic.net wrote:

> Must be one horridly poor yagi. Most 3 eleemnt designs are better
> than 8dBi and with a little effort an be 1 db better than that.

8 dBi WITH a 180 degree pattern?
And WITH A F/B ratio that doesn't exceed 11 dB
or so?

I don't think so.

> On 6 Feb 2005 14:10:37 -0800, radio913@aol.com wrote:
>
> > How did you come to this conclusion? What
> >sort of field strength equipment did you use?
>
> Simple testing with a stable RF power source and a sensitive field
> strength meter in a very large yard. It's not hard to determine a
1Db
> difference and a 3db one is easy.
>

What brand and model field strength meter
do you have? what sort of receive antenna did
you use? How did you do the conversion from
uV/meter to ERP?

> The other is a colinear design the second element cannot contribute
> 3db unless the first didn''t radiate any energy. Thats rarely the
> case.

????? How can the first not radiate any
engergy?

>To get the gain you claim try a 8 or more segment colinear and
> note that would be about 18-20ft tall for a 2m antenna.
>

According to most of what i have read,
every doubling of the sections give approximately
3 dB additional gain.

> > Again, i would be the first to say
> >that reality doesn't fit the math model,
> >sometimes not at all. But is this case,
> >you can really hear the difference.
>

> Usually the math model is reality if its a real model. Often it's
not.
> manyy of the simple shorthand models are far for accurate or
complete.

I used a program called Yagi Optimizer.

It should be close, it's not like
we are modeling active devices like FETs
and such!

> Also in some locations there are third order factors not considered.
> For a real model (NEC based) the stacked Jpole is 2.3->2.4dbi better
> than a plain J and ends up at about 7.4Dbi. [In real terms that's
> only about 2.4 DB better than a vertical dipole which a basic Jpole
> is.]

Incorrect. A stacked J-pole cannot
be 2.4 dBi better than a plain J. It can only
be 2.4 dB better.

Anyways, You think a plain J-pole is 5 dBi?

Incorrect.

The
> Jpole in this case is easier to evaluate because if the SWR is poor
> it's definately not working well and a lot of things have to be
> correct or the SWR will be poor.
>
> For example, it may work better because its nearly 60inches taller
and
> at a given location that could be the majik. Never ignore height as
a
> significant factor at VHF.
>

Obviously. They are at about the same height,
considering the additional height of the Super J.

> They work well to the designs limit if built carefully. I like them
> for the ease of assembly of a rugged design that's reproduceable.
>

I would say that at VHF, a Super J is a
bit heavy and big, but the additional ERP
is worth it.

Slick

2095. Re: whip antenna calculations

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 02:06:17 UTC
From: Spam Fighter <spamcollector@sympatico.ca>
Message-ID: <pan.2005.02.07.02.06.13.507497@sympatico.ca>
Source record: 82335

On Fri, 04 Feb 2005 13:46:50 -0500, Spam Fighter wrote:

> I am looking for a .xls spreadsheet (or something that works under
> LINUX), to calculate the equations for matching common maritime mobile
> HF whip antennas:
>
> 8 ft
> 10 ft
> 15 ft
> 23 ft
> 40 ft (backstay, approx 5/8 on 20 Meters)
>
> I want to calculate the matching parameters including voltages generated
> in the tuner for the 1.8 3.5 7 10.1 14 21 28 MHz ham bands and the 2 4 6
> 8 12 16 and 22 MHz marine bands.
>
> The ARRL ANTENNA HANDBOOK, 18th edition, chapter 18, has some equations
> and a table of calculated values for a 8 ft whip on ham bands. I wish
> to duplicate the calculations and figure out the voltage maximums for
> component values for, say, 100 W key down power.
>
> Take for example the 1st row of the table:
>
> BASE LOADED 8ft whip
> F=1.8 MHz
> Loading L = 345 uH
> Rc Q=50 = 77 ohms
> Rc Q=300 = 13 ohms
> Rr =0.1 ohms
> Feed R = 23 ohms
> Matching L = 3 uH
>
> Now at 1.8 MHz
> XL of 345 uH = +j3902 ohms
>
> Do I calculate the current from P=I*I*R so for Rr = 0.1 ohms, I =
> sqrt(100/Rr) = 31.6 A so V XL is I*R = 31.6*3902 = over 123 KV? (seems
> excessive)
>
> or do I use the R values of 77, 13, or 23 ohms? (4.4 KV, 57 KV, 8.1 KV
>)?
>
> Do I multiple all RMS voltages by sqrt(2) to convert RMS to PEAK?
>

> Greg
> VE0ACR
> gblair _at_ sympatico _dot_ ca

I have it all sorted out. The 2002 ARRL Handbook has a similar table complete with voltages. However, there was a mistake in the text. Working backwards from the stated result, we found the text used a coil capacitance value of 2.5 pF while stating they we using 2 pF. They also assume Rg (ground) is zero. I can duplicate their table and have calculated the data I was after for the other whip lengths.

I have a .xls spreadsheet I can email anyone who is interested.

Greg Blair
ve0acr _at_ rac _dot_ ca

2096. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 02:10:11 UTC
From: radio913@aol.com
Message-ID: <1107742211.219195.191790@c13g2000cwb.googlegroups.com>
Source record: 82334

nospam@nouce.bellatlantic.net wrote:
> On 6 Feb 2005 05:42:42 -0800, radio913@aol.com wrote:
>
>
> > Here is the theoretical H-plane plot of our Yagi:
> >
> >http://www.drslick.org/Temp1/yagiplot.jpg
> >
> > And a photo:
> >
> >http://www.drslick.org/Temp1/yagi929.jpg
>
> After looking at the picture and the plot I fired up yo
> and the only way I could get that low a gain was to
> seriously mess up the antenna. The end effect was
> a 2 element yagi witha spurious useless element.
>
> This is further confirmed by the picture. It appears
> the rightmost element is the fed element (very strange for a three
> element design) and the proportions suggest a reflector close to the
> driven and longer. The third element (the leftmost) would be
spurious
> as it's behind the reflector and far away.
>
> Please explain that yagi, it's strange.
>

It was an unusual use of the YO
program, in that we used two reflectors
and NO directors, to get the shape we
wanted. We actually couldn't use the
optimizer, because it would actually
try to narrow the beam too much.
Remember that you must keep the
pattern about 180 degrees, and the F/B
ratio should be no more than about 11 dB.

If you could come up with something with
a higher overall dBi, i'd like to know,
but i doubt it.

Slick

2097. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 02:30:01 UTC
From: Buck <iam@this.site>
Message-ID: <ldid01518ucaa55eleb9m61e99egn4hcn8@4ax.com>
Source record: 82336

On Sun, 06 Feb 2005 15:29:04 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Nope, you didn't. My analysis was for buried, not above ground, radials.
>And the loss increases, rather than drops, as the number increases. This
>has been well known since at least 1937.
>

Thanks for the correction. As a Novice I learned that underground
radials were better than above ground radials. I couldn't be sure
which you were using so I re-iterated it to be sure.

>> How do the gains/losses change when the radials are disproportionate?
>> i.e., you have been working with essentially a 40 meter vertical with
>> 40 meter radials. What if I were to place a 20 meter vertical (16
>> foot for example) on that 33 foot radial system vs placing a 20 meter
>> vertical on the same 8 radials 16 foot long?
>
>you'll find the answers to many of your
>questions by using groups.google.com for a search.
>
Thanks, I'll do that.
>>

>
>You really want to use a lossy piece of coax to load your antenna as the
>GAP does instead of a more efficient method? Why? Fanned wires with a
>common feed point will be more efficient. If you bury the radials, you
>need only one ground system -- 8 or so radials will get you within a
>couple of dB of a perfect system.
>
I didn't clarify myself, but the gap technology (I should have used
lower case) isn't necessarily the same as the GAP brand. I couldn't
find the book I have it in, but it is where a wire resonant on a
particular frequency brought close to another antenna will match the
system and radiate efficiently (I don't know how efficiently.) (this
is an oversimplification of what I am describing.)

>I've heard many good comments about the ARRL on-line course in antenna
>modeling. You might consider it.
I'll look into it. I understand a lot of what I am doing, but
something isn't working. I think it is one of those things that
someone needs to walk me through one time looking over my shoulder and
I'll get through it. Maybe it will just come to me one day.
Sometimes these things happen.

Thanks again.

Buck
--
73 for now
Buck
N4PGW

2098. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 02:59:14 UTC
From: Howard <mensch90249@yahoo.com>
Message-ID: <jmld0158c9spu5s45as26ie2kb8aqor3ob@4ax.com>
Source record: 82337

On 6 Feb 2005 18:10:11 -0800, radio913@aol.com wrote:

>
>snip<
>>
>
> It was an unusual use of the YO
>program, in that we used two reflectors
>and NO directors, to get the shape we
>wanted. We actually couldn't use the
>optimizer, because it would actually
>try to narrow the beam too much.
> Remember that you must keep the
>pattern about 180 degrees, and the F/B
>ratio should be no more than about 11 dB.
>
>
>Slick

Slick,
Could you explain the use of two reflectors? I've heard that if you are building a two element yagi it's best to use a radiator and reflector but haven't really learned anything about using more than one reflector. Have seen antennas that use 3 reflectors, but they were mounted perpendicular to the plane of the elements and there were several director elements - if memory serves me it was Cushcraft that did that. Haven't seen them added behind the first reflector and am curious as to what characteristic of the antenna's performance it is meant to enhance.

Thanks,
Howard
Howard

2099. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 03:01:05 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110dmflllvdlm8a@corp.supernews.com>
Source record: 82338

You can get just about any "theoretical" result if your theory is adequately flawed. That's obviously the case here.

Roy Lewallen, W7EL

2100. Good News! -- Jesus Christ Went To The Cross So You Can Go To Heaven

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 03:05:50 UTC
From: Good_News_For_You_All@yahoo.com
Message-ID: <1107745550.684830.52760@z14g2000cwz.googlegroups.com>
Source record: 82339

^

2101. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 03:27:38 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <qknd01h7djv8ck74d0ceeg1j6at8rl7j9j@4ax.com>
Source record: 82340

On 6 Feb 2005 18:10:11 -0800, radio913@aol.com wrote:

> Remember that you must keep the
>pattern about 180 degrees, and the F/B
>ratio should be no more than about 11 dB.
>
> If you could come up with something with
>a higher overall dBi, i'd like to know,
>but i doubt it.

Want a list...

MOXON (two)
Batwing
Asymetric array of dipoles
Phased array of vertical monopoles
Dipole against a plane relector
2 element Jpole yagi

Allison

2102. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 03:31:15 UTC
From: radio913@aol.com
Message-ID: <1107747075.426484.153860@l41g2000cwc.googlegroups.com>
Source record: 82341

Howard wrote:
> On 6 Feb 2005 18:10:11 -0800, radio913@aol.com wrote:
>
> >
> >snip<
> >>
> >
> > It was an unusual use of the YO
> >program, in that we used two reflectors
> >and NO directors, to get the shape we
> >wanted. We actually couldn't use the
> >optimizer, because it would actually
> >try to narrow the beam too much.
> > Remember that you must keep the
> >pattern about 180 degrees, and the F/B
> >ratio should be no more than about 11 dB.
> >
> >
> >Slick
>
> Slick,
> Could you explain the use of two reflectors? I've heard that if you
> are building a two element yagi it's best to use a radiator and
> reflector but haven't really learned anything about using more than
> one reflector. Have seen antennas that use 3 reflectors, but they
> were mounted perpendicular to the plane of the elements and there
were
> several director elements - if memory serves me it was Cushcraft that
> did that. Haven't seen them added behind the first reflector and am
> curious as to what characteristic of the antenna's performance it is
> meant to enhance.
>

For this particular design, it was
required in that we needed something with a
180 degree pattern, and not to much F/B
ratio. I can't tell you much more other
than we had to manually tweak the variables
to get a decent result...we couldn't use the
program's optimizer, it would have made the
forward lobe too small.

So what ends up happening in the program,
is that you end up using two directors, but
in the H-plane the lobe goes to the rear (see

link). So in essence, you flip the whole deal around, and your two directors are actually reflectors. Interesting, eh?

Slick

2103. Re: whip antenna calculations

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 04:05:28 UTC
From: Buck <iam@this.site>
Message-ID: <d3qd01lqon4a5glhpe3ouc7rcks63kcf0d@4ax.com>
Source record: 82342

>I have a .xls spreadsheet I can email anyone who is interested.
>
>Greg Blair
>ve0acr _at_ rac _dot_ ca

I am interested, but you may find it more efficient to post it on a
website for download.

Thanks
Buck
N4PGW

na4fm (I)
at (really)
towncorp (don't)
dot (like)
net (spam)
--
73 for now
Buck
N4PGW

2104. Noise figure calculation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 04:10:23 UTC
From: Jason <cheanglong@gmail.com>
Message-ID: <1107749423.615823.284760@z14g2000cwz.googlegroups.com>
Source record: 82343

Hello All

I posted topic about IP3 earlier and many people responded with
excellent discussion.
Today I wish to double check with you all about noise figure. It is
something my friend check with me but I am not sure if it is right.
Most importantly I want to know the Accumulative Noise Figure in blue
colour.
See the below link for visual

http://www.geocities.com/jason_class/noise_q.jpg

I purposely put my calculation there and hope you all can correct if I
make any mistakes.
Thank you in advance for your comment .

rgds and thanks
Jason

2105. Alinco EDX2 under chassis mount?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 04:39:25 UTC
From: denton <denton@oregontrail.net>
Message-ID: <110ds7b719tajee@corp.supernews.com>
Source record: 82344

Hi all...I am preparing to mount an Alinco DX-70 transciever in my 2003 Merc Sable and have found a spot underneath the body next to the frame rails on the rear passenger side of the vehicle to mount an EDX2 tuner....this will give me a very short piece of wire needed to attach to the base of a vertical antenna.
I am a bit leary of exposing the tuner, despite the case being in very good condition, to the extreem environment underneath the vehicle...
Any suggestions as to a material to wrap the tuner in??
I guess I could make a platform next to the vertical antenna to attach the tuner, but would like to try the underbody method first.

2106. Good News! -- Jesus Christ Went To The Cross So You Can Go To Heaven

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 04:50:14 UTC
From: Good_News_For_You_All@yahoo.com
Message-ID: <1107751814.748133.112900@l41g2000cwc.googlegroups.com>
Source record: 82345

^

2107. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 05:11:32 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110du47s2qf9s05@corp.supernews.com>
Source record: 82346

Buck wrote:
> . . .
> I didn't clarify myself, but the gap technology (I should have used
> lower case) isn't necessarily the same as the GAP brand. I couldn't
> find the book I have it in, but it is where a wire resonant on a
> particular frequency brought close to another antenna will match the
> system and radiate efficiently (I don't know how efficiently.) (this
> is an oversimplification of what I am describing.)
> . . .

That sounds like the method patented in 1996 by Gary Breed, K9AY (U.S. patent #5,489,914). He allowed the patent to expire rather than renewing it, so it's now in the public domain.

See http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&p=1&u=/netahtml/search-bool.html&r=1&f=G&l=50&co1=AND&d=ptxt&s1=gary.INZZ.&s2=breed.INZZ.&OS=IN/gary+AND+IN/breed&RS=IN/gary+AND+IN/breed

(You'll probably have to paste that back together. Or just go to http://www.uspto.gov and look it up by patent number.)

Roy Lewallen, W7EL

2108. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 05:19:41 UTC
From: radio913@aol.com
Message-ID: <1107753581.687571.286720@f14g2000cwb.googlegroups.com>
Source record: 82347

nospam@nouce.bellatlantic.net wrote:
> On 6 Feb 2005 18:10:11 -0800, radio913@aol.com wrote:
>
> > Remember that you must keep the
> >pattern about 180 degrees, and the F/B
> >ratio should be no more than about 11 dB.
> >
> > If you could come up with something with
> >a higher overall dBi, i'd like to know,
> >but i doubt it.
>
> Want a list...
>
> MOXON (two)
> Batwing
> Asymetric array of dipoles
> Phased array of vertical monopoles
> Dipole against a plane relector
> 2 element Jpole yagi
>

Remember that you must keep the
pattern about 180 degrees, and the F/B
ratio should be no more than about 11 dB.

I really doubt if you will
supply a link...

Slick

2109. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 05:22:19 UTC
From: radio913@aol.com
Message-ID: <1107753739.009142.275100@o13g2000cwo.googlegroups.com>
Source record: 82348

Roy Lewallen wrote:
> You can get just about any "theoretical" result if your theory is
> adequately flawed. That's obviously the case here.
>

Yagi optimizer programs
with genetic algorithms are well
understood and are quite accurate.

Come listen for yourself...

Slick

2110. Re: Wireless Weather Station and Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 06:28:39 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns95F5E4BC714CCspectrumhogstarbandn@207.106.93.175>
Source record: 82349

> If I put a wireless weather station on the roof on a 6' mast on
> tripod, can I simply run a grounding wire down to an 8' copper
> grounding rod?
>

Is there any other way? :^)

(that's a "yes")

Ed

2111. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 06:31:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <v42e01p5ph2j16h6oieig0ffikk1k1hnq8@4ax.com>
Source record: 82350

On 6 Feb 2005 21:22:19 -0800, radio913@aol.com wrote:

> Come listen for yourself...

Possibly one of the worst methods of absolute measurement.

However, your claim ignores that volume is invariant to signal
strength by design at the limiting stage in any FM receiver.

73's
Richard Clark, KB7QHC

2112. Good News! -- Jesus Christ Went To The Cross So You Can Go To Heaven

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 06:34:39 UTC
From: Good_News_For_You_All@yahoo.com
Message-ID: <1107758079.699603.207780@o13g2000cwo.googlegroups.com>
Source record: 82351

^

2113. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 06:38:33 UTC
From: nm5k@wt.net
Message-ID: <1107758313.631042.165280@z14g2000cwz.googlegroups.com>
Source record: 82352

Buck wrote:
> On Sun, 06 Feb 2005 15:29:04 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >Nope, you didn't. My analysis was for buried, not above ground,
radials.
> >And the loss increases, rather than drops, as the number increases.
This
> >has been well known since at least 1937.

This has me confused...I must be missing something...I checked the
previous
posts, but still doesn't make sense to me...Seems the ground losses
would
decrease as the number of radials increase....Thats what your model
showed.
I thought anyway....
> >
>
> Thanks for the correction. As a Novice I learned that underground
> radials were better than above ground radials. I couldn't be sure
> which you were using so I re-iterated it to be sure.

For a given radial, above ground is better than in ground. But it has
to
be resonant. In that case, you are running a very low ground plane.
If it's just one radial, it should radiate as much as the vertical
element. In that case, it's more of a perverted dipole, than a ground
plane. A true ground plane really needs at least two radials to get a
fairly unlopsided omni pattern. Three radials are better.
If you use 120 radials on medium ground as a benchmark, any height
above
ground will reduce the number of radials required to equal the same
degree of loss. But once the radials are elevated, they must be tuned.
Radials on or in the ground do not need to be resonant.
If you ran a vertical, and can only use a very few radials, having them
tuned and a bit off the ground is better than the same in the ground.
Of course, the YL will probably want to strangle you with one, the
first
time she trips over one...But some run them around the lower frames of
houses, wood fences, etc...
One thing....It's not a magic wand to suddenly make low 4 radials a dx
buster...At 1/8 wave up, it takes appx 60 radials to equal 120 on the
ground. On 40m, thats 16 ft or so... At 2 ft off the ground, you still
probably need maybe 90? radials to equal the 120 on the ground.

So you have to consider that, when you run 4 radials at 2 ft, and don't brown the food in every direction. It is a bit better than 4 in the ground though, and Roy's model pretty much agreed...I think anyway...:/
MK

2114. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 06:50:08 UTC
From: nm5k@wt.net
Message-ID: <1107759008.623950.68550@g14g2000cwa.googlegroups.com>
Source record: 82353
Cross-posted to: rec.radio.amateur.antenna,alt.pirate.radio,alt.radio.pirate

You are lucky to see the gain you have, considering the lack
of decoupling...Or at least in that pix....Also, thats a
pretty lame yagi, so like you say, not really a fair test...
My 3 el vertical yagi would eat that j pole for lunch, being
it has about 9.4 dbi gain...Or about 7.3 dbd....
The J poles are ok I suppose, and are good for people with
copper and torches...But they would be even better with some
additional decoupling...I bet they still have trouble matching
the old isopole that was made by AEA...That antenna was well
decoupled. Looked like a ballistic missile, but it was hard
to beat as far as performance. It was generally the benchmark
most other dual 5/8 designs were judged by.
:/ MK

2115. Good News! -- Jesus Christ Went To The Cross So You Can Go To Heaven

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 08:19:02 UTC
From: Good_News_For_You_All@yahoo.com
Message-ID: <1107764342.432888.199000@c13g2000cwb.googlegroups.com>
Source record: 82354

^

2116. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 09:21:00 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cu7btsctc1@hercules.btinternet.com>
Source record: 82355

Roy, it is a mistake to consider one element of a radiating system as being distinct from another. Reflectors and directors do not operate independently of the embedded 1/2-wave dipole. And, for example, the universally-made error of treating radiation from the feedline as being independent of that from the antenna is a serious matter. Aggravated by ignoring the choke location if there is one.

Similar (greatly prolonged) educational mistakes lead to serious misunderstanding the purpose of the so-called SWR meter - the very last of the meters remaining on the front panels of our commercial black-box transmitters.

They will soon go.

But what does it matter. It's only a hobby. I still get my pleasures from it. And no doubt so do you.

Reg, G4FGQ

2117. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 09:44:10 UTC
From: radio913@aol.com
Message-ID: <1107769450.949426.149830@l41g2000cwc.googlegroups.com>
Source record: 82356

Richard Clark wrote:
> On 6 Feb 2005 21:22:19 -0800, radio913@aol.com wrote:
>
> > Come listen for yourself...
>
> Possibly one of the worst methods of absolute measurement.
>

Never said it was an absolute measurement,
don't be ridiculous! But, ultimately, that's
all we really want, right? Better listenability.

I've already said i don't believe the
19 to 300 watt F/B calculations, but bottom
line, is: It's a MUCH clearer and cleaner
signal ALL around.

> However, your claim ignores that volume is invariant to signal
> strength by design at the limiting stage in any FM receiver.
>

????? Volume has nothing to do with this!

You could throw a dead carrier and still
have an idea of how close to full quieting you
are....

Slick

2118. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 09:57:45 UTC
From: radio913@aol.com
Message-ID: <1107770265.846289.264400@f14g2000cwb.googlegroups.com>
Source record: 82357
Cross-posted to: rec.radio.amateur.antenna,alt.pirate.radio,alt.radio.pirate

nm5k@wt.net wrote:
> You are lucky to see the gain you have, considering the lack
> of decoupling...Or at least in that pix....Also, thats a
> pretty lame yagi, so like you say, not really a fair test...

What lack of decoupling? It's got the
coax inductive choke on the input, 4 turns
of 4" diameter.

If you would read my posts more carefully,
you would be aware that the reason for the low
dBi is that the lobe is 180 degrees, and F/B
ratio limited to around 11dB.

> My 3 el vertical yagi would eat that j pole for lunch, being
> it has about 9.4 dbi gain...Or about 7.3 dbd....

So what, the Super J-pole in omnidirectional,
so that's not saying much for a Yagi. We could have
easily designed it with more gain, but the frontal
lobe would have been way narrower.

How broad or narrow is the front lobe
of your yagi? How many degrees? Much
smaller than 180 no doubt.

Slick

2119. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 09:57:50 UTC
From: radio913@aol.com
Message-ID: <1107770270.555554.195520@l41g2000cwc.googlegroups.com>
Source record: 82358
Cross-posted to: rec.radio.amateur.antenna,alt.pirate.radio,alt.radio.pirate

nm5k@wt.net wrote:
> You are lucky to see the gain you have, considering the lack
> of decoupling...Or at least in that pix....Also, thats a
> pretty lame yagi, so like you say, not really a fair test...

What lack of decoupling? It's got the
coax inductive choke on the input, 4 turns
of 4" diameter.

If you would read my posts more carefully,
you would be aware that the reason for the low
dBi is that the lobe is 180 degrees, and F/B
ratio limited to around 11dB.

> My 3 el vertical yagi would eat that j pole for lunch, being
> it has about 9.4 dbi gain...Or about 7.3 dbd....

So what, the Super J-pole in omnidirectional,
so that's not saying much for a Yagi. We could have
easily designed it with more gain, but the frontal
lobe would have been way narrower.

How broad or narrow is the front lobe
of your yagi? How many degrees? Much
smaller than 180 no doubt.

Slick

2120. Re: IP3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 11:35:26 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <36p2avF55gh1bU1@individual.net>
Source record: 82359

Yes - if you like; I was alluding to curvature in the transfer
function as non-linearity, which one would encounter before
clipping.

"Old Ed" <eXseniorsDeleteThisAndTheX@earthlink.net> wrote in message
news:zucNd.1295$UX3.993@newsread3.news.pas.earthlink.net...
> Regarding your comment about an amplifier possibly "clipping...
> before non-linearity," that is impossible by definition--because
> clipping IS a non-linearity.

2121. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 13:40:36 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <36p9epF55c29gU1@individual.net>
Source record: 82360

"Roy Lewallen" wrote about broadcast television waveforms:
> ... No DC value is transmitted....
and
>...The actual TV waveform is AC coupled, as it must be, and its
>DC values are established in the receiver by the DC restorer...

Please think about this. Standard TV color bars are produced by mixing the outputs of three video pulse generators. The pulses are square waves, with amplitude limits of 0 and 0.7VDC (~0.25ï¿½s transitions). These three video waveforms are shown in Figure 7-1 in the paper hyperlinked at the bottom of this post.

The DC present during the "on" time of these video pulses is indistinguishable from the DC supplied by a continuous 0.7VDC source, over the same, steady-state time interval. The DC and near-DC values of this video must be available to the TV display device in order to accurately show the color bar signal (and any other video waveform).

Low frequency content is lost when video is AC-coupled through a TV transmitter (or any other circuit). A TV set DC restorer sets and maintains the DC axis on which the pulse rides, but that does not correct the distortion of the pulse waveform resulting from loss of its low frequency content near zero hertz (DC).

Also recall that even the shortest pulse* that can pass undistorted through the ~4MHz video bandwidth of the US broadcast TV standard contains most of its energy at, and near zero hertz, e.g., DC.

*a sinï¿½ pulse with 0.25ï¿½s transitions

So DC _is_ , and must be conveyed by analog broadcast (and other) television systems, because television wouldn't work well otherwise. It isn't DC as you may think of it coming out of a battery, but it is DC, nevertheless, and identical to battery DC of the same amplitude, when compared over equal, steady-state intervals.

http://www.tek.com/Measurement/cgi-bin/framed.pl?Document=/Measurement/App_Notes/NTSC_Video_Msmt/colorbars.html&FrameSet=television

RF

2122. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 13:58:53 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <420775ae$1_1@127.0.0.1>
Source record: 82361

Richard Clark wrote:

> "Dave" <noone@nowhere.com> wrote:
>>you will of course note that i quoted the term 'static' to denote that it
>>was indeed not static in the infinite sense of mathematics, but in the real
>>sense of it being a constant value over some measured time period.
>
> This is fine as an elaboration that grows beyond the horizon of the
> question. But it really serves no purpose but to embroider a glaring
> lack of facts.

Perhaps the measured DC value is not the result of EM waves
but the result of mechanical depositing of charge on the
antenna. I assume that wind/snow static is DC - enough DC
to cause arcing across a coax connector.
--
73, Cecil http://www.qsl.net/w5dxp

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2123. Re: Good News! -- Jesus Christ Went To The Cross So You Can Go To Heaven

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 14:05:26 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42077737$1_1@127.0.0.1>
Source record: 82362

Bill Turner wrote:

> Good_News_For_You_All@yahoo.com wrote:
>>The good news is that God came from Heaven to earth
>>in the person of Jesus Christ over 2000 years ago and
>>died for our past, present and future sins(misdeeds).
>
> Well, that's good news. I had been worried about sinning, but now I
> don't have to. Thanks!

If Jesus looks into the future and observes what sins
we are going to commit, we don't have free will, so what
difference does it make?
--
73, Cecil http://www.qsl.net/w5dxp

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2124. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 14:21:07 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <a9ue01h7uuu5dbs3t04vjfl4v4vl9rlgan@4ax.com>
Source record: 82363

On 6 Feb 2005 21:19:41 -0800, radio913@aol.com wrote:

>> Asymetric array of dipoles
>> Phased array of vertical monopoles

>Remember that you must keep the
>pattern about 180 degrees, and the F/B
>ratio should be no more than about 11 dB.
>
> I really doubt if you will
>supply a link...

www.andrews.com many of those commercial designs could be duplicated
and there are a few repeater builder sites that do exactly that.

Allison

2125. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 14:23:05 UTC
From: Buck <iam@this.site>
Message-ID: <laue01d5lai2vq9fac2qnn79iofout1cs3@4ax.com>
Source record: 82364

On 6 Feb 2005 22:38:33 -0800, nm5k@wt.net wrote:

>> >And the loss increases, rather than drops, as the number increases.
>This
>> >has been well known since at least 1937.
>

I didn't catch this either. I misunderstood it to be that the number
of radials decrease loss. However, I do well remember that the
preferred radial of the day when I was first licensed was below ground
radials. Today I see a lot of antennas preferring above ground
radials.

>This has me confused...I must be missing something...I checked the
>previous
>posts, but still doesn't make sense to me...Seems the ground losses
>would
>decrease as the number of radials increase....Thats what your model
>showed.

--
73 for now
Buck
N4PGW

2126. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 14:34:38 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <20LNd.13603$Th1.10028@bgtnsc04-news.ops.worldnet.att.net>
Source record: 82365

Richard,

Sorry about the triple. I was so caught up in the excitement (constant throughout all time) of your message I just couldn't stop.

Quote:

"After having done a quite rigorous contract with HP deeply involved in both the strict math and the mechanics of Fourier, I am well versed to know how not all Fourier Transforms offer equal outcomes - especially with, or without D.C. as a product.

Pure Fourier mandates a waveform constant throughout all time (from its inception to its end)"

I can ignore the name-dropping, but I cannot ignore the incorrect statement about "Pure Fourier". There is no mandate of constancy even for the purest Fourier transform. The function needs only to be moderately well-behaved, including single valued and integrable.

Perhaps you are confusing Fourier series analysis with Fourier transform analysis?

(By the way, for any of the lurkers out there, I did not say a word about "DC". That is a trivial matter subject only to one's choice of wording. There is no apparent disagreement on the reality, only the description.)

73,
Gene
W4SZ

Richard Clark wrote:
> On Sun, 06 Feb 2005 21:58:05 GMT, Gene Fuller <W4SZzzzzzz@att.net>
> wrote:
>
>
>>>Utter nonsense.
>
>
> Hi Gene,
>
> You had to post that three times?
>
> Oh well, seems the season for deeply insightful criticism that appears
> to be following the value of the dollar in the world market. Was that
> your 1ï¿½ï¿½ worth?

>
> Barring any discussion of conflicting experience, I would say it was
> worth every penny. You can put it into a privatized SS account and
> recoup massive earnings - if the dollar would just tread water. Don't
> invest in cotton or rice futures though.... [Feb. 5 - President Bush
> will seek deep cuts in farm and commodity programs in his new budget]
>
> 73's
> Richard Clark, KB7QHC

2127. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 14:40:51 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42077f84$1_1@127.0.0.1>
Source record: 82366

Buck wrote:
> Today I see a lot of antennas preferring above ground radials.

Maybe decoupling the radials from ground lowers ground
losses? :-)
--
73, Cecil http://www.qsl.net/w5dxp

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2128. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 15:00:59 UTC
From: Buck <iam@this.site>
Message-ID: <ktve01dj1g4lhq9h77ps5lb2g8ihisbr09@4ax.com>
Source record: 82367

On Mon, 07 Feb 2005 08:40:51 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Buck wrote:
>> Today I see a lot of antennas preferring above ground radials.
>
>Maybe decoupling the radials from ground lowers ground
>losses? :-)

There have been a number of changes in technology theory in the last
30 or so years. When I was a Novice, the vertical antenna
manufacturers provided information about how to use above-ground
radials, but that was typically for a raised antenna such as roof
mounting it. IIRC, the above ground Hustler 4BTV and the Taylor
antennas both had to be lengthened a little to be resonant in the same
place as the ground mount and radials had to be tuned. Reports at
that time were that antenna efficiency was best when the antenna was
ground mounted and had 8-16 radials buried. However, while not
optimum, the minimum ground was to be an 8-foot ground rod at the base
of the antenna. Baluns seemed to be a new technology, I don't recall
the term "ferrite beads", and RF in the shack wasn't a big issue. One
common practice was having a ground rod as close to your rig as
possible and making sure the rig, PS, antenna and everything
electrical near the rig was grounded to the ground rod. Today the
electrical code for homes forbids that due to ground-loops.

Some of these changes take some getting used to. It's a strange
feeling to realize that what you knew for so long is no longer true.

--
73 for now
Buck
N4PGW

2129. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 15:44:49 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42078e86$1_2@127.0.0.1>
Source record: 82368

Buck wrote:
> Some of these changes take some getting used to. It's a strange
> feeling to realize that what you knew for so long is no longer true.

Think about what will be accepted as being
true after someone figures out how to demodulate
entangled particle beams.
--
73, Cecil http://www.qsl.net/w5dxp

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2130. can still talk with wet antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 16:06:25 UTC
From: Dan Jacobson <jidanni@jidanni.org>
Message-ID: <87is54icce.fsf@jidanni.org>
Source record: 82369

Can one in theory still transmit if rain
water creates a bridge across the driven
element, or even also to 'ground'?
A DC short circuit but not a RF short circuit?
Or is it just salt water that is worrisome?

2131. Re: Noise figure calculation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 16:11:27 UTC
From: Wes Stewart <*n7ws*@arrl.net>
Message-ID: <t92f01hidm4qbp6l65fv3q2djnnq7hf24h@4ax.com>
Source record: 82370

On 6 Feb 2005 20:10:23 -0800, "Jason" <cheanglong@gmail.com> wrote:

|Hello All
|
|I posted topic about IP3 earlier and many people responded with
|excellent discussion.
|Today I wish to double check with you all about noise figure. It is
|something my friend check with me but I am not sure if it is right.
|Most importantly I want to know the Accumulative Noise Figure in blue
|colour.
|See the below link for visual
|
|http://www.geocities.com/jason_class/noise_q.jpg
|
|I purposely put my calculation there and hope you all can correct if I
|make any mistakes.
|Thank you in advance for your comment

What is in blue is correct. Your answer is not.

Once you have the cummulative noise factor and gain for the
amplifier/output filter it becomes the second stage for the
calculation of the input filter/amp cascade.

Note that the *gain* of the first stage (filter) is -2 dB (0.63)

Noise factor = 1.58 + ((3.548 - 1) / 0.63 = 5.62

NF = 10 log(5.62) = 7.5 dB.

Try this calculator:

http://www.marsport.demon.co.uk/tcalcxl.htm

2132. Re: Noise figure calculation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 16:38:29 UTC
From: Jason <cheanglong@gmail.com>
Message-ID: <1107794309.477055.116380@o13g2000cwo.googlegroups.com>
Source record: 82371

Dear Stewart

Thank you for the comment. I am thinking about this. I have sent you an email. Kindly check it
The calculator is cool, I am trying it now. I will need your help when I stuck with it
:)

thanks
Jason

2133. Screwdriver Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 16:49:00 UTC
From: jimbo <jimbo62@spamex.com>
Message-ID: <1107794940.401795.86360@c13g2000cwb.googlegroups.com>
Source record: 82222

The "Screwdriver" antennas by Hi-Q, TarHeel or High Sierra look very interesting for HOA restricted locations. Does anyone have any experience with one of these antennas? Also, does anyone have experience using one as a base rather than mobile?

Thanks for any advice, jimbo

2134. Re: can still talk with wet antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 16:49:57 UTC
From: Buck <iam@this.site>
Message-ID: <rg6f01p3t0s31hlfklfuf5j2ihrgkfuadf@4ax.com>
Source record: 82223

On Tue, 08 Feb 2005 00:06:25 +0800, Dan Jacobson <jidanni@jidanni.org>
wrote:

>Can one in theory still transmit if rain
>water creates a bridge across the driven
>element, or even also to 'ground'?
>A DC short circuit but not a RF short circuit?
>Or is it just salt water that is worrisome?

I have a multi-band dipole, similar to the fan-dipole. A couple of
weeks ago the rain coated my antenna and bridged the gap between
center and shield on my coax. My antenna went from matching 80, 40
and 20 to matching 12 and 17. This was short lived, but it lasted
long enough for my friend and I to get a good laugh.

Typically, without the ice, the weather shifts the center of resonance
on my antennas. Sometimes it kills the use of a band or in case of 80
meters, it shifts from the SSB to CW (or visa versa).

I threw this antenna up in a hurry and added to it off and on over
time. It was supposed to be temporary so I didn't use a balun or
weatherproof the so-called cobra-head, which is really only a piece of
PVC with three holes drilled in it and the center to one wire and the
coax to the other.

I also have a properly built 20 meter antenna where I ran the coax
into a PVC t-connector and the wires connect at points several inches
away so there is no water bridge and the coax stays dry.

--
73 for now
Buck
N4PGW

2135. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 17:28:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mv6f015pvj5vn33dltud737hbbibu33a2j@4ax.com>
Source record: 82224

On Mon, 07 Feb 2005 14:34:38 GMT, Gene Fuller <W4SZzzzzzz@att.net>
wrote:

>I can ignore the name-dropping, but I cannot ignore the incorrect
>statement about "Pure Fourier". There is no mandate of constancy even
>for the purest Fourier transform. The function needs only to be
>moderately well-behaved, including single valued and integrable.

Hi Gene,

In this case you are seriously wrong. There are no IFs ANDs or BUTs.
The loop hole of well-behaved is not enough with it being far too
inspecific.

The ONLY case where the Fourier Series resolves a correct
transformation is if you limit your data set (or for an Integration,
you define your limits) over an interval of n ï¿½ 2 ï¿½ PI for a periodic
function where n is an integer from 1..m. Further, you are resolution
limited if you fail to observe Nyquist's laws and under sample, or
fail to frequency limit your real data. This also segues into
Shannon's laws where you can observe the S+N/N in the transform
(discussed below). These concerns are EXTERNAL to the simple act of
transforming data, but are necessary correlatives that MUST be taken
into account.

If you fail even in this simple regard for periodicity (say looking at
only 359 degrees of the periodic function), the result is quite
dramatically different in the Fourier output. Even the casual
observer can immediately see the difference between the correct and
incorrect results, there is nothing ambiguous about it at all.

>Perhaps you are confusing Fourier series analysis with Fourier transform
>analysis?

No, I have done both, and I will drop the name again, at HP with their
work on Fourier Analysis equipment where I tested their FFT algorithms
(call them what you may, the basic underlying requirements do not
change). I was working with 24 Mathematicians AND Engineers - there
was nothing sloppy about the quality of up-front preparation. This
was a project 5 years in the making. They even wrote their own Pascal
compiler for 1000000 lines of code. I have also done IIRs and FIRs,
Wavelets, and a host of other frequency/time series decimation
analysis.

ALL Fourier techniques have requirements that go beyond the Fourier
math. These requirements (if you have any interest in accuracy)
cannot be ignored. If you have no interest in accuracy, you still

have to perform some of them, which is to say there are trade offs as I mentioned previously. Ignoring them all simply reduces real data into transformed garbage.

I have written FFT software that has resolved pure sine waves into a transformation to a single bin with a statistical noise floor and ALL spurious response down 200dB. To give an example of what 1ï¿½ of decimation error will do, it will inject 120dB of noise into the product and spurs that are barely 10 to 20 dB down from the principle bin (which also exhibits about 3dB error).

Much of what is available through college texts and on the web are seriously under powered in their scope. College is not very interested in scope, simply introduction. That is, unless you find yourself in a undergrad (more probably grad school with the additional considerations taken into account) engineering course dedicated to modern implementations (practical Fourier) now largely focused on DSP (which had its genesis in the IIR and FIR earlier implementations).

73's
Richard Clark, KB7QHC

2136. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 18:04:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6cbf01p96gri1i0casa11bs5ch1ift3e41@4ax.com>
Source record: 82191

On Wed, 09 Feb 2005 17:52:37 GMT, "John" <my-callsign@qsl.net> wrote:
>Can someone tell me please an easy way to calculate the optimum angle of
>radiation from a transmitting antenna over a given path on the HF bands
>(160m - 10m)?

Hi John

Use a propagation modeler and tailor the antenna characteristics to
observe the results.

73's
Richard Clark, KB7QHC

2137. Re: Noise figure calculation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 18:05:37 UTC
From: Wes Stewart <"n7ws at yahoo">
Message-ID: <2abf01d3f91ng4bilar4pgv494mjtqguhq@4ax.com>
Source record: 82225

On 7 Feb 2005 08:38:29 -0800, "Jason" <cheanglong@gmail.com> wrote:

|Dear Stewart
|
|Thank you for the comment. I am thinking about this. I have sent you an
|email. Kindly check it
|The calculator is cool, I am trying it now. I will need your help when
|I stuck with it

I won't get the email as I've turned off that address. Too much spam.

Try N7WS at yahoo dot com

It's not my calculator [g].

2138. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 18:30:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hkcf015v58tts5uvhc11p0neqbpj17d14e@4ax.com>
Source record: 82226

On 7 Feb 2005 01:44:10 -0800, radio913@aol.com wrote:
>> > Come listen for yourself...
> ????? Volume has nothing to do with this!
>
> You could throw a dead carrier and still
>have an idea of how close to full quieting you
>are....

Obviously your hearing perception exceeds the characteristics of a
larger part of mankind. This makes any claims for someone ELSE to
listen to the difference even more problematic.

Hearing is the poorest measure second only to "seeing" for one self.
Leave this type of testimonial for the Sunday services.

73's
Richard Clark, KB7QHC

2139. Re: whip antenna calculations

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 18:31:26 UTC
From: Spam Fighter <spamcollector@sympatico.ca>
Message-ID: <pan.2005.02.07.18.31.25.882876@sympatico.ca>
Source record: 82227

On Sun, 06 Feb 2005 23:05:28 -0500, Buck wrote:

>
>>I have a .xls spreadsheet I can email anyone who is interested.
>>
>>Greg Blair
>>ve0acr _at_ rac _dot_ ca
>
>
> I am interested, but you may find it more efficient to post it on a
> website for download.
>
> Thanks
> Buck
> N4PGW

http://www3.sympatico.ca/gblair/whip.xls

notice the "www3" not the usual "www" in the URL.

Enjoy!

Greg Blair
ve0acr

2140. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 18:51:14 UTC
From: richardharrison@webtv.net
Message-ID: <23982-4207B8A2-228@storefull-3252.bay.webtv.net>
Source record: 82230

Dr. Slick wrote;
"Well, our super J-pole is bearing our yagi in ALL directions, even in the forward lobe."

It`s possible.

This thread pits a "Super J-Pole" with 6 dBd gain against a "Yagi-Uda" with 2.85 to 17.85 dBd gain (5 to 20 dBi), depending on construction. So, it could be true for some 2-element Yagi or it could untrue for a Yagi with 3 or more elements. A 3-element Yagi may give about 5 or 6 dBd gain.

The "ARRL Antenna Book" gives the details. In my 19th edition, the Super J-Pole is asid to give 6 dB gain over a 1/4-wave whip on page 16-27.

The whip with a perfect reflection (a ground-plane antenna) is said on page 13-10 to be equivalent to a 1/2-wave dipole in free-space: "---the image of a vertical antenna is in phase with the vertical radiator". The whip with the perfect reflection is thus identical to a 1/2-wave in free-space in performance. Gain of the ground-plane is 0 dBd or +2.15 dBi.

Best regards, Richard Harrison, KB5WZI

2141. mast as yagi reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 18:52:21 UTC
From: Dan Jacobson <jidanni@jidanni.org>
Message-ID: <87oeewgq3e.fsf@jidanni.org>
Source record: 82249

Can a grounded metal mast ever be useful as a yagi reflector?
http://www.qsl.net/dk7zb/2m_veryshort/2ele.htm
apparently uses a metal mast as a sort of reflector.

If the mast is "very much longer" and "very much thicker" than the
other elements, does its distance from the other elements "stabilize"
in the design and not keep changing as we change the other factors.

Maybe this might be useful in making 'foolproof' 3rd world yagis,
where the user merely owns a tape measure and various metal rods. He
already has a reflector much thicker than the 50 ohm split dipole
driven element, so maybe thickness and metal type of the latter
wouldn't be that critical, as at least he could clip it to the right
size (=what?) for 144-146 MHz? Presto, he has a 2 element yagi?

Matters if he has stuck his mast right into the ground, so it is more
or less grounded or not?

2142. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 18:53:34 UTC
From: Jim Kelley <jwkelley@nospam.edu>
Message-ID: <cu8eja$77r$1@news.service.uci.edu>
Source record: 82232

Cecil Moore wrote:

> Tam/WB2TT wrote:
>
>> "Galilea" <iportu@hotmail.com> wrote
>>
>>> When analysing wideband impulse signals from a wideband antenna I have
>>> realised that the average signal magnitude is not zero. I have
>>> thought this
>>> is because the reactance of the antenna at different frequencies
>>> varies and
>>> since it is a wideband antenna there can be energy measured since it
>>> is only
>>> for an extremely small period of time of 2-4 us. However, I am not
>>> sure and
>>> would greatly appreciate the views of this newsgroup.
>>>
>> Are you saying the DC value is not 0 ?
>
>
> He seems to be saying the DC value is not 0 for a sampling
> time period of 2-4 uS which would of course be true for a
> sine wave if, e.g., an odd number of positive cycles were
> sampled along with an even number of negative cycles. Or
> if the frequency was lower than 250 kHz. Plus all the
> signals and noise are superposed.

Chances are fair that something is doing some rectifying somewhere.

ac6xg

2143. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 18:59:28 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <10df01tmpdj53ngjpkshiva939pdil30o9@4ax.com>
Source record: 82228
Cross-posted to: rec.radio.amateur.antenna,alt.pirate.radio,alt.radio.pirate

On 7 Feb 2005 01:57:45 -0800, radio913@aol.com wrote:

> If you would read my posts more carefully,
>you would be aware that the reason for the low
>dBi is that the lobe is 180 degrees, and F/B
>ratio limited to around 11dB.
>
This only raises the obvious cynicism of choice. You could have
selected a worse antenna to claim a better contrast - there are always
losers available for use as a cat's paw.

For an honest comparison, it is sufficient to simply report your
characteristics in units of dBi and offer the angle of measurement.

Speaking of reports, your breathless testimonials draped with the
mantle of
are described in less than specific details:
>So if you assume
...
>So we have about
...
>That's like
...
>That's like
...
> It's only a theoretical
...
>we didn't really
...
> It's still not really a fair comparison.

All of the above don't really mean much, because no real details of
anything are actually revealed. So when we get to this:
> I presented the theoretical calculations, not actual measurements, sure.
I would say without fear of any real contradiction that NO you did
neither.

And then to rely on the customer to confirm by
>you can really hear the difference.
is droll indeed. This the same effete standard of wine snobs who
justify paying $300 a bottle for Chateau Annie Green Springs. Let the
bottle caps fly!

It takes no great effort to duplicate your rather sloppy presentation
to offer many better, smaller designs that eclipse your speculated

results. Through selective disclosure, choosing a weak competitor, leaning on abused references, and one thumb on the scale, anyone can inflate performance claims to satisfy a customer (or attract more).

However, when one pirate fleeces a community of pirates, I can enjoy the cluster**** going on and offer "yo-ho-ho, and a bottle of rum!" It is a comedy of a genetic self-thinning population after all.

73's
Richard Clark, KB7QHC

2144. Re: Screwdriver Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 19:05:29 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4207bd8c$1_1@127.0.0.1>
Source record: 82229

jimbo wrote:
> The "Screwdriver" antennas by Hi-Q, TarHeel or High Sierra look very
> interesting for HOA restricted locations. Does anyone have any
> experience with one of these antennas? Also, does anyone have
> experience using one as a base rather than mobile?

HighSierra makes one optimized for base operation. In
general, a base station is not usually limited to 13.5
ft. as is a mobile, and any addition to the length of
a very short antenna is an improvement.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2145. Re: can still talk with wet antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 19:18:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mnef0115t5kkta7h8i9dc3oi0c488kjgm3@4ax.com>
Source record: 82231

On Tue, 08 Feb 2005 00:06:25 +0800, Dan Jacobson <jidanni@jidanni.org>
wrote:

>Can one in theory still transmit if rain
>water creates a bridge across the driven
>element, or even also to 'ground'?
>A DC short circuit but not a RF short circuit?
>Or is it just salt water that is worrisome?

Hi Dan,

Water is an insulator, and a very good dielectric. It would make for
a very good method for building high valued capacitors (displacing
inferior oil), but for one remarkably aggressive characteristic.

Water will disassociate many things (act as a solvent or simply as a
transport). As such it quickly degrades its dielectric characteristic
when in contact with nature. If you were to insert two probes to
measure its initial conductivity (presuming you start with distilled,
de-ionized water), you would find it easily in the megOhms if you
could measure that high in the first place. However, the simple
immersion of the probes (depending on their material and time
immersed) will lead to increasing that conductivity - such is the
aggressive nature of water. Nature is rarely that pristine, so to
dwell on de-ionized rain offers its own comedy of failed expectation.

So, that is the long way of saying you are on the greasy skids of
seeking an all-inclusive answer except to simply offer: don't trust
one. Decades of experience, however, yield practical answers. Look
at insulator materials and construction geometries. Largely, these
two are well tailored to shed water and increase surface area for a
fixed length. If you are worried about salt water, visit a marine
supplier who sells electrical/RF equipment (hard to imagine they would
by shy of examples). These rather simple items reveal how few find
water worrisome after their installation.

Now, if you want the warm snuggly feeling of data to two or three
places, the theory to back it up, and allusions to wave mechanics (be
they water or RF). Time and space will enlarge in this forum to allow
that easily.

73's
Richard Clark, KB7QHC

2146. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 19:20:50 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4207c124$1_1@127.0.0.1>
Source record: 82233

Jim Kelley wrote:
> Chances are fair that something is doing some rectifying somewhere.

It later occurred to me that wind/snow noise is
carried by static DC charged particles.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2147. GP -> yagi driven element?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 19:28:26 UTC
From: Dan Jacobson <jidanni@jidanni.org>
Message-ID: <87k6pkgof9.fsf@jidanni.org>
Source record: 82248

Having failed with yagi recipes, too fancy for rudimentary non meter owner me, I shall now restore my GP antenna, the one with three spikes at bottom, and six spikes at its waist.

But why not place it in front of, not atop the 2 inch diameter iron pipe mast where it sat, and in front of them place a 3rd pole? Voila, a 3 element yagi to boost 145 MHz transmission to the big city 15 km away perhaps.

Wait, the GP is much longer than any yagi recipe's driven element for 2 meters. Well, so is the mast much longer than any recipe's reflector...

And all yagi recipes have elements grounded at the middle, if at all, whereas my reflector and director would be grounded at their bottoms, unless I place an extra wire...

2148. Re: Screwdriver Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 19:31:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <67gf011lmm3gf762lk7tdukf0s1elhsie6@4ax.com>
Source record: 82234

On 7 Feb 2005 08:49:00 -0800, "jimbo" <jimbo62@spamex.com> wrote:
>Also, does anyone have experience using one as a base rather than mobile?

Hi Jimbo,

You need only to consider that in your base application, you need as much linear/mass equivalency to a truck/car frame to reproduce the same results. It has been long observed that these highly specialized antennas are in fact a tuned ground/counterpoise/radial in comparison to the larger radiating surfaces of a truck or car.

If you think of them in these terms, you can allow invention and available structures to solve more problems when you bolt one of these to them.

73's
Richard Clark, KB7QHC

2149. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 20:15:07 UTC
From: nm5k@wt.net
Message-ID: <1107807307.419052.36500@g14g2000cwa.googlegroups.com>
Source record: 82235
Cross-posted to: rec.radio.amateur.antenna,alt.pirate.radio,alt.radio.pirate

radio913@aol.com wrote:
> nm5k@wt.net wrote:
> > You are lucky to see the gain you have, considering the lack
> > of decoupling...Or at least in that pix....Also, thats a
> > pretty lame yagi, so like you say, not really a fair test...
>
>
> What lack of decoupling? It's got the
> coax inductive choke on the input, 4 turns
> of 4" diameter.

I don't recall seeing that in the picture. But even still, I
wonder if it's as good as a full 1/4 wave decoupling cone, or
radials...Much better than nothing though...
>
> If you would read my posts more carefully,
> you would be aware that the reason for the low
> dBi is that the lobe is 180 degrees, and F/B
> ratio limited to around 11dB.

I only read the first post...
>
>
> > My 3 el vertical yagi would eat that j pole for lunch, being
> > it has about 9.4 dbi gain...Or about 7.3 dbd....
>
>
> So what, the Super J-pole in omnidirectional,
> so that's not saying much for a Yagi. We could have
> easily designed it with more gain, but the frontal
> lobe would have been way narrower.

Yea, but if you are going to post a CAPS thread
claiming a j pole beats a yagi by 1 db, most are
going to assume the yagi isn't crippled up...
It's sort of Frackish.....:/
>
> How broad or narrow is the front lobe
> of your yagi? How many degrees? Much
> smaller than 180 no doubt.

No doubt...

I'm not trying to rain on your parade, and surely
applaud you for building these, I just don't quite

get the purpose of such a comparison...Everyone
already knows what the gains of the antennas are..
Well, except for the de-tuned yagi... I mean,
is it really a surprise a collinear might beat
a yagi with about half the normal gain of the
NBS 3 el?
I'll bow out...I really have no problem with the
antenna, etc...I just wanted to stir it, being you
have this frackish thread title...:) MK

2150. Re: shortwave 47 meter

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 20:21:54 UTC
From: ploetsio@hotmail.com
Message-ID: <4ee37d0e.0502071221.785de9d2@posting.google.com>
Source record: 82236

Eskay <sieb_k@yahoo.ca> wrote in message
news:<1ds4lk48v97hn.5tevcd8xpld7$.dlg@40tude.net>...
> On 6 Feb 2005 13:15:43 -0800, Onno wrote:
>
> > Hallo.
> >
> > I'm looking for a shortwave antenna which can be easy build on a 25
> > meter mast.
> > This antenna needs a resonant frequenty of +/- 6.7 mhz.
> > The reason wy i wanna build this antenna is that my wife's mother is
> > living in Sumatra Indonesia and workt a long time for the national
> > radio.
> > You can say she is a real radio freak and that's wy I pick up the plan
> > to start a radio station here from holland (europe)so she can here
> > here our dougther and my wife on here own shortwave radio.
> > I have allready design a final amp for this project and it will be
> > ready in about 9 month. It's a class A 4cx15000 exiter modulated Amp.
> > It will produce about 6KW. Now we need a good antenna which can
> > handle this kind of power and can put the signal into Indonesia and
> > the rest of the world.
> > I can build a 1/4 wave vertical but in my opinion the vertical opening
> > of this antenna will produce onely one skip. I need an antenna with a
> > wide fertical angle so it will deliver the signal all throu out the
> > country's at all time. (multy skip)
> > To produce the power is not so hard but when we start our transmitting
> > my grandmother have to here it. That will be so nice.
> > I'm sorry that my english is so bad to explane exactly what i need so
> > i hope somebody will understand it.
>
> Wat jij van plan bent is ilegaal.
>
> Eskay.

Illegaal ? Te hard rijden is ook illegaal. Doen ik ook wel eens.
Jij niet?
Iedereen doet wel eens dingen die niet helemaal mogen dus.......wees
geen moreel ridder.

2151. : : : Good News! -- Jesus Christ Went To The Cross So You Can Go To Heaven : : :

Have a great day!
Internet Evangelist R.L. Grossi

Free Online Bible
http://www.biblegateway.com

Free Online Movies
http://www.tbn.org/index.php/8/1.html

Animation
http://www.gieson.com/Library/projects/animations/walk/index.html

The Passion Of The Christ
http://www.worshipmusic.com/0310263670.html

Beware Of Cults
http://www.carm.org/cults/cultlist.htm

About Hell
http://www.equip.org/free/DH198.htm

Is Jesus God?
http://www.powertochange.com/questions/qna2.html

2152. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 21:17:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110fmn3lkjlm65@corp.supernews.com>
Source record: 82238

I don't know what I was thinking -- I obviously wasn't. Of course you're right. The loss decreases as the number of radials increases. I apolgize for the mistake.

Roy Lewallen, W7EL

Buck wrote:
> On 6 Feb 2005 22:38:33 -0800, nm5k@wt.net wrote:
>
>
>>>>And the loss increases, rather than drops, as the number increases.
>>
>>This
>>
>>>>has been well known since at least 1937.
>>
>
> I didn't catch this either. I misunderstood it to be that the number
> of radials decrease loss. However, I do well remember that the
> preferred radial of the day when I was first licensed was below ground
> radials. Today I see a lot of antennas preferring above ground
> radials.
>
>
>
>>This has me confused...I must be missing something...I checked the
>>previous
>>posts, but still doesn't make sense to me...Seems the ground losses
>>would
>>decrease as the number of radials increase....Thats what your model
>>showed.
>
>

2153. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 21:28:33 UTC
From: radio913@aol.com
Message-ID: <1107811713.736739.175650@c13g2000cwb.googlegroups.com>
Source record: 82239

Richard Harrison wrote:
> Dr. Slick wrote;
> "Well, our super J-pole is bearing our yagi in ALL directions, even
in
> the forward lobe."
>
> It`s possible.
>

it's true. But this doesn't mean that
it's going to beat ALL Yagis, which
is what some people have thought this
thread was all about. Just THIS 180
degree Yagi, with 11 dB F/B ratio.

> This thread pits a "Super J-Pole" with 6 dBd gain against a
"Yagi-Uda"
> with 2.85 to 17.85 dBd gain (5 to 20 dBi), depending on construction.

6 dBd would be about 8.15 dBi, which is not
the case here.

The Super J-pole is 5.5 dBi or 3.35 dBd.

This particular Yagi is about 4.5 dBi
in the front lobe, which was a compromise
to get the 180 degree pattern (and 11dB F/B).

>
> The "ARRL Antenna Book" gives the details. In my 19th edition, the
Super
> J-Pole is asid to give 6 dB gain over a 1/4-wave whip on page 16-27.
>

Really? If we say the 1/4 wave is 2.15 dBi, then
the Super J is 3.35dBd, omni.

So i'm not sure where they got these numbers,
or if we are talking about the same thing.

Slick

2154. Re: can still talk with wet antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 21:29:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110fnd7cl8t51@corp.supernews.com>
Source record: 82240

The short answer is that water won't cause any problem, and even salt water probably won't (except corrosion).

When water bridges across a driven element or to the boom (not by any means the same as the Earth), you've put a high value resistor and capacitor across the driven element or from the element to the boom. Pure water is a good insulator but acts also like a lossy capacitor at RF; rain water on an antenna will have some dissolved minerals so that reduces the shunt R. The feedpoint impedance of a beam is quite low, so all you've done is put a high value of impedance across a low value. The change is therefore very small. This holds for half wave dipoles, quarter wave verticals, and most other common antennas, too.

A few antenna types have high impedances at the feedpoint, like an electrically short whip, or a full wavelength dipole. Although I don't know of any rigorous tests, I don't think even these are commonly bothered much by water.

Roy Lewallen, W7EL

Dan Jacobson wrote:
> Can one in theory still transmit if rain
> water creates a bridge across the driven
> element, or even also to 'ground'?
> A DC short circuit but not a RF short circuit?
> Or is it just salt water that is worrisome?

2155. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 21:43:51 UTC
From: radio913@aol.com
Message-ID: <1107812631.529633.246520@z14g2000cwz.googlegroups.com>
Source record: 82241
Cross-posted to: rec.radio.amateur.antenna,alt.pirate.radio,alt.radio.pirate

nm5k@wt.net wrote:
> >
> > What lack of decoupling? It's got the
> > coax inductive choke on the input, 4 turns
> > of 4" diameter.
>
> I don't recall seeing that in the picture. But even still, I
> wonder if it's as good as a full 1/4 wave decoupling cone, or
> radials...Much better than nothing though...
> >

Take another look...

>
> Yea, but if you are going to post a CAPS thread
> claiming a j pole beats a yagi by 1 db, most are
> going to assume the yagi isn't crippled up...
> It's sort of Frackish.....:/
> >
> > How broad or narrow is the front lobe
> > of your yagi? How many degrees? Much
> > smaller than 180 no doubt.
>
> No doubt...
>
> I'm not trying to rain on your parade, and surely
> applaud you for building these, I just don't quite
> get the purpose of such a comparison...Everyone
> already knows what the gains of the antennas are..
> Well, except for the de-tuned yagi... I mean,
> is it really a surprise a collinear might beat
> a yagi with about half the normal gain of the
> NBS 3 el?
> I'll bow out...I really have no problem with the
> antenna, etc...I just wanted to stir it, being you
> have this frackish thread title...:) MK

Oh, ok, so you thought i was making some
sort of grand statement that a Super J will
beat a Yagi regardless of the design. That's
not what i'm saying at all.

With THIS PARTICULAR 180 degree yagi,
the Super J beats it in all directions.

Really i should have just made the thread title, "Observations on the Super J-pole and Wide angle Yagis in the VHF broadcast band".

If someone can come up with a 3 element yagi (we wanted to keep the size down), with a 180 degree front lobe, and about 11 dB F/B ratio, that has a better than 4.5 dBi in the front lobe, i'd like to see it. Use EZNEC or whatever simulator you have, and make an H-plane plot... i'd like to see that.

The reason we wanted 11dB F/B ratio, is that for this particular usage, it was NOT on the edge of town, and so we still wanted to have enough ERP to the back side.

Slick

2156. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 21:46:51 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <flRNd.2779$ZZ.2197@newssvr23.news.prodigy.net>
Source record: 82242

Cecil Moore wrote:
> Jim Kelley wrote:
>
>> Chances are fair that something is doing some rectifying somewhere.
>
>
> It later occurred to me that wind/snow noise is
> carried by static DC charged particles.

DC stands for Direct Current. What is a static, direct current, charged particle?

73,
Tom Donaly, KA6RUH

2157. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 21:52:34 UTC
From: radio913@aol.com
Message-ID: <1107813154.166324.269380@c13g2000cwb.googlegroups.com>
Source record: 82243

Richard Clark wrote:
> On 7 Feb 2005 01:44:10 -0800, radio913@aol.com wrote:
> >> > Come listen for yourself...
> > > ????? Volume has nothing to do with this!
> > >
> > > You could throw a dead carrier and still
> > >have an idea of how close to full quieting you
> > >are....
> >
> > Obviously your hearing perception exceeds the characteristics of a
> > larger part of mankind. This makes any claims for someone ELSE to
> > listen to the difference even more problematic.
> >
> > Hearing is the poorest measure second only to "seeing" for one self.
> > Leave this type of testimonial for the Sunday services.
> >

A good receiver actually gives you
TONS of information. You can hear overmodulation,
sideband "splatter" to adjacent channels,
spurious oscillations on other channels,
dead carrier hum in your signal, the overall
intelligibility of your signal and the audio frequency
response (roughly). No field strength meter can
tell you this information!

Bottom line is, human hearing is
the ultimate destination. It can
be more qualitative that quantity.

Slick

2158. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 21:57:18 UTC
From: radio913@aol.com
Message-ID: <1107813438.354221.318790@f14g2000cwb.googlegroups.com>
Source record: 82244
Cross-posted to: rec.radio.amateur.antenna,alt.pirate.radio,alt.radio.pirate

Richard Clark wrote:
>
> It takes no great effort to duplicate your rather sloppy presentation
> to offer many better, smaller designs that eclipse your speculated
> results. Through selective disclosure, choosing a weak competitor,
> leaning on abused references, and one thumb on the scale, anyone can
> inflate performance claims to satisfy a customer (or attract more).
>

I challenge anyone else to use
whatever Yagi Optimizers they have
to come up with a 3 element design
(to keep the size down) with a 180 degree
front lobe, and with an 11dB F/B ratio,
that has a greater than 4.5 dBi in the
front lobe. Plot the H-plane of your
simulation too.

Slick

2159. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 21:57:27 UTC
From: radio913@aol.com
Message-ID: <1107813447.380042.288000@c13g2000cwb.googlegroups.com>
Source record: 82245
Cross-posted to: rec.radio.amateur.antenna,alt.pirate.radio,alt.radio.pirate

Richard Clark wrote:
>
> It takes no great effort to duplicate your rather sloppy presentation
> to offer many better, smaller designs that eclipse your speculated
> results. Through selective disclosure, choosing a weak competitor,
> leaning on abused references, and one thumb on the scale, anyone can
> inflate performance claims to satisfy a customer (or attract more).
>

I challenge anyone else to use
whatever Yagi Optimizers they have
to come up with a 3 element design
(to keep the size down) with a 180 degree
front lobe, and with an 11dB F/B ratio,
that has a greater than 4.5 dBi in the
front lobe. Plot the H-plane of your
simulation too.

Slick

2160. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 22:06:03 UTC
From: radio913@aol.com
Message-ID: <1107811866.826330.186160@c13g2000cwb.googlegroups.com>
Source record: 82246

nospam@nouce.bellatlantic.net wrote:
> On 6 Feb 2005 21:19:41 -0800, radio913@aol.com wrote:
>
> >> Asymetric array of dipoles
> >> Phased array of vertical monopoles
>
> >Remember that you must keep the
> >pattern about 180 degrees, and the F/B
> >ratio should be no more than about 11 dB.
> >
> > I really doubt if you will
> >supply a link...
>
> www.andrews.com many of those commercial designs could be duplicated
> and there are a few repeater builder sites that do exactly that.
>

???? That's a long distance
telephone service site...

Slick

2161. Re: can still talk with wet antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 22:15:20 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <YLRNd.29576$xt.8044@fed1read07>
Source record: 82247

The most common problem is if water gets into the traps (if your horizontal antenna has them)

Some traps have drain holes and they should be oriented so the drain hole is downwards

A friend had them upwards and the SWR would go way out of sight when it rained, so he was off the air until the traps dried out.

We changed them, no problems even in a downpour

--
Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:110fnd7cl8t51@corp.supernews.com...
> The short answer is that water won't cause any problem, and even salt
> water probably won't (except corrosion).
>
> When water bridges across a driven element or to the boom (not by any
> means the same as the Earth), you've put a high value resistor and
> capacitor across the driven element or from the element to the boom. Pure
> water is a good insulator but acts also like a lossy capacitor at RF; rain
> water on an antenna will have some dissolved minerals so that reduces the
> shunt R. The feedpoint impedance of a beam is quite low, so all you've
> done is put a high value of impedance across a low value. The change is
> therefore very small. This holds for half wave dipoles, quarter wave
> verticals, and most other common antennas, too.
>
> A few antenna types have high impedances at the feedpoint, like an
> electrically short whip, or a full wavelength dipole. Although I don't
> know of any rigorous tests, I don't think even these are commonly bothered
> much by water.
>
> Roy Lewallen, W7EL
>
> Dan Jacobson wrote:
>> Can one in theory still transmit if rain
>> water creates a bridge across the driven
>> element, or even also to 'ground'?
>> A DC short circuit but not a RF short circuit?
>> Or is it just salt water that is worrisome?

2162. ? re. Silver/Gold-Teflon PL-259

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 22:21:51 UTC
From: Bert Craig <wa2si@optonline.netNOSPAM>
Message-ID: <lURNd.2925$fK3.738@fe09.lga>
Source record: 82250

I just received a gift of 10 silver plated body/gold plated pin/Teflon dielectric PL-259's made by J&I. I normally use Amphenol 83-1SP's for all my PL-259 needs. I was just wondering if there's be any dissimilar metal corrosion if I used these with non-gold plated receptacle SO-239's?

Funny thing is...upon looking at some of the SO-239's on my rigs, tuners, etc., some of them actually sport the gold plated receptacle SO-239. I'd never even thought to look before, hi.

Any comment re. any experiences w/J&I PL-259's would be greatly appreciated. Tnx in advance es...

--
Vy 73 de Bert
WA2SI
FISTS #9384
QRP ARCI #11782

P.S. Shamelessly soliciting CW QSO's from AK, NE & WY for WAS QRP CW.

2163. Re: ? re. Silver/Gold-Teflon PL-259

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 22:23:44 UTC
From: Bert Craig <wa2si@optonline.netNOSPAM>
Message-ID: <7WRNd.2926$k33.2676@fe09.lga>
Source record: 82251

Oops, sp. correction. EMMMbarassing!

--
Vy 73 de Bert
WA2SI
FISTS #9384
QRP ARCI #11782
"Bert Craig" <wa2si@optonline.netNOSPAM> wrote in message
news:lURNd.2925$fK3.738@fe09.lga...
>I just received a gift of 10 silver plated body/gold plated pin/Teflon
>dielectric PL-259's made by J&I. I normally use Amphenol 83-1SP's for all
>my PL-259 needs. I was just wondering if there'd be any dissimilar metal
>corrosion if I used these with non-gold plated receptacle SO-239's?
>
> Funny thing is...upon looking at some of the SO-239's on my rigs, tuners,
> etc., some of them actually sport the gold plated receptacle SO-239. I'd
> never even thought to look before, hi.
>
> Any comment re. any experiences w/J&I PL-259's would be greatly
> appreciated. Tnx in advance es...
>
> --
> Vy 73 de Bert
> WA2SI
> FISTS #9384
> QRP ARCI #11782
>
> P.S. Shamelessly soliciting CW QSO's from AK, NE & WY for WAS QRP CW.
>

2164. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 22:30:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vmpf01ti3u47dhvpv7k76piupnor4q3tfh@4ax.com>
Source record: 82252
Cross-posted to: rec.radio.amateur.antenna,alt.pirate.radio,alt.radio.pirate

On 7 Feb 2005 13:57:18 -0800, radio913@aol.com wrote:

>
>Richard Clark wrote:
>>
>> It takes no great effort to duplicate your rather sloppy presentation
>> to offer many better, smaller designs that eclipse your speculated
>> results. Through selective disclosure, choosing a weak competitor,
>> leaning on abused references, and one thumb on the scale, anyone can
>> inflate performance claims to satisfy a customer (or attract more).
>>
>
> I challenge anyone else to use
>whatever Yagi Optimizers they have
>to come up with a 3 element design
>(to keep the size down) with a 180 degree
>front lobe, and with an 11dB F/B ratio,
>that has a greater than 4.5 dBi in the
>front lobe. Plot the H-plane of your
>simulation too.

This is a hollow challenge in that such designs are already freely available through EZNEC. Again, the thumb on the scale scenario offers easy ways to pencil whip these numbers above, given they are only partial disclosures tricked up for the benefit of marketing to suckers otherwise inflating their egos as "pirates."

To that band of would-be broadcasters, it is patently obvious that our salesman here has already admitted that no Yagi Optimizer was fully engaged to optimize the "3 element design." (And there is an absolute lack of data for this so-called Super JPole.) As such, he is mocking your credulity to suggest that YO would somehow be appropriate as a package to pursue this particular goal. When marketing has such contempt for customers, you have to wonder about them (both marketing AND the customers).

What is even more contemptible, is the notion that the inferior design is preferable to other designs (they abound for that very reason). The suggestion of any superiority of the "super JPole" has already been draped in presumptions and strained references. This is simply the clouded judgment of a solution in search of a problem. When all you know is about JPoles (which is arguable), then they solve all of life's transmission woes.

Much of this tarted up comparison smacks of a quarter mile race between a corvette and a school bus - ignoring that you wanted a recommendation for a bicycle.

I will leave it to the more industrious customers or would-be customers to simply download the free version of EZNEC and confirm that this clod-hopping 3 element design above would be bettered by a 2 element one. This has already been offered by Allison to no noticeable intelligent response. I will leave it to those who glom onto vacuous marketing with the fatal attraction of a moth for a flame to skip this exercise.

73's
Richard Clark, KB7QHC

2165. Re: ? re. Silver/Gold-Teflon PL-259

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 22:32:57 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <paydndYkR8UOcZrfRVn-sg@comcast.com>
Source record: 82253

"Bert Craig" <wa2si@optonline.netNOSPAM> wrote in message
news:lURNd.2925$fK3.738@fe09.lga...
>I just received a gift of 10 silver plated body/gold plated pin/Teflon
>dielectric PL-259's made by J&I. I normally use Amphenol 83-1SP's for all
>my PL-259 needs. I was just wondering if there's be any dissimilar metal
>corrosion if I used these with non-gold plated receptacle SO-239's?
>
> Funny thing is...upon looking at some of the SO-239's on my rigs, tuners,
> etc., some of them actually sport the gold plated receptacle SO-239. I'd
> never even thought to look before, hi.
>
> Any comment re. any experiences w/J&I PL-259's would be greatly
> appreciated. Tnx in advance es...
>
> --
> Vy 73 de Bert
> WA2SI
> FISTS #9384
> QRP ARCI #11782
>
> P.S. Shamelessly soliciting CW QSO's from AK, NE & WY for WAS QRP CW.
>
Can't swear to it, but I seem to recall a problem with gold/tin interfacing.
Gold migration?

Tam/WB2TT

2166. Re: mast as yagi reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 22:54:24 UTC
From: dplatt@radagast.org
Message-ID: <110fsd07uh8q6c2@corp.supernews.com>
Source record: 82254

>Can a grounded metal mast ever be useful as a yagi reflector?
>http://www.qsl.net/dk7zb/2m_veryshort/2ele.htm
>apparently uses a metal mast as a sort of reflector.
>
>If the mast is "very much longer" and "very much thicker" than the
>other elements, does its distance from the other elements "stabilize"
>in the design and not keep changing as we change the other factors.
>
>Maybe this might be useful in making 'foolproof' 3rd world yagis,
>where the user merely owns a tape measure and various metal rods. He
>already has a reflector much thicker than the 50 ohm split dipole
>driven element, so maybe thickness and metal type of the latter
>wouldn't be that critical, as at least he could clip it to the right
>size (=what?) for 144-146 MHz? Presto, he has a 2 element yagi?

To some extent, yes... or at least so I've been lead to understand.

A local repeater committee I'm part of has been discussing the idea of replacing our existing Hustler G7 omni with a commercial antenna which uses a stacked set of half-wave folded dipoles. The dipoles are normally side-mounted from a metal mast, held out at a distance of somewhere around 1/10 wavelength.

The antenna designer at the factory told us that we could choose from any of several different sensitivity patterns, ranging from a near-cardioid pattern, to an "off-center circular" (something looking fairly close to what an omnidirectional pattern would look like if you were to "push" it 2-3 dB to one side, if that makes sense).

The principal difference between the antenna designs for these patterns, is how close to the mast the folded dipoles are placed. In effect, the mast is acting as a non-tuned reflector, creating more or less of a dip or null in the antenna's pattern in the direction of the mast, and a corresponding boost to the pattern out on the opposite side.

My impression is that it's difficult to get a deep back-side notch or null with this sort of arrangement... the front-to-back ratio is low. It's a useful way to shape the pattern of an otherwise-omnidirectional antenna to cover a not-entirely-circular service area. I don't think it's likely to be all that useful for applications needing a substantially directional pattern, or large front-to-back ratios.

For the sorts of applications you're speaking of (easy and near-foolproof Yagis made with simple materials under Third World conditions), the classic "Cheap Yagi" design by Kent Britain WA5VJB

seems idea. They're easy to construct, don't require a split driven element or a Gamma match or balun, seem to be non-critical in their design, and seem to measure out quite well.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

2167. : : : Good News! -- Jesus Christ Went To The Cross So You Can Go To Heaven : : :

2168. Re: Screwdriver Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 23:21:26 UTC
From: Ron <rmrippy@hotmail.com>
Message-ID: <WJSNd.67902$fE4.11757953@twister.southeast.rr.com>
Source record: 82256

Hi Jimbo,

I've had good luck with my High Sierra HS-1800/Pro in just the
application you mention. You can take a look at:

http://www.qrz.com/w4tqt

73, Ron W4TQT

jimbo wrote:
> The "Screwdriver" antennas by Hi-Q, TarHeel or High Sierra look very
> interesting for HOA restricted locations. Does anyone have any
> experience with one of these antennas? Also, does anyone have
> experience using one as a base rather than mobile?
>
> Thanks for any advice, jimbo
>

2169. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 23:32:56 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <0euf01pbljjgtei8mgqb5a96v9ahsok6q9@4ax.com>
Source record: 82257

On 7 Feb 2005 14:06:03 -0800, radio913@aol.com wrote:

> ???? That's a long distance
>telephone service site...

http://www.andrew.com/products/antennas/

I added an "s" by error. Sheesh.

I figured you'd know their products as they are well known in
broadcast and VHF/UHF ham circles. However that was only one example.
There is also CellOne who also do antenna products and other useful
items. Of course there are only a few hundred (or more) companies
making antennas many of which are suited for a cartiod pattern work.

Allison

2170. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-07 23:54:15 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <snvf01tgsjhshq778pv482mq9bc01r4sm8@4ax.com>
Source record: 82258
Cross-posted to: rec.radio.amateur.antenna,alt.pirate.radio,alt.radio.pirate

On 7 Feb 2005 13:57:18 -0800, radio913@aol.com wrote:

>
>Richard Clark wrote:
>>
>> It takes no great effort to duplicate your rather sloppy presentation
>> to offer many better, smaller designs that eclipse your speculated
>> results. Through selective disclosure, choosing a weak competitor,
>> leaning on abused references, and one thumb on the scale, anyone can
>> inflate performance claims to satisfy a customer (or attract more).
>>
>
> I challenge anyone else to use
>whatever Yagi Optimizers they have
>to come up with a 3 element design
>(to keep the size down) with a 180 degree
>front lobe, and with an 11dB F/B ratio,
>that has a greater than 4.5 dBi in the
>front lobe. Plot the H-plane of your
>simulation too.

I'll admit that I've not followed this thread and don't intend to
punch any tar babies. But I must ask; what the hell is a "180 degree"
front lobe?

2171. Re: Screwdriver Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 00:35:09 UTC
From: Buck <iam@this.site>
Message-ID: <mn1g01tiv36sra2r7b8id2riq9v16p9jii@4ax.com>
Source record: 82259

On 7 Feb 2005 08:49:00 -0800, "jimbo" <jimbo62@spamex.com> wrote:

>The "Screwdriver" antennas by Hi-Q, TarHeel or High Sierra look very
>interesting for HOA restricted locations. Does anyone have any
>experience with one of these antennas? Also, does anyone have
>experience using one as a base rather than mobile?
>
>Thanks for any advice, jimbo

I don't have experience with them base or mobile except to have been on a trip with someone who has one on his truck. The antenna is great. If you must have a compromise antenna, putting one of these on the roof, maybe with the coil disguised in what looks like a vent, might be a great antenna.

As I understand it, you will want to use as many tuned radials around the antenna as you can get away with, at least two per band (four if possible) for maximum signal. However, if that isn't possible, you may consider grounding it to a large metal surface that surrounds the antenna.

I don't know of an efficient way to hide one in a tree, but someone here might have an idea that will be useful. Since it tunes itself, you won't need a tuner and 50 ohm coax will be sufficient.

Chances are you will need to add some form of one-to-one balun (UNUN) or hang a suitable number of ferrite beads on the coax next to the antenna to prevent radiation from traveling back down the coax.

I have heard a lot of good reports from people that use them. I understand that there are about three grades of the screwdriver antennas. The smaller ones have more loss than the larger ones. It is up to your budget as to whether you want to pay for that extra little bit of signal you get with the larger antennas.

I wish you the best on it.

73

--
73 for now
Buck
N4PGW

2172. Re: Groundplane, or something else?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 00:39:46 UTC
From: Buck <iam@this.site>
Message-ID: <7g2g0115tuapqkkd8a9nbcck14tsj74iu4@4ax.com>
Source record: 82260

On Mon, 07 Feb 2005 13:17:19 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>I don't know what I was thinking -- I obviously wasn't. Of course you're
>right. The loss decreases as the number of radials increases. I apolgize
>for the mistake.
>
>Roy Lewallen, W7EL
>

I chalk it up to dislexic fingers, just a type of typo! :)

Strangely enough, I didn't read it that way till someone else reported
it.
--
73 for now
Buck
N4PGW

2173. Re: whip antenna calculations

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 00:42:39 UTC
From: Buck <iam@this.site>
Message-ID: <km2g01p84dubd7pfn6sds7b3v6ac2cd1c6@4ax.com>
Source record: 82261

>
>http://www3.sympatico.ca/gblair/whip.xls
>
>notice the "www3" not the usual "www" in the URL.
>
>Enjoy!
>
>Greg Blair
>ve0acr

The URL worked but the xls didn't :(It came up unrecognizable and
looks like hyroglyphics

--
73 for now
Buck
N4PGW

2174. Re: mast as yagi reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 00:55:31 UTC
From: Buck <iam@this.site>
Message-ID: <se3g01t73k73kb5tb76esgta01f2s55mtk@4ax.com>
Source record: 82262

On Tue, 08 Feb 2005 02:52:21 +0800, Dan Jacobson <jidanni@jidanni.org>
wrote:

>Can a grounded metal mast ever be useful as a yagi reflector?
>http://www.qsl.net/dk7zb/2m_veryshort/2ele.htm
>apparently uses a metal mast as a sort of reflector.
>
>If the mast is "very much longer" and "very much thicker" than the
>other elements, does its distance from the other elements "stabilize"
>in the design and not keep changing as we change the other factors.
>
>Maybe this might be useful in making 'foolproof' 3rd world yagis,
>where the user merely owns a tape measure and various metal rods. He
>already has a reflector much thicker than the 50 ohm split dipole
>driven element, so maybe thickness and metal type of the latter
>wouldn't be that critical, as at least he could clip it to the right
>size (=what?) for 144-146 MHz? Presto, he has a 2 element yagi?
>
>Matters if he has stuck his mast right into the ground, so it is more
>or less grounded or not?

Yes, if the spacing is correct and the pole is long enough, but it may
not be as efficient as a tuned element such as the reflector on a
Yagi.

--
73 for now
Buck
N4PGW

2175. Re: Noise figure calculation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 01:03:54 UTC
From: Jason <cheanglong@gmail.com>
Message-ID: <1107824634.925651.268690@l41g2000cwc.googlegroups.com>
Source record: 82263

Thanks Stewart
I email to you now.
I may not be online till Friday. So give me some time after you reply
me.

thanks
Jason

2176. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 04:20:48 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <09fg01pavo2rbt0t3bh40qcmfdc7p1rd67@4ax.com>
Source record: 82264

On Mon, 07 Feb 2005 16:54:15 -0700, Wes Stewart <n7ws_@*yahoo.com>
wrote:

>I'll admit that I've not followed this thread and don't intend to
>punch any tar babies. But I must ask; what the hell is a "180 degree"
>front lobe?

What he wants is a cartoid pattern, That is a "D" shaped roughly
pattern that's all from and not so much back.

The easy way to do that is a good colinear and mount it near
the flat face of a tower (usually less than 1/4 wave away) . The net
effect is slightly increased gain away from the tower and a mild null
on the other side of the tower. Most of the time this is not desired
but, there are valid cases where you don't wish to waste power behind
you. The most common is coastal commercial broadcat radio and TV.

Allison

2177. Re: Very pleased with Hustler 5-BTV - photos

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 04:37:33 UTC
From: Greg Knapp <gknapp@freshrain.org>
Message-ID: <5oSdnSeZbIaQ35XfRVn-ow@speakeasy.net>
Source record: 82265

Charlie,

I just came across your posting. Thanks for sharing the photos, I really enjoyed them. I have the 6BTV out in the back pasture with just 16 radials and a criss-cross of left over chicken wire, and it has always worked great. Been thinking of "upgrading it" (as it is about 15 years old) to the DX Eng. tilt-over and ground plate, so especially liked your clear photos of how it went together.

73,
Greg, N6GK
"Charlie" <charlie@aol.com> wrote in message
news:CvvCd.13676$6i.5689@bignews6.bellsouth.net...
> I've had my new station on the air now for nearly 2 weeks. The Hustler
> 5-BTV is working really well ground mounted with 72 radials.
> I'm using the DX Engineering stainless steel radial plate and their
> tilt-over mount which is so sweet. Got a couple dozen antenna
> installation photos at this link.
> 1. http://www.ad5th.com/5-BTV.html
>
> 73 / DX
>
> --
>
> Charlie
> Ham Radio - AD5TH
> www.ad5th.com
> Live Blues Music
> www.492acousticblues.com
>
>
>
>
>

2178. Would like feedback about becoming a private FM translator for commercial station.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 05:15:57 UTC
From: KG4CYB <campingfreak2002@yahoo.com>
Message-ID: <cu9hud$5ga$1@xuxa.iecc.com>
Source record: 82267
Cross-posted to: rec.radio.broadcasting,rec.radio.amateur.antenna

Would like to translate a 50,000 watt Earth station located aprox 55 miles from the home qth. I think it would put me at about 15dbu contour. Anyways before I ramble on, Does or has anyone operate/operated their own translator? Any experience would be helpful.

2179. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 05:21:01 UTC
From: radio913@aol.com
Message-ID: <1107840061.503301.7270@f14g2000cwb.googlegroups.com>
Source record: 82266
Cross-posted to: rec.radio.amateur.antenna,alt.pirate.radio,alt.radio.pirate

Richard Clark wrote:
> >
> > I challenge anyone else to use
> >whatever Yagi Optimizers they have
> >to come up with a 3 element design
> >(to keep the size down) with a 180 degree
> >front lobe, and with an 11dB F/B ratio,
> >that has a greater than 4.5 dBi in the
> >front lobe. Plot the H-plane of your
> >simulation too.
>
> This is a hollow challenge in that such designs are already freely
> available through EZNEC. Again, the thumb on the scale scenario
> offers easy ways to pencil whip these numbers above, given they are
> only partial disclosures tricked up for the benefit of marketing to
> suckers otherwise inflating their egos as "pirates."
>

"Hollow challenge"? I don't think you have the
facilities to do this....you're field seems to be
more along the lines of a bad used car saleman!

If someone can come up with a 3 element
yagi (we wanted to keep the size down), with
a 180 degree front lobe, and about 11 dB F/B
ratio, that has a better than 4.5 dBi in the
front lobe, i'd like to see it. Use EZNEC
or whatever simulator you have, and make
an H-plane plot... i'd like to see that.

> To that band of would-be broadcasters, it is patently obvious that
our
> salesman here has already admitted that no Yagi Optimizer was fully
> engaged to optimize the "3 element design." (And there is an
absolute

I ain't trying to sell anything here, Dipshit.

I'm just informing other people of my results,
take it or leave it.

>
> I will leave it to the more industrious customers or would-be
> customers to simply download the free version of EZNEC and confirm
> that this clod-hopping 3 element design above would be bettered by a

2
> element one. This has already been offered by Allison to no
> noticeable intelligent response. I will leave it to those who glom
> onto vacuous marketing with the fatal attraction of a moth for a
flame
> to skip this exercise.
>

The only vacuum is in your head, Richard.

Some things never change....

Slick

2180. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 05:26:08 UTC
From: radio913@aol.com
Message-ID: <1107840368.222325.124720@g14g2000cwa.googlegroups.com>
Source record: 82268

nospam@nouce.bellatlantic.net wrote:
> On Mon, 07 Feb 2005 16:54:15 -0700, Wes Stewart <n7ws_@*yahoo.com>
> wrote:
>
>
> >I'll admit that I've not followed this thread and don't intend to
> >punch any tar babies. But I must ask; what the hell is a "180
degree"
> >front lobe?
>
> What he wants is a cartoid pattern, That is a "D" shaped roughly
> pattern that's all from and not so much back.
>

Indeed. Basically like what i showed you:

http://www.drslick.org/Temp1/yagiplot.jpg

This "D" shape is suitable for when the broadcaster
wants some directivity, but will NOT be on the
extreme edge of the service area or town. It's
obviously not suitable if you are in the center
of town, unless you wish to focus more ERP
in the direction of some taller buildings,
for example.

> The easy way to do that is a good colinear and mount it near
> the flat face of a tower (usually less than 1/4 wave away) . The net
> effect is slightly increased gain away from the tower and a mild null
> on the other side of the tower. Most of the time this is not
desired
> but, there are valid cases where you don't wish to waste power behind
> you. The most common is coastal commercial broadcat radio and TV.
>

Do you have a specific design on hand?

Slick

2181. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 05:27:32 UTC
From: radio913@aol.com
Message-ID: <1107840452.806623.43840@z14g2000cwz.googlegroups.com>
Source record: 82269

nospam@nouce.bellatlantic.net wrote:
> On 7 Feb 2005 14:06:03 -0800, radio913@aol.com wrote:
>
> > ???? That's a long distance
> >telephone service site...
>
> http://www.andrew.com/products/antennas/
>
> I added an "s" by error. Sheesh.
>
> I figured you'd know their products as they are well known in
> broadcast and VHF/UHF ham circles. However that was only one
example.
> There is also CellOne who also do antenna products and other useful
> items. Of course there are only a few hundred (or more) companies
> making antennas many of which are suited for a cartiod pattern work.
>

I couldn't find anything there that was similar
to this:

http://www.drslick.org/Temp1/yagiplot.jpg

s.

2182. Re: Testing for gain/loss in an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 05:52:14 UTC
From: Ed Bailen <n5kzw@arrl.net>
Message-ID: <sjkg015i1fe8t6l986ur7bjrbdiruh070l@4ax.com>
Source record: 82270

On Fri, 04 Feb 2005 13:28:21 -0500, Buck <iam@this.site> wrote:

>I want to test a couple of antenna designs and compare them to a
>dipole antenna.
>
>I am wondering if my idea is a good way to measure gain or loss from
>an antenna. Here goes:
>
>Create a place in which to install the test antenna which will be
>consistent. For example, 40 foot high between two power poles (no
>power lines etc, though.)
>
>Setup a fixed location with a Field Strength Meter (FSM) that has a
>fixed antenna for testing at that location.
>
>Hang a dipole (the reference antenna) and transmit a signal that can
>be calibrated to a fixed location on the FSM. Then hang the
>experimental antenna in place of the dipole. Take the measurements
>without changing anything from the rig. Measuring the power output
>required to meet the same setting on the FSM as the dipole should give
>me a fair idea about the gain or loss from the experimental antenna.
>
>or maybe not.
>
>What am I overlooking?
>
>Thanks
>Buck
>N4PGW

If you are trying to get a feel for the pattern of the antennas in
"the real workd" you want to have your receiving antenna far enough
away to be making far field measurements. I don't have a definition
at hand, but it think it's somewhere between 5 and 20 wavelengths.

Regards,
Ed

2183. Re: Santa Clause like you have never seen him before

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 06:12:18 UTC
From: Dave <mister.hobnobinn@verizon.net>
Message-ID: <6LYNd.10993$ya6.4703@trndny01>
Source record: 82271
Cross-posted to: rec.puzzles.crosswords,rec.pyrotechnics,rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

You LINK is BROKEN

joshz@hotmail.com wrote:

> Santa Clause like you have never seen him before, this is a must see for everyone
http://paddy.home.comcast.net/
>
>

2184. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 06:35:23 UTC
From: Buck <iam@this.site>
Message-ID: <89ng01ptgktp1r08kjm0tafnhba85go9u3@4ax.com>
Source record: 82272

On Tue, 08 Feb 2005 04:20:48 GMT, nospam@nouce.bellatlantic.net wrote:

>On Mon, 07 Feb 2005 16:54:15 -0700, Wes Stewart <n7ws_@*yahoo.com>
>wrote:
>
>
>>I'll admit that I've not followed this thread and don't intend to
>>punch any tar babies. But I must ask; what the hell is a "180 degree"
>>front lobe?
>
>What he wants is a cartoid pattern, That is a "D" shaped roughly
>pattern that's all from and not so much back.
>
>The easy way to do that is a good colinear and mount it near
>the flat face of a tower (usually less than 1/4 wave away) . The net
>effect is slightly increased gain away from the tower and a mild null
>on the other side of the tower. Most of the time this is not desired
>but, there are valid cases where you don't wish to waste power behind
>you. The most common is coastal commercial broadcat radio and TV.
>
>Allison

What he really wants is to illegally broadcast on the FM broadcast
band. Look at the original post. 2/3 of his newsgroups are Pirate
Radio.

--
73 for now
Buck
N4PGW

2185. Re: can still talk with wet antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 06:38:07 UTC
From: RB <rbig@bellsouth.nospam.net>
Message-ID: <13ZNd.18$8b3.4@bignews1.bellsouth.net>
Source record: 82273

I've noted rain sometimes shift antenna tuning a little bit. But, no big problem.

2186. Re: Angle of Radiation - Hawaii

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 07:07:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <afng01p1l5g1evcchk4580751l6j6msc7f@4ax.com>
Source record: 82212

On Thu, 10 Feb 2005 03:49:58 GMT, Rick Frazier <rickf@rickfrazier.com>
wrote:

>I'm thinking I can set the angle of radiation for a horizontal dipole,
>by hanging it the proper distance above (and or towards or away from the
>desired direction) to essentially add to the desired angle of radiation,
>if only by some small amount.

Hi Rick,

This is true, but probably not for the reasons you may have
envisioned. Simply put, the metal acts as a shield to prevent loss to
ground. What is not lost is radiated in other directions. It aids in
those directions straight up, but it also aids in directions at every
other angle too - net result: better signal; how much: nothing
dramatic. This simple fact will probably get you more initial gain
than you will add doing anything further (short of building a tower
and putting up a beam).

>Is there an optimum angle of radiation for DX,
Yes - you may hit it poorly tho'.

>
>Though optimizing the location of the dipole for a particular angle of
>radiation seems good, there will also be a corresponding cancellation of
>signals at other (calculable) angles of radiation, right?
Odds are that given this vague description, that, yes, anything could
happen. Guessing your intent, well you are already in illusionland
with optimization - unless, of course, 1dB optimizations light up the
stars in your firmament.

>Is it all for naught anyway? Given the action of a wire reflector, will
>the sheet metal slab only look like a larger version and only in the
>general direction perpendicular to the center of the sheet metal axis?
Practical answer is no one will probably notice even if you could
shift everything around to suit your best guess. You have far more
dramatic opportunities (more than 1dB) with a vertical within sight of
the ocean.

73's
Richard Clark, KB7QHC

2187. Re: Screwdriver Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 07:29:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7bpg01lca0ijdr4ms61hmjhv286230jfpb@4ax.com>
Source record: 82214

On 9 Feb 2005 17:33:28 -0800, "jimbo" <jimbo62@spamex.com> wrote:

>I know that I want full band coverage 10-160, and I only have 100 watts
>from my transmitter. So, I can't have an antenna that "eats" 90 percent
>of my transmitter ourput.

Hi Jimbo,

The simple numbers are radiation resistance and Ohmic resistance.
Which is larger? Answer that and you have a simple answer. What are
their proportions? Answer that and you have a more complex answer.
Think of a voltage divider (now a power divider).

Now ask yourself, what is the radiation resistance? What is the Ohmic
resistance? For quarterwave and smaller antennas, simple formulas
abound (or tables are available) for radiation resistance. For Ohmic
resistance, this is a function of materials and construction. In this
last regard, it only takes a loose wire, or screw and this resistance
climbs through the roof.

Let's put that into context. For a 12' vertical radiator operating on
160M, you have a 4/160th's wavelength radiator. Radiation resistance
is running on the order of 1/4th Ohm. If you manage to hold all Ohmic
resistance to that value, or lower (everywhere - in TOTAL) then you
verge on 50% efficiency, or better.

Your Mileage May Vary.

73's
Richard Clark, KB7QHC

2188. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 09:06:03 UTC
From: radio913@aol.com
Message-ID: <1107853563.303514.75270@l41g2000cwc.googlegroups.com>
Source record: 82275

Buck wrote:
>
> What he really wants is to illegally broadcast on the FM broadcast
> band. Look at the original post. 2/3 of his newsgroups are Pirate
> Radio.
>

My Goodness! I would never break any
FCC rules! How dare you accuse me.

Even though you can use the Super J-pole
up to 1500 watts or so, i would recommend
not using more than 1 femtoWatt or so.

Good for mowing the lawn with your
walkman....

:)

Slick

2189. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 09:25:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110h1ctroptn461@corp.supernews.com>
Source record: 82274

radio913@aol.com wrote:
>
> My Goodness! I would never break any
> FCC rules! How dare you accuse me.
>. . .

No need for anyone to accuse you, it's all there on the Web:

http://www.talkaboutradioshows.com/group/alt.pirate.radio/messages/7526.html

Or try a google search of "dr slick" "pirate radio"

Anyone interested in knowing a bit more about Garvin Yee, aka "Dr.
Slick" can see:

http://www.artwanted.com/webjump.cfm?artid=4990

Roy Lewallen, W7EL

2190. G5RV with end bits

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 11:34:04 UTC
From: grasshouse@hotmail.com
Message-ID: <cua84ivtr1@news6.svr.pol.co.uk>
Source record: 82276

I have got a full size G5RV designed antenna. I intend making it into an 80 metre band doublet, and broad banding it using a 50 mm cage for the last 12 foot or so, than I intend, standing the 2 cages vertical in the supporting trees. So it will finish of as a huge U or 2 L shape. About 50 feet above ground. Has any one had a bash at this shape/ style of antenna? Also I have read about antenna modelling software, where can I get some, and will it cope with silly shaped antenna? Thanks

2191. Re: G5RV with end bits

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 11:48:22 UTC
From: grasshouse@hotmail.com
Message-ID: <cua9gh$1as$1@news6.svr.pol.co.uk>
Source record: 82277

just found EZNEC thanks.

2192. Re: Santa Clause like you have never seen him before

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 12:38:05 UTC
From: Tumbleweed <thisaccountneverread@yahoo.com>
Message-ID: <36rq53F54qjmtU1@individual.net>
Source record: 82278
Cross-posted to: rec.puzzles.crosswords,rec.pyrotechnics,rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

Which is just as well as chances are its a virus/worm/trojan.

--
Tumbleweed

email replies not necessary but to contact use;
tumbleweednews at hotmail dot com
"Dave" <mister.hobnobinn@verizon.net> wrote in message
news:6LYNd.10993$ya6.4703@trndny01...
> You LINK is BROKEN
>
> joshz@hotmail.com wrote:
>
>> Santa Clause like you have never seen him before, this is a must see for
>> everyone http://paddy.home.comcast.net/
>>

2193. Re: whip antenna calculations

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 12:56:23 UTC
From: Spam Fighter <spamcollector@sympatico.ca>
Message-ID: <pan.2005.02.08.12.56.22.637901@sympatico.ca>
Source record: 82279

On Mon, 07 Feb 2005 19:42:39 -0500, Buck wrote:

>
>>
>>http://www3.sympatico.ca/gblair/whip.xls
>>
>>notice the "www3" not the usual "www" in the URL.
>>
>>Enjoy!
>>
>>Greg Blair
>>ve0acr
>
> The URL worked but the xls didn't :(It came up unrecognizable and
> looks like hyroglyphics

It was created in LINUX'S GNUMERIC spreadsheet and might have been saved
as a GNUMERIC format spreadsheet.

I just saved as an EXCEL 97 spreadsheet document and reloaded it to the
server.

Try again.

2194. Re: whip antenna calculations

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 13:55:49 UTC
From: Buck <iam@this.site>
Message-ID: <96hh0157boj5i1c6f0da31oeu0p8oa97g1@4ax.com>
Source record: 82280

On Tue, 08 Feb 2005 07:56:23 -0500, Spam Fighter
<spamcollector@sympatico.ca> wrote:

>On Mon, 07 Feb 2005 19:42:39 -0500, Buck wrote:
>
>>
>>>
>>>>>http://www3.sympatico.ca/gblair/whip.xls
>>>
>>>>>notice the "www3" not the usual "www" in the URL.
>>>
>>>>>Enjoy!
>>>
>>>>>Greg Blair
>>>>>ve0acr
>>
>> The URL worked but the xls didn't :(It came up unrecognizable and
>> looks like hyroglyphics
>
>It was created in LINUX'S GNUMERIC spreadsheet and might have been saved
>as a GNUMERIC format spreadsheet.
>
>I just saved as an EXCEL 97 spreadsheet document and reloaded it to the
>server.
>
>Try again.

Thank you,
Everything works this time :)

73 for now...
--
73 for now
Buck
N4PGW

2195. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 14:46:10 UTC
From: radio913@aol.com
Message-ID: <1107873970.889301.174910@o13g2000cwo.googlegroups.com>
Source record: 82281

Roy Lewallen wrote:
> radio913@aol.com wrote:
> >
> > My Goodness! I would never break any
> > FCC rules! How dare you accuse me.
> >. . .
>
> No need for anyone to accuse you, it's all there on the Web:
>
>
http://www.talkaboutradioshows.com/group/alt.pirate.radio/messages/7526.html
>

Don't be silly Roy! I might sell 100 watt
broadcast band transmitters, but i only encourage
people to use them into 50 Ohm non-radiating dummy
loads!

Hehe! Makes a great bed-warmer!

> Or try a google search of "dr slick" "pirate radio"
>
> Anyone interested in knowing a bit more about Garvin Yee, aka "Dr.
> Slick" can see:
>
> http://www.artwanted.com/webjump.cfm?artid=4990
>

Thanks for the free plug!

The art is for sale you know....

www.DrSlick.org

Slick

2196. Re: Santa Clause like you have never seen him before

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 14:49:20 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <b6kh019gj3q51nfnqgr6ri287bnuij0s17@4ax.com>
Source record: 82282
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

On Tue, 8 Feb 2005 12:38:05 -0000, "Tumbleweed"
<thisaccountneverread@yahoo.com> wrote:

>Which is just as well as chances are its a virus/worm/trojan.

There is only a 99.9999999999% chance of it being a virus/trojan/worm.
You would be safer eating rotting food from a dumpster.

Some systems protect you by not download certain types of files, even
if you don't know you have security. Looks like a broken link, but
actually your software is doing you a favor.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

2197. Re: Icom AH-4 tuner and IC-706Mk2G radio

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 15:16:41 UTC
From: Jon KB1HTW <kb1htw!@!arrl.net>
Message-ID: <cual51rde1@newslocal.mitre.org>
Source record: 82283

Been out of town - haven't had time to try anything yet. What size chokes would you recommend? I can stop by RatShack on the way home, or possibly detour up to HRO in Salem, NH...

Isn't the 706 supposed to use something like 300mW for tuning? Shouldn't this be under the threshold for RF interfering with the tuning control lead? I mean, if I can send Ethernet frames at a rate of 1Gb/s down a Cat 5 cable error free, you'd think I wouldn't have trouble with 300msec pulses...

Jon

"Ivan Makarov" <miv@hotmail.com> wrote in message
news:rbSdnfqQGIYgap_fRVn-gQ@rogers.com...
> Jon,
>
> get your control cable choked before trying anything else. You can use a
> pair of split core ferrite beads. Put them close to the cable's ends to
> stop
> induced RF from getting into the circuits.706MKIIG is sensitive to that.
> Better then, get a larger core diameter and make as many turns as you can
> fit. Same thing applies when you want to extend the control's head
> cable.
> A better option would be to use a shielded cable, not TP. What happens is
> that your cable works as an antenna, feding RF back into the radio which
> may
> cause unpredictable results. In case of the remote control head this
> simply
> shuts the radio down when trying to key it.
> But you still should be able to get away with your existing TP cable if
> you
> chop the RF off at both ends.
>
> --
>
> Regards,
> Ivan
>
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:qmr401l015jc45abp3gu3mnr6d4ch1t7ai@4ax.com...
>> On Thu, 3 Feb 2005 09:58:31 -0500, "Jon KB1HTW" <kb1htw!@!arrl.net>
>> wrote:
>>
> ...> I see no discussion of choking either the transmission line nor the
>> control lines on this page. This is poor coverage (or I simply
>> scanned it too fast). This may/may not change your situation, but

>> using them is standard procedure.
>>
> ..> Richard Clark, KB7QHC
>
>

2198. Re: ? re. Silver/Gold-Teflon PL-259

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 15:17:21 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <5K4Od.2642$ng6.2564@newssvr17.news.prodigy.com>
Source record: 82284

Bert,
I don't think I'd worry about it, really. Any
interaction will take some time to happen, and who
keeps the same connectors for that long?
'Doc

2199. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 15:22:36 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <vpih015le4r8qliflt0dd27vjsc19aaccr@4ax.com>
Source record: 82285

On 7 Feb 2005 21:27:32 -0800, radio913@aol.com wrote:

> I couldn't find anything there that was similar
>to this:
>
>http://www.drslick.org/Temp1/yagiplot.jpg

You can lead a horse to water, still can't get it damp.

You'd have to look at the data sheet. All the commercial people
are aware of this and it's accepted practice.

What you missed is a 2 or 4bay dipole is a really nice antenna
that can offer gain and pattern control. The usual use is a 4 bay
vertically oriented with each of the 4 dipoles spaced 90 degrees
around the mast for 5.6db omnidirectional gain. Now, if you want a
directional pattern, such as cartioid then put all four on one side,
also expect slightly higher gain as well. The commercial version are
expensive but are known for their durability but, the good news is
they can be built using copper pipe and will give the same
perfomance. I might add, the gain numbers I gave are not theory,
they are real numbers from proven designs.

Ok, here are some links one how to build it..
http://www.repeater-builder.com/rbtip/exposeddipole.html
some good info here, the metal used is less desirable than
CU pipe. The general design is proven.

http://www.w4dex.com/kc4fwc/ant.htm
Info on making a phasing harness, needed for a 4bay but not
rocket science.

http://dipole.w4zt.com/ look at the plumbers dipole page.
This can be built as a 1/2/4/8 dipole array. The limit is 4
based mostly on size though I've seen one 8 dipole array
and it's long(nearly 45ft!) but very effective. I might add if the
mast pipe is made with 1" copper it can also serve as the supporing
mast. This is a prefered design and offers good all grounded
construction (lightining avoidance and static noise reduction).

The two dipole array with both on one side of the mast is the same
gain as the super jpole with two differences. the 4 bay will be longer
but offers a real gain increase and slightly better pattern control.
The gain increase for this type antenna is predictable, being 3DB
for each time you double the elements. The single being 0 DBd,
2bays 3Dbd, and 4bays 6Dbd . Thereal world the practical antennas
built as omnidirectional are really 0, 2.8 ,5.6dbd due to small but

measureable losses in the cables. If the elements are lined up on one side the gain is higher (sme claim 9db) with a cartiod pattern. It's all copper and no required insulators and can be built more robustly. The pattern is predictable, less is left to chance. This type of antenna also works well against the side of a metal building (less tuning difficulties) though you will get a more directional pattern from the building shielding the opposing direction. These designs will you get away from theory and use practical designs.

A repeater group I work with locally used the DBproducts 4bay and found it the best antenna they've put on the tower to date. It wasn't cheap and it was heavy. Experience at that site was anything less robust would barely stand a year before the SWR went to unacceptable. I've built the 4bay for UHF and it's a solid performer. The all copper design weathers very well, is very cheap to build and performs just as well as the commercial versions which are welded up from aluminum.

I'm sure your getting results from the Jpole but, I can be certain from using them myself that your results are part luck and can easily be attributed to the added height (the 70+inches can really help) and placement more than the presumed gain. If you compare a yagi or dipole to a J-pole the radiating element must be the same height. Since the J-pole is really an end fed dipole it has a 38 inch advantage. For a yagi the centerpoint is the boom.. In direct comparisons the yagi you built would have to be minimally 3ft higher to compete on fair ground.

J-poles in general do not like to be near (less than 1/2wave) metalic structures as it detunes them. Yagi behavour is also sensitive to metalic structures close to them. The Yo model is not complete enough for those cases.

Allison
KB1GMX

2200. Re: can still talk with wet antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 15:23:18 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <GP4Od.2644$ng6.1489@newssvr17.news.prodigy.com>
Source record: 82286

Dan,
It depends on how 'clean' the water is, but in general,
there shouldn't be much (if any) changes that can't be
compensated for (retune). the biggest problem is that it
makes you sound like your under water...(-)(o)
'Doc

2201. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 15:28:48 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4208dc44$1_2@127.0.0.1>
Source record: 82287

Tom Donaly wrote:
> DC stands for Direct Current. What is a static, direct current, charged
> particle?

A particle possessing a DC potential with respect to
the antenna. The mechanism of charge transfer from the
charged particle to the antenna is DC.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2202. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 15:34:15 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4208dd8b$1_1@127.0.0.1>
Source record: 82288
Cross-posted to: rec.radio.amateur.antenna,alt.pirate.radio,alt.radio.pirate

radio913@aol.com wrote:
> I challenge anyone else to use
> whatever Yagi Optimizers they have
> to come up with a 3 element design
> (to keep the size down) with a 180 degree
> front lobe, and with an 11dB F/B ratio,
> that has a greater than 4.5 dBi in the
> front lobe.

Why would anyone want such an antenna?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2203. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 15:41:51 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <fsmh01lst9k5hlehmk1jbtjkqutud2e2j9@4ax.com>
Source record: 82289

On Tue, 08 Feb 2005 01:25:45 -0800, Roy Lewallen <w7el@eznec.com>

You likely pegged it.

Why anyone would use a yagi structure to get a pattern like that,
it's not the forte` of that kind of design. That badly a detuned yagi
would likely not perform as expected as well.

I kinda figured that out between the hacked up beam and the almightly
Jpole claims. Jpoles seem to be the holy grail of the pirates. Not
to put down the Jpole but it's suffered more snakeoil and used car
salesmanship than deserved.

Oh well, if someone wanted to do it right at least the recipie is
there even if Dr Slick doesn't fully appreciate it.

Allison

2204. Re: Yaesu RSL-10

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 16:10:56 UTC
From: Alex Henriksen / OZ2AFY <alexie@zbox.dk>
Message-ID: <a2ph0119kru4refp29m44aiquh5qt4vm46@4ax.com>
Source record: 82290

Hello..

Does anybody know a antenna from Yaesu called 'Yaesu RSL-10'.?
I need some info about it..

Regard Alex Henriksen / OZ2AFY
==========
OZ2AFY Home Page - <http://oz2afy.zbox.dk>
Danlotto - <http://www.danlotto.com/?id=14582>
Rapmobil - <http://rapmobil.zbox.dk>

--- I use Linux because I love Linux, not because I hate Microsoft

2205. mobile SWR meter suggestions?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 16:17:13 UTC
From: Spam Fighter <spamcollector@sympatico.ca>
Message-ID: <pan.2005.02.08.16.17.12.955630@sympatico.ca>
Source record: 82291

I have been using on of the small compact back lite cross needle DAIWA SWR/power meters, model CN-410M. It is only 3"x3"x4" and can be flush mounted.

It appears they are no longer manufactured.

Anyone care to suggest a suitable replacement for mobile HF operations? Compact size and flush mounting preferred.

Thanks,

Greg

2206. Re: Extending Icom AH-4 tuner control cable

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 16:32:02 UTC
From: Spam Fighter <spamcollector@sympatico.ca>
Message-ID: <pan.2005.02.08.16.32.01.865692@sympatico.ca>
Source record: 82293

On Wed, 02 Feb 2005 15:09:14 -0500, Jon KB1HTW wrote:

> I need to extend the control cable for my AH-4 tuner. I have lots of Cat 5
> Ethernet cable. The four leads to the tuner are Key, Start, +13.8Vdc, and
> Ground. I initially hooked up each to each of the four pairs in the Ethernet
> cable (i.e., Key to Blue/Blue-White). My thinking was parallel each pair so
> I have less current loss, but I think I blew the capacitance out of the
> water and the Key/Start pulses are getting smeared along the 100+ foot run.
>
> What's the best way to wire things up so to the twisted pairs so any RFI
> gets nulled out? Ground to each of the 4 White leads, and Key to say Blue,
> Start to Green, and +13.8V to Orange? That way each twisted pair would have
> a "signal" and ground. Or I could use the Brown for Ground, and connect the
> AH-4 factory cable's shield to the four white leads. Which is the preferred
> route for minimizing RFI or cable capacitance affecting the Start/Key pulse
> signals?
>
> Jon - KB1HTW

Try using a shielded 4 conductor cable. All the stuff about ferrites is
good but if you can prevent pickup in the first place, that is better.
Also try ferrite beads on the ICOM interface control wires inside the
tuner.

2207. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 16:32:23 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <rQ5Od.3112$UX3.1747@newsread3.news.pas.earthlink.net>
Source record: 82292

radio913@aol.com wrote:
> Roy Lewallen wrote:
>
>>radio913@aol.com wrote:
>>
>>> My Goodness! I would never break any
>>>FCC rules! How dare you accuse me.
>>>. . .
>>
>>No need for anyone to accuse you, it's all there on the Web:
>>
>>
>
> http://www.talkaboutradioshows.com/group/alt.pirate.radio/messages/7526.html
>
>
> Don't be silly Roy! I might sell 100 watt
> broadcast band transmitters, but i only encourage
> people to use them into 50 Ohm non-radiating dummy
> loads!
>
> Hehe! Makes a great bed-warmer!

This is an outright lie. On Ebay and at

http://www.talkaboutradioshows.com/group/alt.pirate.radio/messages/7526.html

you say:

"...WHETHER 50 OHM DUMMY LOAD OR A

PROPERLY TUNED ANTENNA..."

An antenna is not in the category of "...non-radiating dummy loads!".

John

2208. 40 Ft of HBX Tower FS

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 18:59:53 UTC
From: wrhood@exis.net
Message-ID: <42090bdf.3129703@news.exis.net>
Source record: 82294

40 Ft of HBX Tower FS - Chesapeake Amateur Radio Service (a nonprofit club) has five sections of Rohn HBX self supporting tower to dispose of. It consists of the top five sections, we do not have any base parts. The tower is ready for pickup in Chesapeake, Virginia. There is about 20-30% rust on the tower. The club would like to have $100 for use in offsetting it's support of providing public services for the local city government. The tower will be raffled off at the club's Springfest on April 9th. Check out www.qsl/cars for information on the upcoming hamfest. wrhood@exis.net

2209. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 19:21:02 UTC
From: Buck <iam@this.site>
Message-ID: <h84i01lt52ub7j4i6l7a9tqun17uq2bsjj@4ax.com>
Source record: 82295

On Tue, 08 Feb 2005 15:41:51 GMT, nospam@nouce.bellatlantic.net wrote:

>On Tue, 08 Feb 2005 01:25:45 -0800, Roy Lewallen <w7el@eznec.com>
>
>You likely pegged it.
>
>Why anyone would use a yagi structure to get a pattern like that,
>it's not the forte` of that kind of design. That badly a detuned yagi
>would likely not perform as expected as well.
>
>I kinda figured that out between the hacked up beam and the almightly
>Jpole claims. Jpoles seem to be the holy grail of the pirates. Not
>to put down the Jpole but it's suffered more snakeoil and used car
>salesmanship than deserved.
>
>Oh well, if someone wanted to do it right at least the recipie is
>there even if Dr Slick doesn't fully appreciate it.
>
>Allison
maybe he is using the yagi for the dummy load. ;)

--
73 for now
Buck
N4PGW

2210. Re: ? re. Silver/Gold-Teflon PL-259

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 19:54:47 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <cub5e7$s88$1@f04n12.cac.psu.edu>
Source record: 82296

It will not happen anyway. That is not a real problem. The real problem is most of the gold/Teflon PL259's I've seen are not very good connectors. One batch I had was giving me trouble soldering the braid. So I measured the inside diameter of the area where the 4 holes you solder the braid through. It was 0.050" bigger in diameter than the good amphonal connectors I normally use. It made it hard to solder trying to fill that big of a gap.

--
John Passaneau, W3JXP
Penn State University
w3jxp@arrl.net

"'Doc" <w5lz@cwis.net> wrote in message
news:5K4Od.2642$ng6.2564@newssvr17.news.prodigy.com...
> Bert,
> I don't think I'd worry about it, really. Any
> interaction will take some time to happen, and who
> keeps the same connectors for that long?
> 'Doc

2211. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 19:55:02 UTC
From: radio913@aol.com
Message-ID: <1107892502.248768.258920@z14g2000cwz.googlegroups.com>
Source record: 82297

nospam@nouce.bellatlantic.net wrote:
> On 7 Feb 2005 21:27:32 -0800, radio913@aol.com wrote:
>
>
> > I couldn't find anything there that was similar
> >to this:
> >
> >http://www.drslick.org/Temp1/yagiplot.jpg
>
> You can lead a horse to water, still can't get it damp.
>

I would like an H-plane plot, if possible,
and i'm looking for a cardiod pattern, as above,
but with higher dBi if possible.

> You'd have to look at the data sheet. All the commercial people
> are aware of this and it's accepted practice.
>
> What you missed is a 2 or 4bay dipole is a really nice antenna
> that can offer gain and pattern control. The usual use is a 4 bay
> vertically oriented with each of the 4 dipoles spaced 90 degrees
> around the mast for 5.6db omnidirectional gain. Now, if you want a
> directional pattern, such as cartioid then put all four on one side,
> also expect slightly higher gain as well. The commercial version are
> expensive but are known for their durability but, the good news is
> they can be built using copper pipe and will give the same
> perfomance. I might add, the gain numbers I gave are not theory,
> they are real numbers from proven designs.
>

2 bays is big and heavy enough! 4 would be
a bit overkill in this situation.

>
> http://dipole.w4zt.com/ look at the plumbers dipole page.
> This can be built as a 1/2/4/8 dipole array. The limit is 4
>

I've tried using an SO-239 attached to the
antenna itself (as they have done here), and it's
a bad idea...pot metal is very weak.

> direction. These designs will you get away from theory and use
> practical designs.
>

The theory is close to reality in my case! Except
for the F/B ratio, which seems a bit exaggerated.

> A repeater group I work with locally used the DBproducts 4bay and
> found it the best antenna they've put on the tower to date. It
wasn't
> cheap and it was heavy. Experience at that site was anything less
> robust would barely stand a year before the SWR went to unacceptable.
> I've built the 4bay for UHF and it's a solid performer. The all
> copper design weathers very well, is very cheap to build
> and performs just as well as the commercial versions which are welded
> up from aluminum.
>

yeah, but UHF versus VHF is gonna be a huge
difference weight and size wise!

> I'm sure your getting results from the Jpole but, I can be certain
> from using them myself that your results are part luck and can easily
> be attributed to the added height (the 70+inches can really help)
and
> placement more than the presumed gain. If you compare a yagi or
> dipole to a J-pole the radiating element must be the same height.
> Since the J-pole is really an end fed dipole it has a 38 inch
> advantage. For a yagi the centerpoint is the boom.. In direct
> comparisons the yagi you built would have to be minimally 3ft higher
> to compete on fair ground.
>

The Super J-pole was actually about 5 ft. lower than the
Yagi, so it evened out in the end.

S.

2212. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 20:01:34 UTC
From: radio913@aol.com
Message-ID: <1107892894.901189.220070@f14g2000cwb.googlegroups.com>
Source record: 82298

John Smith wrote:
> radio913@aol.com wrote:
> > Roy Lewallen wrote:
> >
> >>radio913@aol.com wrote:
> >>
> >>> My Goodness! I would never break any
> >>>FCC rules! How dare you accuse me.
> >>>. . .
> >>
> >>No need for anyone to accuse you, it's all there on the Web:
> >>
> >>
> >
> >
http://www.talkaboutradioshows.com/group/alt.pirate.radio/messages/7526.html
> >
> >
> > Don't be silly Roy! I might sell 100 watt
> > broadcast band transmitters, but i only encourage
> > people to use them into 50 Ohm non-radiating dummy
> > loads!
> >
> > Hehe! Makes a great bed-warmer!
>
>
> This is an outright lie. On Ebay and at
>
>
http://www.talkaboutradioshows.com/group/alt.pirate.radio/messages/7526.html
>
> you say:
>
> "...WHETHER 50 OHM DUMMY LOAD OR A
>
> PROPERLY TUNED ANTENNA..."
>
> An antenna is not in the category of "...non-radiating dummy loads!".
>

But if you read it carefully, you will
note that i only am stating the conditions whereby the
final transistors will not be blown, which is
a 50 Ohm dummy load or a properly tuned antenna.

But I don't encourage anyone to break the law,
heaven forbid!

:^/

S.

2213. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 20:18:36 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <f87i01dmaueaq47kd959sk82ka8qj53go4@4ax.com>
Source record: 82299

On 8 Feb 2005 11:55:02 -0800, radio913@aol.com wrote:

> I would like an H-plane plot, if possible,
>and i'm looking for a cardiod pattern, as above,
>but with higher dBi if possible.

Try google, or better yet do a little work. I've already done a fair bit.

> 2 bays is big and heavy enough! 4 would be
>a bit overkill in this situation.

Not likely.

> I've tried using an SO-239 attached to the
>antenna itself (as they have done here), and it's
>a bad idea...pot metal is very weak.

It's a good idea, use a good connector, most of the quality ones are nickel or siver plated brass. The ratchack ones are garbage. I prefer Type N connectors as they are easier to waterproof and good ones are quite solid.

> yeah, but UHF versus VHF is gonna be a huge
>difference weight and size wise!

Yep, 3:1. Use light metal. Though using 1/2 inch copper is not as heavy as it may seem as it's also structural. I have built them for VHF too.

Of course for 100mhz FM use they do grow a bit and may be too obvious for a stealth operation.

The rules are simple. Want more signal, put up more metal.

Allison

2214. Re: ? re. Silver/Gold-Teflon PL-259

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 20:28:17 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <vo7i01tlk4e4m0a2r6t3r10ta9eikat5tt@4ax.com>
Source record: 82300

On Mon, 7 Feb 2005 17:32:57 -0500, "Tam/WB2TT" <t-tammaru@c0mca$t.net>
wrote:

>Can't swear to it, but I seem to recall a problem with gold/tin interfacing.
>Gold migration?
>
>Tam/WB2TT

Usually gold to tin is ok. What can be a problem is if the gold is
over copper rather than nickel for the edge card connectors. I had a
few computers that were "poisoned" with connectors that had gold over
either poor nickel or non-existent nickel plate and they were very
problematic with copper migration. They developed a "shake well
before using" problem requiring the system to have the cards pulled
and reinserted to break through the film that resulted. The gold
connectors tend to loose their gold shine and turn greensih to dull
gray if thats a problem. Never had that problem with PL259s/SO239s.

I have had some cheap silver/gold PL259s given to me that were
dimensionally sloppy, likely cheap manufacturing.

Allison
KB1GMX

2215. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 20:50:09 UTC
From: clvrmnky <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <5C9Od.90603$vO1.566750@nnrp1.uunet.ca>
Source record: 82301

On 07/02/2005 4:52 PM, radio913@aol.com wrote:
> Richard Clark wrote:
>
>>On 7 Feb 2005 01:44:10 -0800, radio913@aol.com wrote:
>>
>>>>>Come listen for yourself...
>>>
>>> ????? Volume has nothing to do with this!
>>>
>>> You could throw a dead carrier and still
>>>have an idea of how close to full quieting you
>>>are....
>>
>>Obviously your hearing perception exceeds the characteristics of a
>>larger part of mankind. This makes any claims for someone ELSE to
>>listen to the difference even more problematic.
>>
>>Hearing is the poorest measure second only to "seeing" for one self.
>>Leave this type of testimonial for the Sunday services.
>>
>
> A good receiver actually gives you
> TONS of information. You can hear overmodulation,
> sideband "splatter" to adjacent channels,
> spurious oscillations on other channels,
> dead carrier hum in your signal, the overall
> intelligibility of your signal and the audio frequency
> response (roughly). No field strength meter can
> tell you this information!
>
> Bottom line is, human hearing is
> the ultimate destination. It can
> be more qualitative that quantity.
>

However, it is exactly these aspects that make human hearing terrible
for side-by-side comparisons like the one initially described by the OP.

There are plenty examples of double-blind tests that indicate that the
participating observer often makes the worst sort of qualitative judgements.

Human judgement is a useful tool, especially when trying to understand
the hard-to-quantify. However, I find it dubious that anyone has ears
good enough to hear the quality of an audio signal that is the result of
+- 1dB of RF gain presented to the front-end. (This is not to say I

think that the OP only used this method to get his/her results.
Clearly, the OP used some sort of methodology to obtain the +1dB gain
claim. I only suggest that we should be critical of qualitative
results that back up the results we want.)

Results to the contrary from a proper double-blind test backed up by
multiple datasets based on what we /can/ measure would convince me
otherwise.

A better qualitative test would be to simply live with the antenna for a
few weeks, and see what DX one could pull in. Again, totally
unscientific; but this is what average radiopersons (like me, I'm
afraid!) have been doing for decades now.

I look at this sort of thing as an example of the "right tool for the
right job."

2216. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 21:18:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110ib5urjnr2cd7@corp.supernews.com>
Source record: 82302

radio913@aol.com wrote:
> . . .
> But I don't encourage anyone to break the law,
> heaven forbid!

Most of these are no longer on the web, but they were on 9-19-03 when I originally posted them here:

From http:www.metroactive.com/papers/metro/08.28.97/beat-9735.html:

I missed Creech but got to hear a tape of the band's performance two days later on a micropowered radio station broadcasting at 91.3FM out of Los Gatos known as Radio Free Lost Gatos. The guys in Creech guest DJed, heckled callers and played the whole of their set along with some of their favorite bands. According to RFLG owner/manager/DJ Dr. Slick, the station has been operating out of a house "buried in the Los Gatos hills" for three years. "I do it for fun," Slick says. "I don't do it because I'm an 'anarchist.' I don't go out and say, 'Kill the cops.' I'm positive with radio."

Slick was mum on the wattage but said that 91.3 reaches all of Los Gatos and parts of Campbell. Slick plays classic rock, jazz and "a little bit of Bach" when not turning the controls over to guest DJs like the members of Creech. The station can be heard Sundays and Wednesdays, 8pmï¿½3am. Meanwhile, the next Gaslighter Theater show stars Monkey, Blue Beat Stompers, Steadyups, Lucky Strike and Pigs in Space on Friday (Sept. 5). As always: all ages and five bucks.

From http://www.svcn.com/archives/lgwt/05.06.98/PirateCat.html

Monkey Man stepped into the world of microbroadcasting about a year ago, with his friend Michael Magic at Free-Radio San Jose, 93.7 FM, but had to leave the station after some of his on-air hi-jinks went too far. After that, he started working with Dr. Slick, whose station, Free-Radio Los Gatos, is on 91.3 FM on Sunday and Wednesday nights from 8 p.m. to 11 p.m.

"Then Dr. Slick said I should get my own station, so I went down to Fry's and got one of those little radio kits for, like, $30." Dr. Slick gave Monkey Man an old one-watt amplifier, and another friend, Austin Tatious of KKUD 104.1 in Willow Glen, donated a mixing board. Pirate Cat was on the air.

---------- end of Web quotes ---------------

At the time, I asked:

"It looks like we can look forward to a bigger signal from Radio Free Lost Gatos (or is it Free-Radio Los Gatos?). No more 'all of Los Gatos and parts of Campbell'! Or are you be building FM transmitters and amplifiers for sale?"

It looks like we now have the answer.

Roy Lewallen, W7EL

2217. Re: Extending Icom AH-4 tuner control cable

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 22:32:58 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cubemq$sq8$1@sparta.btinternet.com>
Source record: 82303

I have much used an AH-4 tuner in conjunction with an Icom IC-735
transceiver for 5 or 6 years or more. On all bands 160 to 10m.

The tuner has always been located at the base of various end-fed antennas.
The tuner control unit has always been bolted, as intended, to the side of
transceiver. The transceiver has been used in three different rooms, at
different times, in the house with varying lengths of control cable and coax
running through 1" holes in brick walls.

The control cable to the tuner has varied in length and distance from a few
feet to about 30 feet.

The system has always worked fine. No chokes, ferrites or anti-RFI measures
have ever been used. No RFI has been experienced. No faults have occurred
except that one dial lamp in the IC-735 has failed and I'm too old to fix
it.

The length of control cable has been varied simply by inserting a length of
unscreened, thin-wire, pvc-sheathed cable, 5/16" diameter, using soldered
joints and an open-to-the-air tag strip.

At present there is an excess length of control cable, of unknown length,
which is strewn around the floor, partly coiled up, at the back of a long
bench. But no TVI.

Reg, G4FGQ

2218. Re: ? re. Silver/Gold-Teflon PL-259

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 23:23:28 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <QRbOd.58173$dt3.6307021@twister.southeast.rr.com>
Source record: 82305

"John Passaneau" <jxp16@psu.edu> wrote in message
news:cub5e7$s88$1@f04n12.cac.psu.edu...
> It will not happen anyway. That is not a real problem. The real problem is
> most of the gold/Teflon PL259's I've seen are not very good connectors.
> One
> batch I had was giving me trouble soldering the braid. So I measured the
> inside diameter of the area where the 4 holes you solder the braid
> through.
> It was 0.050" bigger in diameter than the good amphonal connectors I
> normally use. It made it hard to solder trying to fill that big of a gap.
I ve had various problems with Gold connectors too. On the last batch the
insulators kept pulling out.There may be some good ones out there but I am
begining to think the gold /Silver is just window dressing for inferior
products.
.

2219. Re: mobile SWR meter suggestions?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 23:24:06 UTC
From: jgboyles@aol.com
Message-ID: <20050208182406.11910.00000005@mb-m20.aol.com>
Source record: 82304

>Anyone care to suggest a suitable replacement for mobile HF operations?

Hi Greg, I have never used an in-line SWR meter in my mobile rigs. I did not think it would be helpful.
For tuning a HF mobile antenna I use an antenna analyzer. An SWR bridge could be used, but it is not as useful to me because the analyzer gives lots more info.
When you are going down the interstate at 75 mph and talking on the radio, the SWR meter will tell you (if you happen to look at it) if something is wrong with the antenna. If you did not have an SWR meter, you would know something is wrong, cause the RX would go deaf, or the TX would fold back (have to look at the TX).
Sorry I did not recommend a mobile SWR meter. Just listed the reasons why you could get by without one.
73 Gary N4AST

2220. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 23:32:10 UTC
From: richardharrison@webtv.net
Message-ID: <12401-42094BFA-387@storefull-3255.bay.webtv.net>
Source record: 82307

Tom Donaly wrote:
"DC stands for Direct Current,. What is a static direct current, charged particle?"

My dictionary says d-c: An essentially constant-value current that flows in only one direction." Another definition says: "It may be continuous or discontinuous. It may be constant or varying."

Static means stationary or fixed. A static charge is the accumulated electrical charge on an object.

Terman writes on page 288 of his 1955 edition:
"An amplifier having a frequency range extending from a low value up to the order of a megacycle or higher is termed a video amplifier."

Black level is that level of the picture signal corresponding to the maximum limit of black peaks. White level is the carrier-signal level which corresponds to maximum TV picture brightness.

Alternating current cycles, regularly, increasing and decreasing periodically.

An alternating current is assumed to be sinusoidal unless otherwise specified, but it could, for example, be triangular, square, or it could have some other form. If the wave is symmetrical about the zero axis, any number of complete cycles will have zero as their average value. Most amplifiers and transmission systems are not directly coupled. They use capacitors or transformers between stages. These can`t pass direct current, so this reference is lost in transmission unless other steps are taken for its replacement.

The effective value of a sine wave thet does the same work as direct current does is 0.707 x the peak value of the sine wave. Average of the sine wave is different. It is the average of many equally spaced values taken along the course, from awro to zero through one complete HALF cycle of the wave. This works out to 0.636 x the peak value of the sine wave (0.9 x 0.707).

Best regards, Richard Harrison, KB5WZI

2221. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 23:45:52 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <QacOd.175588$w62.173583@bgtnsc05-news.ops.worldnet.att.net>
Source record: 82306

Richard,

It is clear that you are not discussing a general Fourier Transform.
Everything you state below, while correct, refers to Discrete Fourier
Series analysis and Discrete Fourier Transforms, including FFT.

More generally, integral Fourier Transforms are widely, rigorously, and
correctly used to analyze pulse phenomena that are definitely not periodic.

The original spark for this thread was an aperiodic pulse. You chose to
"mandate" all sorts of conditions that may be useful in a particular
case but are not required for theoretical correctness.

73,
Gene
W4SZ

Richard Clark wrote:
> On Mon, 07 Feb 2005 14:34:38 GMT, Gene Fuller <W4SZzzzzzz@att.net>
> wrote:
>
>
>>I can ignore the name-dropping, but I cannot ignore the incorrect
>>statement about "Pure Fourier". There is no mandate of constancy even
>>for the purest Fourier transform. The function needs only to be
>>moderately well-behaved, including single valued and integrable.
>
>
> Hi Gene,
>
> In this case you are seriously wrong. There are no IFs ANDs or BUTs.
> The loop hole of well-behaved is not enough with it being far too
> inspecific.
>
> The ONLY case where the Fourier Series resolves a correct
> transformation is if you limit your data set (or for an Integration,
> you define your limits) over an interval of n ï¿½ 2 ï¿½ PI for a periodic
> function where n is an integer from 1..m. Further, you are resolution
> limited if you fail to observe Nyquist's laws and under sample, or
> fail to frequency limit your real data. This also segues into
> Shannon's laws where you can observe the S+N/N in the transform
> (discussed below). These concerns are EXTERNAL to the simple act of
> transforming data, but are necessary correlatives that MUST be taken
> into account.
>
> If you fail even in this simple regard for periodicity (say looking at

> only 359 degrees of the periodic function), the result is quite
> dramatically different in the Fourier output. Even the casual
> observer can immediately see the difference between the correct and
> incorrect results, there is nothing ambiguous about it at all.
>
>
>>Perhaps you are confusing Fourier series analysis with Fourier transform
>>analysis?
>
>
> No, I have done both, and I will drop the name again, at HP with their
> work on Fourier Analysis equipment where I tested their FFT algorithms
> (call them what you may, the basic underlying requirements do not
> change). I was working with 24 Mathematicians AND Engineers - there
> was nothing sloppy about the quality of up-front preparation. This
> was a project 5 years in the making. They even wrote their own Pascal
> compiler for 1000000 lines of code. I have also done IIRs and FIRs,
> Wavelets, and a host of other frequency/time series decimation
> analysis.
>
> ALL Fourier techniques have requirements that go beyond the Fourier
> math. These requirements (if you have any interest in accuracy)
> cannot be ignored. If you have no interest in accuracy, you still
> have to perform some of them, which is to say there are trade offs as
> I mentioned previously. Ignoring them all simply reduces real data
> into transformed garbage.
>
> I have written FFT software that has resolved pure sine waves into a
> transformation to a single bin with a statistical noise floor and ALL
> spurious response down 200dB. To give an example of what 1ï¿½ of
> decimation error will do, it will inject 120dB of noise into the
> product and spurs that are barely 10 to 20 dB down from the principle
> bin (which also exhibits about 3dB error).
>
> Much of what is available through college texts and on the web are
> seriously under powered in their scope. College is not very
> interested in scope, simply introduction. That is, unless you find
> yourself in a undergrad (more probably grad school with the additional
> considerations taken into account) engineering course dedicated to
> modern implementations (practical Fourier) now largely focused on DSP
> (which had its genesis in the IIR and FIR earlier implementations).
>
> 73's
> Richard Clark, KB7QHC

2222. Re: mobile SWR meter suggestions?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-08 23:52:50 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <04ki01tih7pqc88r5smpro9dvl8deu751q@4ax.com>
Source record: 82308

On 08 Feb 2005 23:24:06 GMT, jgboyles@aol.com (JGBOYLES) wrote:

> or the TX would fold back

This suggests a method: buy a meter with the appropriate form factor
(DVM of course); measure the line that drives the fold back control.

73's
Richard Clark, KB7QHC

2223. Re: ? re. Silver/Gold-Teflon PL-259

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 00:31:34 UTC
From: Bert Craig <wa2si@optonline.netNOSPAM>
Message-ID: <3ZcOd.2732$0c6.836@fe08.lga>
Source record: 82309

Thanks to all who replied. I think I'll just stick with the Silver-plated
Amphenol 83-1SP. The phenolic has never melted on me and the Silver-plated
body has always soldered up FB. Tnx agn es...

--
Vy 73 de Bert
WA2SI
FISTS #9384
QRP ARCI #11782
"Jimmie" <Gfender@carolina.rr.com> wrote in message
news:QRbOd.58173$dt3.6307021@twister.southeast.rr.com...
>
> "John Passaneau" <jxp16@psu.edu> wrote in message
> news:cub5e7$s88$1@f04n12.cac.psu.edu...
>> It will not happen anyway. That is not a real problem. The real problem
>> is
>> most of the gold/Teflon PL259's I've seen are not very good connectors.
>> One
>> batch I had was giving me trouble soldering the braid. So I measured the
>> inside diameter of the area where the 4 holes you solder the braid
>> through.
>> It was 0.050" bigger in diameter than the good amphonal connectors I
>> normally use. It made it hard to solder trying to fill that big of a gap.
> I ve had various problems with Gold connectors too. On the last batch the
> insulators kept pulling out.There may be some good ones out there but I am
> begining to think the gold /Silver is just window dressing for inferior
> products.
> .
>

2224. © © © Good News! -- Jesus Christ Went To The Cross So You Can Go To Heaven © © ©

You are now a Christian if you said the prayer and allowed
God to save you. Welcome to the family of God.

Have a great day!
Internet Evangelist R.L. Grossi

Free Online Bible
http://www.biblegateway.com

Free Online Movies
http://www.tbn.org/index.php/8/1.html

Animation
http://www.gieson.com/Library/projects/animations/walk/index.html

The Passion Of The Christ
http://www.worshipmusic.com/0310263670.html

Beware Of Cults
http://www.carm.org/cults/cultlist.htm

About Hell
http://www.equip.org/free/DH198.htm

Is Jesus God?
http://www.powertochange.com/questions/qna2.html

2225. Re: ? re. Silver/Gold-Teflon PL-259

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 00:51:14 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <TNWdnXv_073nw5TfRVn-1A@comcast.com>
Source record: 82311

<nospam@nouce.bellatlantic.net> wrote in message
news:vo7i01tlk4e4m0a2r6t3r10ta9eikat5tt@4ax.com...
> On Mon, 7 Feb 2005 17:32:57 -0500, "Tam/WB2TT" <t-tammaru@c0mca$t.net>
> wrote:
>
>>Can't swear to it, but I seem to recall a problem with gold/tin
>>interfacing.
>>Gold migration?
>>
>>Tam/WB2TT
>
> Usually gold to tin is ok. What can be a problem is if the gold is
> over copper rather than nickel for the edge card connectors. I had a
> few computers that were "poisoned" with connectors that had gold over
> either poor nickel or non-existent nickel plate and they were very
> problematic with copper migration. They developed a "shake well
> before using" problem requiring the system to have the cards pulled
> and reinserted to break through the film that resulted. The gold
> connectors tend to loose their gold shine and turn greensih to dull
> gray if thats a problem. Never had that problem with PL259s/SO239s.
>
> I have had some cheap silver/gold PL259s given to me that were
> dimensionally sloppy, likely cheap manufacturing.
>
> Allison
> KB1GMX

Bingo! You jogged my mind. I knew it had something to do with a card edge
connector.

Tam

2226. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 01:02:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <48ki01tk927oqghssu6keuccgut2ptqlev@4ax.com>
Source record: 82312

On Tue, 08 Feb 2005 23:45:52 GMT, Gene Fuller <W4SZzzzzzz@att.net>
wrote:

>Richard,
>
>It is clear that you are not discussing a general Fourier Transform.
>Everything you state below, while correct, refers to Discrete Fourier
>Series analysis and Discrete Fourier Transforms, including FFT.
>
>More generally, integral Fourier Transforms are widely, rigorously, and
>correctly used to analyze pulse phenomena that are definitely not periodic.
>
>The original spark for this thread was an aperiodic pulse. You chose to
>"mandate" all sorts of conditions that may be useful in a particular
>case but are not required for theoretical correctness.
>
>73,
>Gene
>W4SZ

Hi Gene,

The simple truth to the matter would be resolved in your offering the "general" Fourier Transform that could accomplish this feat of rendering the spectrum of an aperiodic pulse without having to tailor the waveform. I will lead the way instead.

I would note, ironically, that this data would be discrete (not continuous) and would necessarily drive peripheral processes to approach this "general" Fourier Transform. In other words, to accomplish this generality you would be required to describe the aperiodic function mathematically from discrete data. I've done tons of multivariate regressions, and there are any number of "solutions" that each would exhibit quite different Fourier results. Nearly every regression suffers from the same issues I've already discussed for Fourier analysis - aperiodicity. Frankly such an approach would be inferior to rather simple windowing and performing standard FFTs. This, of course, strips D.C. from the data set.

Windowing has been studied for its qualities since Blackman and Tukey's seminal work "The Measurement of Power Spectra" written in 1958. This is the mathematical work that predates FFTs. Every constraint and reservation that I have describe arises from the pages of this slim volume in terms of what you describe as "general" Fourier. As I've said, I have worked with both the Integral solutions to Fourier Analysis and discrete FFTs for some 20 years. The cautions

and constraints are absolutely identical. Nyquist teaches us this, Shannon further instructs us.

The authors offer three methods to perform Fourier analysis: Spaced, Mixed, and Continuous. They report:
"The choice among these types will depend on their particular advantages and disadvantages, and on the availability of equipment, both for recording and analysis. In almost every case, however, the detailed problems will be surprisingly similar."
pg. 55

The concepts of windowing are revealed by Blackman and Tukey; and their necessity described at great length - per my summarized cautions. The notion of "prewhitening" is discussed so that a finite data record can be transformed (no practical Fourier analysis consists of an infinite record). Aliasing is revealed as a problem as a consequence of sampling (I cannot imagine our correspondent made a continuous recording with a 2.5GHz baseband recorder). Windowing is described in "general" Fourier (and Laplace) math (no one here wants to deal with these abstractions). Impulse data (Dirac functions) litter the pages. Analysis goes miles beyond power spectra to include autocorrelation math- all done in integral calculus. Should we go into covariability? How about Coherence? This last would be useful to prove that the data is even real (and likely as not, it fails this transform).

The long and short of this obviates the hugely erroneous report of measuring DC at the terminals of an antenna. There is absolutely no Fourier Cavalry coming to the rescue of a poorly stated problem with equally problematic data.

73's
Richard Clark, KB7QHC

2227. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 01:16:06 UTC
From: richardharrison@webtv.net
Message-ID: <17957-42096456-409@storefull-3258.bay.webtv.net>
Source record: 82313

Tom Donaly, KA6RUH wrote:
"DC stands for Direct Current. What is static, direct current, charged particle?

Tom addressed Cecil Moore, W5DXP. I`ll risk a breach of protocol and respond though I was not addressed.

Put a charge on a speck of dust, snow flake, or rain drop. Propel it through space by any means. The moving charge is an electric current. What kind of current depends on its trajectory. A unidirectional atraight trip is without doubt a d-c flow.

If the chrge is propelled regularly back and forth, it possibly qualifies as a-c.

If the charge lands on a bare antenna wire, it likely will abruptly give some of its charge to the antenna wire. In this case, the singular event is a pulse and a static discharge.

Best regards, Richard Harrison, KB5WZI

2228. Re: Screwdriver Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 01:32:48 UTC
From: WA9VRH Larry <wa9vrh@mtco.com>
Message-ID: <420968b7$1_2@127.0.0.1>
Source record: 82314

Hi Jimbo,

Check out: http://www.eham.net/reviews/detail/640

It is for Don W6AAQ's (who is the father of the
screwdriver) version.

Great antenna and half the price of all the others. I
have been using one of his for about 5 years.
73 Larry WA9VRH

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

2229. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 02:49:05 UTC
From: radio913@aol.com
Message-ID: <1107917345.051358.193680@z14g2000cwz.googlegroups.com>
Source record: 82315

clvrmnky wrote:

> >
> > A good receiver actually gives you
> > TONS of information. You can hear overmodulation,
> > sideband "splatter" to adjacent channels,
> > spurious oscillations on other channels,
> > dead carrier hum in your signal, the overall
> > intelligibility of your signal and the audio frequency
> > response (roughly). No field strength meter can
> > tell you this information!
> >
> > Bottom line is, human hearing is
> > the ultimate destination. It can
> > be more qualitative that quantity.
> >
>
> However, it is exactly these aspects that make human hearing terrible

> for side-by-side comparisons like the one initially described by the
OP.
>
> There are plenty examples of double-blind tests that indicate that
the
> participating observer often makes the worst sort of qualitative
judgements.
>

But any radio broadcaster worth his or her
salt will be able to tell APPROXIMATELY how many
watts a signal is producing (or ERP), especially since
we don't have ionospheric skip in the broadcast
band, all line of sight.

> Human judgement is a useful tool, especially when trying to
understand
> the hard-to-quantify. However, I find it dubious that anyone has
ears
> good enough to hear the quality of an audio signal that is the result
of
> +- 1dB of RF gain presented to the front-end.

-1 dB at 100 watts is about 79 watts, so
yeah, most people with a good receiver aren't
going to hear the difference. But some
people very familiar with the signal might

notice the difference.

-2 dB at 100 watts is about 63 watts, which
most people should notice, especially on the
fringe of the service area.

-3 dB is 100 versus 50 watts, and no
shit there's an audible difference!

(This is not to say I
> think that the OP only used this method to get his/her results.
> Clearly, the OP used some sort of methodology to obtain the +1dB gain

> claim. I only suggest that we should be critical of qualitative
> results that back up the results we want.)
>

+1 dB was what our theoretical
difference was, but it may have been more.

Sorry, but we don't have a huge VHF anechoic
chamber, and the proper signal strength meter
to do this properly!

>
> A better qualitative test would be to simply live with the antenna
for a
> few weeks, and see what DX one could pull in. Again, totally
> unscientific; but this is what average radiopersons (like me, I'm
> afraid!) have been doing for decades now.
>

Like i said, I would love to have a
big VHF anechoic chamber, and place each antenna
on a rotor, and measure every 2 degrees or so,
with the proper uV/meter equipment, but
we don't have the $$ for that. Most people
don't, i don't know anyone who does.

It may be unscientific, but in a certain
way NOT, because you can get field reports from
many people, who all have different receivers,
and different antennas on their cars, etc... so
the results are more of an averaged response.

Bottom line is, is the signal more
intelligible and listenable?

Slick

2230. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 03:01:01 UTC
From: radio913@aol.com
Message-ID: <1107916187.177855.297820@l41g2000cwc.googlegroups.com>
Source record: 82316

Roy Lewallen wrote:
> radio913@aol.com wrote:
> > . . .
> > But I don't encourage anyone to break the law,
> > heaven forbid!
>
> Most of these are no longer on the web, but they were on 9-19-03 when
I
> originally posted them here:
>
> From http:www.metroactive.com/papers/metro/08.28.97/beat-9735.html:
>
> I missed Creech but got to hear a tape of the band's performance two
> days later on a micropowered radio station broadcasting at 91.3FM out
of
> Los Gatos known as Radio Free Lost Gatos. The guys in Creech guest
DJed,
> heckled callers and played the whole of their set along with some of
> their favorite bands. According to RFLG owner/manager/DJ Dr. Slick,
the
> station has been operating out of a house "buried in the Los Gatos
> hills" for three years. "I do it for fun," Slick says. "I don't do it

> because I'm an 'anarchist.' I don't go out and say, 'Kill the cops.'
I'm
> positive with radio."
>
> Slick was mum on the wattage but said that 91.3 reaches all of Los
Gatos
> and parts of Campbell. Slick plays classic rock, jazz and "a little
bit
> of Bach" when not turning the controls over to guest DJs like the
> members of Creech. The station can be heard Sundays and Wednesdays,
> 8pm3am. Meanwhile, the next Gaslighter Theater show stars Monkey,
Blue
> Beat Stompers, Steadyups, Lucky Strike and Pigs in Space on Friday
> (Sept. 5). As always: all ages and five bucks.
>
> From http://www.svcn.com/archives/lgwt/05.06.98/PirateCat.html
>
> Monkey Man stepped into the world of microbroadcasting about a year
ago,
> with his friend Michael Magic at Free-Radio San Jose, 93.7 FM, but
had

> to leave the station after some of his on-air hi-jinks went too far.
> After that, he started working with Dr. Slick, whose station,
Free-Radio
> Los Gatos, is on 91.3 FM on Sunday and Wednesday nights from 8 p.m.
to
> 11 p.m.
>
> "Then Dr. Slick said I should get my own station, so I went down to
> Fry's and got one of those little radio kits for, like, $30." Dr.
Slick
> gave Monkey Man an old one-watt amplifier, and another friend, Austin

> Tatious of KKUD 104.1 in Willow Glen, donated a mixing board. Pirate
Cat
> was on the air.

Cool article! Yeah, i remember those days well....sigh.

Great times!

>
> At the time, I asked:
>
> "It looks like we can look forward to a bigger signal from Radio Free

> Lost Gatos (or is it Free-Radio Los Gatos?). No more 'all of Los
Gatos
> and parts of Campbell'! Or are you be building FM transmitters and
> amplifiers for sale?"
>
> It looks like we now have the answer.
>

Radio Free Los Gatos doesn't exist anymore, but thanks
for bringing up good memories!

We serve the San Jose/Milpitas area now.

Just because i build transmitters, don't mean
i encourage people to use radiating loads with them!
Dummy loads are a wonderful thing, and you can learn
so much about RF circuit design and the phase-locked-loop!

Slick

2231. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 03:05:06 UTC
From: radio913@aol.com
Message-ID: <1107918305.996449.195350@c13g2000cwb.googlegroups.com>
Source record: 82317

nospam@nouce.bellatlantic.net wrote:

>
> > 2 bays is big and heavy enough! 4 would be
> >a bit overkill in this situation.
>
> Not likely.
>

Definitely! You try putting up a VHF
Super J-pole yourself! You are probably
more used to UHF, so 4 bays doesn't scare
you, but at the broadcast band, you will need
some serious help.

I would love to see what a 4 bay
would do though, but you need serious
bucks to do that, plus alot of manual
labor...

> > I've tried using an SO-239 attached to the
> >antenna itself (as they have done here), and it's
> >a bad idea...pot metal is very weak.
>
> It's a good idea, use a good connector, most of the quality ones are
> nickel or siver plated brass. The ratchack ones are garbage. I
> prefer Type N connectors as they are easier to waterproof and good
> ones are quite solid.
>

He doesn't explicitely say brass in
his website, and looking at the picture, it
looks like a cheapie SO-239 made of pot metal.

It's a bad idea overall. I would
mount it with 4-40 nuts and bolts on
an aluminum plate, and then attach
that to the antenna.

I've had to take an antenna
down before, just to replace the
broken SO-239 that i used in this
way. Bad idea. You have to make
your antenna very physically strong,
unless you like to spend a lot of time
on your rooftop.

> > yeah, but UHF versus VHF is gonna be a huge
> >difference weight and size wise!
>
> Yep, 3:1. Use light metal. Though using 1/2 inch copper is not as
> heavy as it may seem as it's also structural. I have built them for
> VHF too.
>

1/2" copper gets heavy with 2 bays, trust me.

Especially for something like the Super J.

>
> The rules are simple. Want more signal, put up more metal.
>

Or want more ERP, or a lower angle
of radiation, put up more metal.

I would agree.

Slick

2232. © © © Good News! -- Jesus Christ Went To The Cross So You Can Go To Heaven © © ©

You are now a Christian if you said the prayer and allowed
God to save you. Welcome to the family of God.

Have a great day!
Internet Evangelist R.L. Grossi

Free Online Bible
http://www.biblegateway.com

Free Online Movies
http://www.tbn.org/index.php/8/1.html

Animation
http://www.gieson.com/Library/projects/animations/walk/index.html

The Passion Of The Christ
http://www.worshipmusic.com/0310263670.html

Beware Of Cults
http://www.carm.org/cults/cultlist.htm

About Hell
http://www.equip.org/free/DH198.htm

Is Jesus God?
http://www.powertochange.com/questions/qna2.html

2233. Re: ? re. Silver/Gold-Teflon PL-259

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 04:25:36 UTC
From: Dave VanHorn <dvanhorn@dvanhorn.org>
Message-ID: <x96dnfbMaoImDZTfRVn-uw@comcast.com>
Source record: 82319

>>Can't swear to it, but I seem to recall a problem with gold/tin
>>interfacing.
>>Gold migration?

Where I've seen this, is when the tin frets, with flakes of tin oxide that build up under the gold, and literally push the fingers away. Tin-Tin allows a gas-tight contact that dosen't fret, but the tin-gold is bad news, in a finger-type connector. Motion, even micro-scale heating and cooling motion, makes it happen.

I just helped a client through one of these this winter, someone changed a part number and ordered tin connectors for one half of what was supposed to be a gold-gold pair.

A treatment of De-Oxit helps a lot, but the real solution of course, is not to use tin against gold in that situation..

I don't know if it would affect something like a PL-259 though.

2234. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 05:16:16 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42099e35$1_1@127.0.0.1>
Source record: 82320

radio913@aol.com wrote:
> Radio Free Los Gatos doesn't exist anymore, but thanks
> for bringing up good memories!

Remember KFAT? "The Free Mexican Air Force"?
Those were the days.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2235. © © © Good News! -- Jesus Christ Went To The Cross So You Can Go To Heaven © © ©

2236. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 05:37:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <898j015o97mm2n0i10hcc4knkgnnmg1tgr@4ax.com>
Source record: 82172
Cross-posted to: rec.radio.amateur.antenna,alt.pirate.radio,alt.radio.pirate

On 8 Feb 2005 18:49:05 -0800, radio913@aol.com wrote:

> -3 dB is 100 versus 50 watts, and no
>shit there's an audible difference!

Only to a piece of toast.

2237. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 05:38:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hd8j015t7lcumceungpoee6sp0r5os7bhb@4ax.com>
Source record: 82173
Cross-posted to: rec.radio.amateur.antenna,alt.pirate.radio,alt.radio.pirate

On 8 Feb 2005 19:01:01 -0800, radio913@aol.com wrote:

> Just because i build transmitters, don't mean
>i encourage people to use radiating loads with them!
Just encourage them to buy expensive toasters, hmmm?

2238. Re: mobile SWR meter suggestions?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 09:32:06 UTC
From: nm5k@wt.net
Message-ID: <1107941526.165735.130320@z14g2000cwz.googlegroups.com>
Source record: 82174

Sorry I did not recommend a mobile SWR meter. Just listed the reasons why
you could get by without one. .....

I couldn't get by without one myself...Who wants to drag an analyser around just to change bands, etc..Besides, I don't own an analyser. I never thought they would be that helpful...:/ Or at least I've never needed one for anything I've ever done...
Also, if you are driving down the road, and the antenna leans back and changes the load my radio sees, the SWR meter will tell me at a glance what the match is. You can have a 2:1 SWR or higher, and still not have a "deaf" radio. But thats enough to cause a foldback...How much depends on the rig..
I can tweak the antenna, or matching device very quickly to make sure I get full power out. I couldn't see having to hook an analyser
up to do that, while on a trip...But my SWR meter is in the radio. This

one reason why I preferred a IC-730 over say a TS-130, back when those were current rigs...I'm so spoiled on having the meter in the rig, I don't
think I could go back to not having it...I hate having to drag around an extra box for that...Naturally, my current IC-706 has a meter also.. Icoms have had internal meters since waaaayyyy back...Sure makes things a lot easier...Applies to portable too...As far as the original poster, I don't have a clue, being I don't need one outboard...I'd use almost anything as long as it worked...Even a cheap rat shack model would be fine.
But....If he wants to live as I do, he needs a different radio...:-/
On hf, my meter stays on "SWR" all the time. I never look at the power out,
or ALC.
If I see that meter/bar start swinging over, I know instantly, Houston, we
have a problem. But to each his own , I guess....
MK

2239. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 10:11:34 UTC
From: radio913@aol.com
Message-ID: <1107943894.239644.97010@o13g2000cwo.googlegroups.com>
Source record: 82175

Cecil Moore wrote:
> radio913@aol.com wrote:
> > Radio Free Los Gatos doesn't exist anymore, but thanks
> > for bringing up good memories!
>
> Remember KFAT? "The Free Mexican Air Force"?
> Those were the days.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>

How about KPIG, which indeed started out
as a pirate station?

S.

2240. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 10:11:41 UTC
From: radio913@aol.com
Message-ID: <1107943901.374916.278960@z14g2000cwz.googlegroups.com>
Source record: 82176

Cecil Moore wrote:
> radio913@aol.com wrote:
> > Radio Free Los Gatos doesn't exist anymore, but thanks
> > for bringing up good memories!
>
> Remember KFAT? "The Free Mexican Air Force"?
> Those were the days.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>

How about KPIG, which indeed started out
as a pirate station?

S.

2241. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 10:16:27 UTC
From: radio913@aol.com
Message-ID: <1107944187.178548.297400@z14g2000cwz.googlegroups.com>
Source record: 82177
Cross-posted to: rec.radio.amateur.antenna,alt.pirate.radio,alt.radio.pirate

Richard Clark wrote:
> On 8 Feb 2005 19:01:01 -0800, radio913@aol.com wrote:
>
> > Just because i build transmitters, don't mean
> >i encourage people to use radiating loads with them!
> Just encourage them to buy expensive toasters, hmmm?

Toasters? No, you mean bed-warmers!

So basically, i sell bed-warmers for
the furtherance of one's knowledge of
FM broadcast electronics.

For the future I plan on marketing an
excellent line of specially shaped dummy-loads
that can accept a coffee mug on the top,
for keeping your coffee warm all day!

Heehee!

:^)

Slick

2242. Re: Mini Beams

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 11:47:38 UTC
From: GS <spam@limbo.hell>
Message-ID: <ALmOd.3522$504.532330@news20.bellglobal.com>
Source record: 82178

Hi Dave,

Also take a look at the BBQ101520 by Degen Designs.

This is a true compact mini-quad antenna. Additionally, the quad comes full strung and is ready to mount in about 1-1/2 hours or less.

www.degendesigns.com

73 Guenther
info@degendesigns.com

"Dave" <myself@yourself.ie> wrote in message
news:E8_Md.19$zQ2.11@newsfe2-gui.ntli.net...
> Hi All
> I only have a small plot and unable to get a big triband beam up
> due to the elements hanging over my neighbours garden so the only beam I
> am able to put up is a mini beam which one in your opinion is the best the
> TGM MQ series or the cushcraft MA5B. Has anybody had any experience with
> both of them
> Dave
>

2243. Re: ? re. Silver/Gold-Teflon PL-259

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 14:30:26 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <cud6q3$v4g$1@f04n12.cac.psu.edu>
Source record: 82179

Hi All
If you get the connector hot enough to damage the phenolic in the Amphenol connectors, the coax was all ready melted and dripping out the back. Heat resistance is a non issue.

--
John Passaneau, W3JXP
Penn State University
w3jxp@arrl.net

"Bert Craig" <wa2si@optonline.netNOSPAM> wrote in message news:3ZcOd.2732$0c6.836@fe08.lga...
> Thanks to all who replied. I think I'll just stick with the Silver-plated
> Amphenol 83-1SP. The phenolic has never melted on me and the Silver-plated
> body has always soldered up FB. Tnx agn es...
>
> --
> Vy 73 de Bert
> WA2SI
> FISTS #9384
> QRP ARCI #11782

2244. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 14:50:41 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <420a24d7$1_2@127.0.0.1>
Source record: 82180

radio913@aol.com wrote:
> Cecil Moore wrote:
>>Remember KFAT? "The Free Mexican Air Force"?
>>Those were the days.
>
> How about KPIG, which indeed started out
> as a pirate station?

Search results:
KPIG remembers KFAT [New Window]
http://www.kfat.com/kfat.html
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2245. Re: Icom AH-4 tuner and IC-706Mk2G radio

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 15:00:50 UTC
From: Jon KB1HTW <kb1htw!@!arrl.net>
Message-ID: <cud8je$9k1$1@newslocal.mitre.org>
Source record: 82181

Had time last night only to take the tuner down off the roof and put it inside my shack, just inside the window. Extended the long wire another 60+ feet using insulated 14AWG stranded speaker wire running across the roof from the original wire's anchor point on one edge, down to the window, so now it's 135'+. RF ground is now a 45` length of the same 14AWG wire running anong the deck and ground. Opened up the tuner and verified that I have supply sufficient voltage at the tuner (13.7Vdc). Placed sleeved ferrite cores on both the radio end and the tuner end of the control cable. Tried tuning at 40/20/17/6m - still not working.

It's a killer when I can only work on it 20 minutes at a time. Hopefully Saturday or Sunday I can try a bit more focused troubleshooting, assuming the coming Nor'easter isn't too bad. I thought I'd try making it drive a balanced dipole (if I can pick up some 450 ohm ladder line this week), 75' each leg. They won't be straight, more like a J with the tuner at the mid-point.

"Ivan Makarov" <miv@hotmail.com> wrote in message
news:rbSdnfqQGIYgap_fRVn-gQ@rogers.com...
> Jon,
>
> get your control cable choked before trying anything else. You can use a
> pair of split core ferrite beads. Put them close to the cable's ends to
> stop
> induced RF from getting into the circuits.706MKIIG is sensitive to that.
> Better then, get a larger core diameter and make as many turns as you can
> fit. Same thing applies when you want to extend the control's head
> cable.
> A better option would be to use a shielded cable, not TP. What happens is
> that your cable works as an antenna, feding RF back into the radio which
> may
> cause unpredictable results. In case of the remote control head this
> simply
> shuts the radio down when trying to key it.
> But you still should be able to get away with your existing TP cable if
> you
> chop the RF off at both ends.
>
> --
>
> Regards,
> Ivan
>
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:qmr401l015jc45abp3gu3mnr6d4ch1t7ai@4ax.com...

>> On Thu, 3 Feb 2005 09:58:31 -0500, "Jon KB1HTW" <kb1htw!@!arrl.net>
>> wrote:
>>
> ...> I see no discussion of choking either the transmission line nor the
>> control lines on this page. This is poor coverage (or I simply
>> scanned it too fast). This may/may not change your situation, but
>> using them is standard procedure.
>>
> ..> Richard Clark, KB7QHC
>
>

2246. Re: mobile SWR meter suggestions?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 15:03:11 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <da9k01pu8biruk00hv33vpk8ldqff4hrco@4ax.com>
Source record: 82182

On Tue, 08 Feb 2005 11:17:13 -0500, Spam Fighter
<spamcollector@sympatico.ca> wrote:

>I have been using on of the small compact back lite cross needle DAIWA
>SWR/power meters, model CN-410M. It is only 3"x3"x4" and can be flush
>mounted.
>
>It appears they are no longer manufactured.
>
>Anyone care to suggest a suitable replacement for mobile HF operations?
>Compact size and flush mounting preferred.
>
>Thanks,
>
>Greg

Diamond Antenna makes a couple of small cross needle meters about 3.5"
square, the sx-20c and sx-40c, depending on the frequency range you
need. They're listed in the AEA catalog, or you could go to theeir web
site, or call 'em..

bob
k5qwg

2247. Re: mobile SWR meter suggestions?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 15:43:36 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <fsbk019kkfvpkc54bp1uajkrf4rv4qmtgn@4ax.com>
Source record: 82183

On Wed, 09 Feb 2005 15:03:11 GMT, Bob Miller <NOSPAM@neosoft.com>
wrote:

>On Tue, 08 Feb 2005 11:17:13 -0500, Spam Fighter
><spamcollector@sympatico.ca> wrote:
>
>>I have been using on of the small compact back lite cross needle DAIWA
>>SWR/power meters, model CN-410M. It is only 3"x3"x4" and can be flush
>>mounted.
>>
>>It appears they are no longer manufactured.
>>
>>Anyone care to suggest a suitable replacement for mobile HF operations?
>>Compact size and flush mounting preferred.
>>
>>Thanks,
>>
>>Greg
>
>Diamond Antenna makes a couple of small cross needle meters about 3.5"
>square, the sx-20c and sx-40c, depending on the frequency range you
>need. They're listed in the AEA catalog, or you could go to theeir web
>site, or call 'em..

(make that AES, not AEA)

>
>bob
>k5qwg
>

2248. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 15:56:39 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <uk9k01h4ac94k3opb1b9tb5lg55t2nnjdc@4ax.com>
Source record: 82184

On 8 Feb 2005 19:05:06 -0800, radio913@aol.com wrote:

>nospam@nouce.bellatlantic.net wrote:
>
>> > 2 bays is big and heavy enough! 4 would be
>> >a bit overkill in this situation.
>
> Definitely! You try putting up a VHF
>Super J-pole yourself! You are probably
>more used to UHF, so 4 bays doesn't scare
>you, but at the broadcast band, you will need
>some serious help.

I have done both the super J-pole and 4 bays of Dipole
at both UHF and VHF. I've also tested the result with far better
hardware than you have. Beside being a ham I'm also commercial
licensed and have an extensive radio lab.

> I would love to see what a 4 bay
>would do though, but you need serious
>bucks to do that, plus alot of manual
>labor...

Your kidding right? I figure using both 1" copper water pipe, 1/2"
copper pipe and the various fittings to be cheap. How cheap?
Likely if you spent 50$us you spent too much for your materials.

> He doesn't explicitely say brass in
>his website, and looking at the picture, it
>looks like a cheapie SO-239 made of pot metal.

Looks aren't everything. Also potmetal is not solderable
and his was. I'm normal so I have to test with a file to know
what material the connector is. I can never tell from picture.

> It's a bad idea overall. I would
>mount it with 4-40 nuts and bolts on
>an aluminum plate, and then attach
>that to the antenna.

You can but, you are making work thats not required
and you run into dissimilar metal electrolytic corrosion
and plain old rust. Water intrusion is the death of coax
most often. I've worked in marine environments
(salt is corrsive) so I have seen what works. Buy a
decent waterproof connector. I'd say Type N if your
really fussy.

> I've had to take an antenna
>down before, just to replace the
>broken SO-239 that i used in this
>way. Bad idea. You have to make
>your antenna very physically strong,
>unless you like to spend a lot of time
>on your rooftop.

Mine have spend years on a real tower, roofs and other sometimes more
difficult places to reach. I don't like height so if I put it up
it's staying.

>> Yep, 3:1. Use light metal. Though using 1/2 inch copper is not as
>> heavy as it may seem as it's also structural. I have built them for
>> VHF too.
>
> 1/2" copper gets heavy with 2 bays, trust me.

Ah yes, you know all. Some day I"ll post a picture of the antenna
farm both UHF and VHF. Never minding the ones I've given away.
I know what type M and type L 1/2inch copper pipe weigh, do you?

Two bays would use approximately:

6 19" lengths of 1/2" copper (less than 5$)
4 1/2 inch pipe caps (usually less than 20 cents each)
1 10ft length (partial) of 3/4 copper water pipe for the mast (Runs
about 8$ last I paid for one)
2 1/2 inch tees (79 cents)
2 3/4" to 1/2" tees ($1.49 expensive ones).

This is under 12 pounds and is self supporting to that height.
Plenty light enough for this girl. You could use Aluminum tube
to build this and really cut the weight.

> Especially for something like the Super J.

Since the super-j doesnt offer the same performance your
claim is specious. As to structural, The super-J often fails
badly at the center insulator and the phasing loop as descrbed often
rarely makes the winter here in the east due to ice, wind and
snow. New England winters are harsh on antennas.

I also have a standard copper cactus Jpole for 6m/2m/70cm (it's only
14 ft tall) made with 1", 3/4" and 1/2 inch coppper. A really robust
antenna.

>> The rules are simple. Want more signal, put up more metal.
>>
> Or want more ERP, or a lower angle of radiation, put up more metal.

Same rules. If you understood antennas you'd know you do not get
increased ERP (or the reciprical, more signal) without concentrating
the RF field. Simply said, to do that requires more metal.

Allison

2249. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 16:18:37 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <upck01ho3l0millo5qnvoip3mlh0kufgel@4ax.com>
Source record: 82185

On 8 Feb 2005 18:49:05 -0800, radio913@aol.com wrote:

> +1 dB was what our theoretical
>difference was, but it may have been more.
>

First the average reciever will not see the differnce unless right at
the threshold of detection (MDS). The only place I've seen a 1db
difference that was detectable is in really weak signal systems.
In those systems the 1DB differnce cosses the threshold from just
noise to marginally detectable. Such as EME or my favortie mode
troposcatter.

The average FM broadcast system TX and RX runs at high power because
the average FM rx has limited sensitvity due to the required wide
bandwidth. Those recievers require a much larger signals to hit an
acceptable signal to noise and rarely can differentiate between
a 1db difference.

> Sorry, but we don't have a huge VHF anechoic
>chamber, and the proper signal strength meter
>to do this properly!

Measuring 1db difference does not require all of that. As to a
propper field strength meter, specify a brand. They are not rocket
science and are easy to build. If you really want to see something
attend a Central states VHF society antenna gain test. They usually
hit .1db or better accuracy and have tested Jpoles. The results of
past years are posted at their site.

http://www.csvhfs.org/CSVHFANT.HTML

I'll point you to the 2004 results and specifically to the 144mhz
section where a Jpole entered scored a -2.8db gain compared to
a reference dipole (0db)

These things are easily tested and easy to verify. If your trying
to resolve to bettern than .1DB that may be harder but,
3DB is easy and tends to jump at you.

Allison

2250. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 17:17:40 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mqgk0112a3ghd0qgrp4n07sg38q8k2v1nh@4ax.com>
Source record: 82186
Cross-posted to: rec.radio.amateur.antenna,alt.pirate.radio,alt.radio.pirate

On 9 Feb 2005 02:16:27 -0800, radio913@aol.com wrote:
> So basically, i sell bed-warmers
I'm sure some of your customers agree - the population that has
survived the first self thinning of the genetic pool :-)

And your antennas? I suppose they are probes for warming delicate
tissues?

One can tell by your mien that you must really love your customers.
That crew of pirates must love barrel duty.

73's
Richard Clark, KB7QHC

2251. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 17:42:47 UTC
From: radio913@aol.com
Message-ID: <1107970967.720660.289610@g14g2000cwa.googlegroups.com>
Source record: 82187

nospam@nouce.bellatlantic.net wrote:
> >
> > Definitely! You try putting up a VHF
> >Super J-pole yourself! You are probably
> >more used to UHF, so 4 bays doesn't scare
> >you, but at the broadcast band, you will need
> >some serious help.
>
> I have done both the super J-pole and 4 bays of Dipole
> at both UHF and VHF. I've also tested the result with far better
> hardware than you have. Beside being a ham I'm also commercial
> licensed and have an extensive radio lab.
>

What brand and model # field strength
meter do you have? Or did you build a
homemade RF rectifying "sniffer" amplified
with an Op-amp? Not saying the later
couldn't be calibrated correctly...

> > I would love to see what a 4 bay
> >would do though, but you need serious
> >bucks to do that, plus alot of manual
> >labor...
>
> Your kidding right? I figure using both 1" copper water pipe, 1/2"
> copper pipe and the various fittings to be cheap. How cheap?
> Likely if you spent 50$us you spent too much for your materials.
>

Yeah, but you need a serious tower
to put 4 bays on, esp. at VHF, which we don't have
the money for.

> > He doesn't explicitely say brass in
> >his website, and looking at the picture, it
> >looks like a cheapie SO-239 made of pot metal.
>
> Looks aren't everything. Also potmetal is not solderable
> and his was. I'm normal so I have to test with a file to know
> what material the connector is. I can never tell from picture.
>

He should explicitely state that it
should be made of brass.

Also, solder has VERY little
mechanical strength. Almost none.

It's a bad idea.

> > It's a bad idea overall. I would
> >mount it with 4-40 nuts and bolts on
> >an aluminum plate, and then attach
> >that to the antenna.
>
> You can but, you are making work thats not required
> and you run into dissimilar metal electrolytic corrosion
> and plain old rust. Water intrusion is the death of coax
> most often. I've worked in marine environments
> (salt is corrsive) so I have seen what works. Buy a
> decent waterproof connector. I'd say Type N if your
> really fussy.
>

You're correct on this one:

http://www.ssina.com/galvanic/

So then use a brass plate, and
stainless-steel 4-40 bolts and nuts.

But don't rely on solder and the
corner of an SO-239 for strength.

>
> Ah yes, you know all. Some day I"ll post a picture of the antenna
> farm both UHF and VHF. Never minding the ones I've given away.
> I know what type M and type L 1/2inch copper pipe weigh, do you?
>
> Two bays would use approximately:
>
> 6 19" lengths of 1/2" copper (less than 5$)
> 4 1/2 inch pipe caps (usually less than 20 cents each)
> 1 10ft length (partial) of 3/4 copper water pipe for the mast
(Runs
> about 8$ last I paid for one)
> 2 1/2 inch tees (79 cents)
> 2 3/4" to 1/2" tees ($1.49 expensive ones).
>
> This is under 12 pounds and is self supporting to that height.
> Plenty light enough for this girl. You could use Aluminum tube
> to build this and really cut the weight.
>

Opps! I meant to say 1" copper. 1/2" copper
is not strong enough for a VHF super J-pole.

Aluminum is not solderable.

The Super J-pole at VHF is big, and
it's worse depending on how high you want
to get it.

> > Especially for something like the Super J.
>
> Since the super-j doesnt offer the same performance your
> claim is specious. As to structural, The super-J often fails
> badly at the center insulator and the phasing loop as descrbed often
> rarely makes the winter here in the east due to ice, wind and
> snow. New England winters are harsh on antennas.
>

We used a length of Delrin rod for the center
conductor, it's slightly flexible but ultra strong.
Don't use a wooden dowel coated w/epoxy, it will break.

The phasing loop was something like AWG#4
solid copper wire. Hasn't failed for 3 years,
but Ca. is a bit less harsh, indeed!

Slick

2252. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 17:49:01 UTC
From: radio913@aol.com
Message-ID: <1107971341.679582.290790@c13g2000cwb.googlegroups.com>
Source record: 82188

nospam@nouce.bellatlantic.net wrote:
> On 8 Feb 2005 18:49:05 -0800, radio913@aol.com wrote:
>
> > +1 dB was what our theoretical
> >difference was, but it may have been more.
> >
>
> First the average reciever will not see the differnce unless right at
> the threshold of detection (MDS). The only place I've seen a 1db
> difference that was detectable is in really weak signal systems.
> In those systems the 1DB differnce cosses the threshold from just
> noise to marginally detectable. Such as EME or my favortie mode
> troposcatter.
>
> The average FM broadcast system TX and RX runs at high power because
> the average FM rx has limited sensitvity due to the required wide
> bandwidth. Those recievers require a much larger signals to hit an
> acceptable signal to noise and rarely can differentiate between
> a 1db difference.
>

Then we agree. Most listeners
will not notice a 1dB difference.

>
> These things are easily tested and easy to verify. If your trying
> to resolve to bettern than .1DB that may be harder but,
> 3DB is easy and tends to jump at you.

3 dB? 100 watts versus 50?

Yeah, I should hope so!

Slick

2253. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 17:51:12 UTC
From: radio913@aol.com
Message-ID: <1107971472.932804.320890@g14g2000cwa.googlegroups.com>
Source record: 82189
Cross-posted to: rec.radio.amateur.antenna,alt.pirate.radio,alt.radio.pirate

Richard Clark wrote:
> On 9 Feb 2005 02:16:27 -0800, radio913@aol.com wrote:
> > So basically, i sell bed-warmers
> I'm sure some of your customers agree - the population that has
> survived the first self thinning of the genetic pool :-)
>
> And your antennas? I suppose they are probes for warming delicate
> tissues?
>

No, they just look BEAUTIFUL on
top of a roof!

:)

S,

2254. Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 17:52:37 UTC
From: John <my-callsign@qsl.net>
Message-ID: <F5sOd.6142$xY1.4607@newsfe1-gui.ntli.net>
Source record: 82190

Can someone tell me please an easy way to calculate the optimum angle of radiation from a transmitting antenna over a given path on the HF bands (160m - 10m)?

OK, I guess its all to do with the height of the reflective layer in play and the distance of the QSO but I'd really appreciate some clues as to how to work this out.

Thanks

John

2255. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 18:13:47 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <objk019slsafauv3m8grd2blquve9udoko@4ax.com>
Source record: 82192

On 9 Feb 2005 09:42:47 -0800, radio913@aol.com wrote:

> What brand and model # field strength
>meter do you have? Or did you build a
>homemade RF rectifying "sniffer" amplified
>with an Op-amp? Not saying the later
>couldn't be calibrated correctly...

An older lampkin, and also a tuned RF sniffer
with gain (at RF) so I only need milliwatts.

Doesn't matter much as it can be performed with uncalibrated
instruments and a simple field reference by using a simple dipole
as a reference antenna first and do A:B comparisons. You don't need
absolute levels, only ratios for good accuracy.

> Yeah, but you need a serious tower
>to put 4 bays on, esp. at VHF, which we don't have
>the money for.

The first tower was built for repeater site using EMT stacked one on
another with sleeve joints (poor mans swage) to 30 ft. Then I put the
4 stack dipole on that (its height was also 22ft VHF). It was done
for a commercial site that was to be temporary and cheap. Worked well
for nearly a year before we planted a DB products commercial 4 bay and
a telephone pole at that site when they decided to make it permanent.
Its about 10$ per ten feet to build and guy that arrangement.

> Also, solder has VERY little
>mechanical strength. Almost none.
>
> It's a bad idea.

If the connector is holding weight then something else is wrong
as you would normally secure the cable to the supports. Strength
is not an issue then. Also most cut a small slot so the corner is
acutally in a grove, adds imensely to strength.

> So then use a brass plate, and
>stainless-steel 4-40 bolts and nuts.

Don't forget locking hardware as vibration and themal creep are
problems. You still get galvanic effects. Also drilling holes in the
structure to support the plate detracts from the structures strength.

>> This is under 12 pounds and is self supporting to that height.
>> Plenty light enough for this girl. You could use Aluminum tube

>> to build this and really cut the weight.
>>
>
> Opps! I meant to say 1" copper. 1/2" copper
>is not strong enough for a VHF super J-pole.

But for the multibay dipole the 1/2 insections are only 19 iches and
very robust for that. The dipole portion could also be done with 1/4"
refrigeration tube as the structre is small.

> Aluminum is not solderable.

Again your wrong. It's solderable but, you do have to know how and
use a decent heat source. Though bolted connections would work.

> The Super J-pole at VHF is big, and
>it's worse depending on how high you want
>to get it.

Yes it is.

>> Since the super-j doesnt offer the same performance your
>> claim is specious. As to structural, The super-J often fails
>> badly at the center insulator and the phasing loop as descrbed often
>> rarely makes the winter here in the east due to ice, wind and
>> snow. New England winters are harsh on antennas.
>>
>
> We used a length of Delrin rod for the center
>conductor, it's slightly flexible but ultra strong.
>Don't use a wooden dowel coated w/epoxy, it will break.

Delrin works, not easily obtained and often not the right size
meaning a machine shop may be needed. Doesnt solve
the problem of the phasing loop sagging and failing.

> The phasing loop was something like AWG#4
>solid copper wire. Hasn't failed for 3 years,
>but Ca. is a bit less harsh, indeed!

CA is timid save maybe for wind and mountain weather. The use of #4
CU is very heavy and adds to the problems. The problem in that case
is #4 has a low strength to weight ratio. Most use hard drawn 1/4"
copper or brass tube which is far more satisfactory.

Allison

2256. Re: can still talk with wet antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 18:21:56 UTC
From: Mark <makolber@yahoo.com>
Message-ID: <1107973316.093994.33860@f14g2000cwb.googlegroups.com>
Source record: 82193

I've had 2 Comet base loaded 2 meter mobile antennas degrade after a year or so apparently due to condensation inside the so called sealed base coil. I've now drilled a small weep hole near the bottom in the second one and it seems to be drying out and working again.

There is no such thing as a sealed container outside. You need a small hole to let the water out. Water will always get in by condensation.

Mark

2257. Re: average signal magnitude not zero

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 18:22:16 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <cudkribca1@news.service.uci.edu>
Source record: 82195

Richard Clark wrote:

> On Tue, 08 Feb 2005 23:45:52 GMT, Gene Fuller <W4SZzzzzzz@att.net>
> wrote:
>
>
>>Richard,
>>
>>It is clear that you are not discussing a general Fourier Transform.
>>Everything you state below, while correct, refers to Discrete Fourier
>>Series analysis and Discrete Fourier Transforms, including FFT.
>>
>>More generally, integral Fourier Transforms are widely, rigorously, and
>>correctly used to analyze pulse phenomena that are definitely not periodic.
>>
>>The original spark for this thread was an aperiodic pulse. You chose to
>>"mandate" all sorts of conditions that may be useful in a particular
>>case but are not required for theoretical correctness.
>>
>>73,
>>Gene
>>W4SZ
>
>
> Hi Gene,
>
> The simple truth to the matter would be resolved in your offering the
> "general" Fourier Transform that could accomplish this feat of
> rendering the spectrum of an aperiodic pulse without having to tailor
> the waveform. I will lead the way instead.
>
> I would note, ironically, that this data would be discrete (not
> continuous) and would necessarily drive peripheral processes to
> approach this "general" Fourier Transform. In other words, to
> accomplish this generality you would be required to describe the
> aperiodic function mathematically from discrete data. I've done tons
> of multivariate regressions, and there are any number of "solutions"
> that each would exhibit quite different Fourier results. Nearly every
> regression suffers from the same issues I've already discussed for
> Fourier analysis - aperiodicity. Frankly such an approach would be
> inferior to rather simple windowing and performing standard FFTs.
> This, of course, strips D.C. from the data set.
>
> Windowing has been studied for its qualities since Blackman and

> Tukey's seminal work "The Measurement of Power Spectra" written in
> 1958. This is the mathematical work that predates FFTs. Every
> constraint and reservation that I have describe arises from the pages
> of this slim volume in terms of what you describe as "general"
> Fourier. As I've said, I have worked with both the Integral solutions
> to Fourier Analysis and discrete FFTs for some 20 years. The cautions
> and constraints are absolutely identical. Nyquist teaches us this,
> Shannon further instructs us.
>
> The authors offer three methods to perform Fourier analysis: Spaced,
> Mixed, and Continuous. They report:
> "The choice among these types will depend on their particular
> advantages and disadvantages, and on the availability of
> equipment, both for recording and analysis. In almost every case,
> however, the detailed problems will be surprisingly similar."
> pg. 55
>
> The concepts of windowing are revealed by Blackman and Tukey; and
> their necessity described at great length - per my summarized
> cautions. The notion of "prewhitening" is discussed so that a finite
> data record can be transformed (no practical Fourier analysis consists
> of an infinite record). Aliasing is revealed as a problem as a
> consequence of sampling (I cannot imagine our correspondent made a
> continuous recording with a 2.5GHz baseband recorder). Windowing is
> described in "general" Fourier (and Laplace) math (no one here wants
> to deal with these abstractions). Impulse data (Dirac functions)
> litter the pages. Analysis goes miles beyond power spectra to include
> autocorrelation math- all done in integral calculus. Should we go
> into covariability? How about Coherence? This last would be useful
> to prove that the data is even real (and likely as not, it fails this
> transform).
>
> The long and short of this obviates the hugely erroneous report of
> measuring DC at the terminals of an antenna. There is absolutely no
> Fourier Cavalry coming to the rescue of a poorly stated problem with
> equally problematic data.

Right. It's probably just a rusty bolt somewhere.

ac6xg

2258. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 18:37:16 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <wLsOd.29867$xt.14407@fed1read07>
Source record: 82194

Maybe check ON4UN's book -- "Low Band DXing"
He has info on this
Too lengthy to quote here

--
Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?

"John" <my-callsign@qsl.net> wrote in message
news:F5sOd.6142$xY1.4607@newsfe1-gui.ntli.net...
> Can someone tell me please an easy way to calculate the optimum angle of
> radiation from a transmitting antenna over a given path on the HF bands
> (160m - 10m)?
>
> OK, I guess its all to do with the height of the reflective layer in play
> and the distance of the QSO but I'd really appreciate some clues as to how
> to work this out.
>
> Thanks
>
> John
>
>
>

2259. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 19:20:47 UTC
From: dplatt@radagast.org
Message-ID: <110kokfrlf4db1d@corp.supernews.com>
Source record: 82196

In article <1107916187.177855.297820@l41g2000cwc.googlegroups.com>,
<radio913@aol.com> wrote:

> We serve the San Jose/Milpitas area now.
>
> Just because i build transmitters, don't mean
>i encourage people to use radiating loads with them!
>Dummy loads are a wonderful thing, and you can learn
>so much about RF circuit design and the phase-locked-loop!

Do the transmitters and/or amplifiers that you advertise and/or sell,
comply with the current FCC rules regarding certification? If so,
under which Part number are they certificated?

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2260. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 19:35:40 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110kpgdk3p0ov8f@corp.supernews.com>
Source record: 82197

Get W6ELProp - it's easy to use, and free. http://www.qsl.net/w6elprop/.

Roy Lewallen, W7EL

John wrote:
> Can someone tell me please an easy way to calculate the optimum angle of
> radiation from a transmitting antenna over a given path on the HF bands
> (160m - 10m)?
>
> OK, I guess its all to do with the height of the reflective layer in play
> and the distance of the QSO but I'd really appreciate some clues as to how
> to work this out.
>
> Thanks
>
> John
>
>
>

2261. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 20:04:38 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <r6rk01lqkmetsomks4j93mqbb4uo28ch8e@4ax.com>
Source record: 82198

On Wed, 09 Feb 2005 19:20:47 -0000, dplatt@radagast.org (Dave Platt)
wrote:

>Do the transmitters and/or amplifiers that you advertise and/or sell,
>comply with the current FCC rules regarding certification? If so,
>under which Part number are they certificated?

Nah, thats not the effective path.

Do the play lists get recorded and is RIAA paid? Seems they
are far nastier than the FCC.

Allison

2262. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 20:35:14 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cuds62$4vq$1@titan.btinternet.com>
Source record: 82199

The elevation angle of a radio wave is not related to antenna construction.

It is calculated by trigonometry and is geometrically related to the distance between two points on the Earth's surface, the height of the ionospheric reflecting layers involved, and the number of hops.

If a radio wave leaves the Earth at one end of the path and returns to Earth at the other end, then the elevation angles of the path taken are the same at both ends. And the same in the other direction. (To forestall nitpickers let it be said things can vary around averages.)

The optimum angle at which to point a radio antenna, either for transmit or receive, is obviously the same as the elevation angle of the radio path.

BUT NO AMOUNT OF WAVING THE ANTENNA ABOUT WILL AFFECT THE ELEVATION ANGLE OF THE RADIO PATH.

For given points on the Earth's surface, height of reflecting layer, and number of hops, the angle of elevation of the radio path is fixed.

The angle at which the radiation from an antenna is a maximum is an entirely different matter.

Calculation of a path elevation angle on a curved Earth not very difficult but is a little too complicated to be written here.

Up to 1500 groundpath miles the Earth can be considered to be flat. Trig calculation is then schoolkids stuff.

Full formulae can be found in maths books under "Spherical Trigonometry" or in practical radio engineering books.

Calculations can be interesting but are invariably roughly approximate because layer height involves guesswork. And by the time you've finished a calculation the height has shifted. Or the number of hops has changed from 2 to 3. The only things which remain static are your own latitude and longitude.

To calculate propagation statistics of one and two hop radio paths, including elevation angles, download simple program TWOHOPS in a few seconds from website below and run immediately.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

2263. Re: Antennas vs Antennae

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 20:37:54 UTC
From: Alan <alannc44@{nospam}ix.netcom.com>
Message-ID: <CwuOd.68424$K72.8536616@twister.southeast.rr.com>
Source record: 82200

"Bill Turner" <noway@nohow.com> wrote in message
news:5i1e01ta13s8cvqjhm11844dsm3svk9bbu@4ax.com...
> On Sun, 6 Feb 2005 18:15:42 -0330, "Terry" <tsanford@nf.sympatico.ca>

>
> Perhaps that is why English is the most-spoken second language in the
> world

Or, perhaps commerce and money.

(Bias
> showing, I admit).
>

Yep.

Alan
WN4HOG

2264. © © © Good News! -- Jesus Christ Went To The Cross So You Can Go To Heaven © © ©

You are now a Christian if you said the prayer and allowed
God to save you. Welcome to the family of God.

If you decide to wait till later you may die before you get
another chance to be saved because none of us knows
exactly when we will die.

Have a great day!
Internet Evangelist R.L. Grossi

Free Online Bible
http://www.biblegateway.com

Free Online Movies
http://www.tbn.org/index.php/8/1.html

Animation
http://www.gieson.com/Library/projects/animations/walk/index.html

The Passion Of The Christ
http://www.worshipmusic.com/0310263670.html

Beware Of Cults
http://www.carm.org/cults/cultlist.htm

About Hell
http://www.equip.org/free/DH198.htm

Is Jesus God?
http://www.powertochange.com/questions/qna2.html

2265. Quick and Easy Money

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 22:47:16 UTC
From: brovsky@gmail.com
Message-ID: <1107989236.269353.59430@o13g2000cwo.googlegroups.com>
Source record: 82202

Try this out, it works!!!!
Turn $10 into $10,000 with PayPal..Easy & Quick
PLEASE TAKE A MOMENT TO READ THIS INFORMATION. THIS REALLY WORKS!!!
" I WAS SHOCKED WHEN I SAW HOW MUCH MONEY CAME FLOODING INTO MY PAYPAL ACCOUNT." -Mark 2004
Dear Friend,
This is a new program as you will see. It can be for the U.S. Canada, S.E Asia or the U.K. This is a fantastic opportunity, try it for yourself!! EVERYTHING DONE ONLINE! With just $10 or £5 and a Paypal PREMIER or BUSINESS account, you could make $$Thousands$$ in 2 SIMPLE STEPS!
GUARANTEED - you will have $10,000 in two weeks. Only $10, a Paypal PREMIER or BUSINESS account and 30 mins. are all that is needed to get this going. If you want to make a few thousand dollars real quick, then PLEASE take a moment to read and understand the MLM program I´m sharing with you.
NO IT´S NOT what you think. YOU DON´T have to send $10 to five or six people to buy a report, receipt or get on their mailing list. Nor will you need to invest more money later to get things going. THIS IS THE FASTEST, EASIEST PROGRAM EVER! You will be able to complete it in LESS THAN 30 MINUTES and you will NEVER
FORGET THE DAY YOU FIRST VIEWED THIS ONLINE.
If you´re already running a home business, you can easily do this one along with it. If not, this is the FASTEST and EASIEST way to earn serious money online that you´ve ever seen so far in the history of the Internet! This
program works no matter what country you are in, or what currency you use. It doesn´t matter how old or how young you are. And you certainly won´t need any special knowledge or talent. You won´t need to run a website, or make phone calls, or make photocopies, or send out letters through the mail, or pay for advertising, etc. The only things you will need are: * An email address
* A Premier or Business PayPal account with at least $10 deposited in it
* 30 minutes of your time
ONLY 2 SIMPLE AND EASY STEPS ! !
If you are doing other programs, by all means stay with them. The more the merrier, BUT PLEASE READ ON!! First of all, there are only TWO POSITIONS, not four, five or six like many other programs. This program is more
realistic and much, MUCH FASTER. Because it is so easy, the response rate for this program is VERY HIGH and VERY FAST, and you will receive your reward in FOURTEEN DAYS. That´s only TWO WEEKS! Not one or two months. Just in time for next month's BILLS.

TRUE STORY -- Grace Kelly tells how she ran this gifting summation four times last year. The first time, she received $6,000 in cash in two weeks and then $14,000 in cash the next three times.

THIS CAN AND WILL WORK FOR YOU! HERE ARE THE DETAILS:
Post this letter in 50 message boards, chat rooms, or newsgroup. You don´t need to post 200 like other programs or email 100 people just to get started. Even if you are already in a program like the send twenty dollars to six people. CONTINUE IT and stay with it, THOSE DO PAY OUT, but do yourself a favor, DO THIS ONE TODAY as well, RIGHT NOW!!! It is simple and takes a very small investment, only $10 and a Paypal PREMIER or BUSINESS account. IT WORKS AND IS DONE IN 2 SIMPLE AND EASY STEPS ! ! This program WILL PAY FASTER before the other programs you are working on even trickle in!! Follow the simple instructions and in two weeks, you should have $10,000 because most PEOPLE WILL RESPOND due to the LOW ONE TIME INVESTMENT, SPEED AND HIGH PROFIT POTENTIAL, PLUS, since its done all ONLINE, there is no time wasted mailing out letters and the such!!! We are not even figuring a 50% response! So let´s all keep it going and help each other in these tough times. We all owe money to bill collectors, and creditors. But, with this, if people take the time to help each other, the good fortune will follow. SO, Take the measly minutes this SIMPLE
and REWARDING program offers and give the gift that gives back TODAY!!!
HERE´S WHAT YOU NEED TO DO...
STEP 1 Ok, if you´re not already a PayPal user,
the very first thing you need to do is use the PayPal link below and SIGN UP. It takes just two minutes! Here´s the URL. Just click on the PayPal link below:
https://www.paypal.com/us/cgi-bin/webscr?cmd=_registration-run
Be sure to use this link so you can sign up for a free PREMIER or BUSINESS account. You´ll need to have a PREMIER or BUSINESS account (and not a PERSONAL account) otherwise you won´t be able to receive credit card payments from other people.
STEP 2
It is an undeniable law of the universe that we must first give in order to receive. So the first thing to do when you have your Premier/Business PayPal account is to IMMEDIATELY send a $10 payment from your PayPal account
to the person at POSITION #1, if... -- your
birthday is BETWEEN JAN 1 THRU JUNE 30, OR, if...
-- your birthday is BETWEEN JULY 1 THRU DEC 31, send the
gift to the person at POSITION # 2,
along with a note saying: "HERE IS A $10 GIFT FOR YOU." Be certain to add this note, as this is what KEEPS THIS PROGRAM LEGAL. Instructions on how to send a payment are under "SEND MONEY" at the Paypal Site.
It´s so Easy!!!
When you send your $10 payment to the first address in the list, do it with a great big smile on your face because "as you sow, so shall you reap!" When this program is continued, as it should be, EVERYONE PROFITS!!

DON´T BE AFRAID to send gifts to strangers. It will come back to you ten folds. A person can give you up to $10,000 per year and you don´t have to report it to the IRS!

Here are the current positions:
* POSITION#1 --- nxbrennan@hotmail.com
* POSITION#2 --- executioner_2k@yahoo.com

After you have transferred a $10 payment to the email address, something very eerie happens. It gives you an indescribable, overwhelming sense of certainty, belief and conviction in the system. You´ve just proved to yourself
that, because you have done it, there must be a great number of other people ready to do exactly the same. Thus you have now seen for yourself, first hand, that this business actually works!

REMOVE the email address you are replacing (the one you sent $10 to), and REPLACE it with your own email address.
REMEMBER: Use the same EMAIL ADDRESS that is used with YOUR Paypal account !!!
Paste your newly typed email address over the old one and
then post to 50 Message Boards, Chat Rooms, or Newsgroups. DON´T MULL OVER IT, JUST 30 MIN OF YOUR TIME, THAT´S IT THERE IS NO MORE TO DO!!
ACT FAST AND GET THE GIFT. HONESTLY AND INTEGRITY MAKE THIS PLAN WORK!!
DO TO OTHERS AS YOU WOULD HAVE THEM DO TO YOU. YOUR NAME COULD CYCLE FOR A LONG TIME ! ! THIS MAKES IT THE GIFT THAT KEEPS ON GIVING.
This is excellent seed money to start or expand a business, buy your dream home, car, and pay off what ever bills you may have.
Good luck and God Bless. Play fairly, Good fortune will follow.
WHY THIS PROGRAM WORKS:
!! HONESTY AND INTEGRITY !!
Straight to the point, the reason this program is SO SUCCESSFUL is because when you follow these instructions EXACTLY = GIVE A $10 GIFT and POST this in 50 different message boards, there are only TWO outcomes.
(1) A persons birthday will fall on the same half as yours, therefore, YOU GET THE $10...
OR,
(2) a persons birthday will fall on the other half of the timeline, therefore, YOU STAY IN YOUR POSITION and
get posted in 50 other MESSAGE BOARDS, etc...
BOTTOMLINE: Either you get the $10 or your name gets passed on for other people to give YOU $10 or pass YOUR name on to other people that will. It makes you think though, the more you POST YOUR OWN POSTS, the BETTER the results!!!
4 FACTORS THAT MAKE THIS PROGRAM SO SUCCESSFUL...
* EXTREMELY FAST RESPONSE
* EXTREMELY HIGH RESPONSE RATE
* UNLIMITED PROFIT POTENTIAL
* QUICK, SIMPLE AND CHEAP TO GET STARTED
So there it is. You now have the knowledge that will enable you to make

over $10,000 within the next two weeks. The only thing that can hold you back now is a lack of faith or a lack of self-belief. However, any doubts you may
currently have will disappear within a few days of putting this plan into practice. Trust me on this! You certainly won´t regret it.
SOME NOTES FROM PAYPAL WHICH YOU MAY FIND USEFUL:
PayPal lets you pay anyone with an email address and is the world´s Number 1 online payment service. PayPal is accepted on over 3 million eBay auctions as well as a countless number of online shops. You can also use PayPal to pay your friends - for example, it´s a convenient way to split the phone bill with your room-mate, send cash to your kids in college, or send cash to someone in another country. Better yet, you can also earn a referral bonus of up to $100 each time someone signs up for a PayPal account using your referral URL! When you send money through PayPal, you can fund your payments with your credit card or checking account. You won´t have to worry about your privacy, because PayPal keeps your accounting information safe and secure. Making a purchase
with PayPal is far more secure than mailing a check or giving your credit card number to a stranger. That´s why over 9 MILLION people from around the world use PayPal to move money. Signing up for a PayPal account is free, easy, and it takes only a couple of minutes.
Thank you, and good luck in your ventures.

2266. Quick and Easy Money

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 22:47:37 UTC
From: brovsky@gmail.com
Message-ID: <1107989257.161303.118390@g14g2000cwa.googlegroups.com>
Source record: 82203

Try this out, it works!!!!
Turn $10 into $10,000 with PayPal..Easy & Quick
PLEASE TAKE A MOMENT TO READ THIS INFORMATION. THIS REALLY WORKS!!!
" I WAS SHOCKED WHEN I SAW HOW MUCH MONEY CAME FLOODING INTO MY PAYPAL ACCOUNT." -Mark 2004
Dear Friend,
This is a new program as you will see. It can be for the U.S. Canada, S.E Asia or the U.K. This is a fantastic opportunity, try it for yourself!! EVERYTHING DONE ONLINE! With just $10 or £5 and a Paypal PREMIER or BUSINESS account, you could make $$Thousands$$ in 2 SIMPLE STEPS!
GUARANTEED - you will have $10,000 in two weeks. Only $10, a Paypal PREMIER or BUSINESS account and 30 mins. are all that is needed to get this going. If you want to make a few thousand dollars real quick, then PLEASE take a moment to read and understand the MLM program I´m sharing with you.
NO IT´S NOT what you think. YOU DON´T have to send $10 to five or six people to buy a report, receipt or get on their mailing list. Nor will you need to invest more money later to get things going. THIS IS THE FASTEST, EASIEST PROGRAM EVER! You will be able to complete it in LESS THAN 30 MINUTES and you will NEVER
FORGET THE DAY YOU FIRST VIEWED THIS ONLINE.
If you´re already running a home business, you can easily do this one along with it. If not, this is the FASTEST and EASIEST way to earn serious money online that you´ve ever seen so far in the history of the Internet! This
program works no matter what country you are in, or what currency you use. It doesn´t matter how old or how young you are. And you certainly won´t need any special knowledge or talent. You won´t need to run a website, or make phone calls, or make photocopies, or send out letters through the mail, or pay for advertising, etc. The only things you will need are: * An email address
* A Premier or Business PayPal account with at least $10 deposited in it
* 30 minutes of your time
ONLY 2 SIMPLE AND EASY STEPS ! !
If you are doing other programs, by all means stay with them. The more the merrier, BUT PLEASE READ ON!! First of all, there are only TWO POSITIONS, not four, five or six like many other programs. This program is more
realistic and much, MUCH FASTER. Because it is so easy, the response rate for this program is VERY HIGH and VERY FAST, and you will receive your reward in FOURTEEN DAYS. That´s only TWO WEEKS! Not one or two months. Just in time for next month's BILLS.

TRUE STORY -- Grace Kelly tells how she ran this gifting summation four times last year. The first time, she received $6,000 in cash in two weeks and then $14,000 in cash the next three times.

THIS CAN AND WILL WORK FOR YOU! HERE ARE THE DETAILS:
Post this letter in 50 message boards, chat rooms, or newsgroup. You don´t need to post 200 like other programs or email 100 people just to get started. Even if you are already in a program like the send twenty dollars to six people. CONTINUE IT and stay with it, THOSE DO PAY OUT, but do yourself a favor, DO THIS ONE TODAY as well, RIGHT NOW!!! It is simple and takes a very small investment, only $10 and a Paypal PREMIER or BUSINESS account. IT WORKS AND IS DONE IN 2 SIMPLE AND EASY STEPS ! ! This program WILL PAY FASTER before the other programs you are working on even trickle in!! Follow the simple instructions and in two weeks, you should have $10,000 because most PEOPLE WILL RESPOND due to the LOW ONE TIME INVESTMENT, SPEED AND HIGH PROFIT POTENTIAL, PLUS, since its done all ONLINE, there is no time wasted mailing out letters and the such!!! We are not even figuring a 50% response! So let´s all keep it going and help each other in these tough times. We all owe money to bill collectors, and creditors. But, with this, if people take the time to help each other, the good fortune will follow. SO, Take the measly minutes this SIMPLE
and REWARDING program offers and give the gift that gives back TODAY!!!
HERE´S WHAT YOU NEED TO DO...
STEP 1 Ok, if you´re not already a PayPal user,
the very first thing you need to do is use the PayPal link below and SIGN UP. It takes just two minutes! Here´s the URL. Just click on the PayPal link below:
https://www.paypal.com/us/cgi-bin/webscr?cmd=_registration-run
Be sure to use this link so you can sign up for a free PREMIER or BUSINESS account. You´ll need to have a PREMIER or BUSINESS account (and not a PERSONAL account) otherwise you won´t be able to receive credit card payments from other people.
STEP 2
It is an undeniable law of the universe that we must first give in order to receive. So the first thing to do when you have your Premier/Business PayPal account is to IMMEDIATELY send a $10 payment from your PayPal account
to the person at POSITION #1, if... -- your
birthday is BETWEEN JAN 1 THRU JUNE 30, OR, if...
-- your birthday is BETWEEN JULY 1 THRU DEC 31, send the
gift to the person at POSITION # 2,
along with a note saying: "HERE IS A $10 GIFT FOR YOU." Be certain to add this note, as this is what KEEPS THIS PROGRAM LEGAL. Instructions on how to send a payment are under "SEND MONEY" at the Paypal Site.
It´s so Easy!!!
When you send your $10 payment to the first address in the list, do it with a great big smile on your face because "as you sow, so shall you reap!" When this program is continued, as it should be, EVERYONE PROFITS!!

DON´T BE AFRAID to send gifts to strangers. It will come back to you ten folds. A person can give you up to $10,000 per year and you don´t have to report it to the IRS!

Here are the current positions:
* POSITION#1 --- nxbrennan@hotmail.com
* POSITION#2 --- executioner_2k@yahoo.com

After you have transferred a $10 payment to the email address, something very eerie happens. It gives you an indescribable, overwhelming sense of certainty, belief and conviction in the system. You´ve just proved to yourself
that, because you have done it, there must be a great number of other people ready to do exactly the same. Thus you have now seen for yourself, first hand, that this business actually works!

REMOVE the email address you are replacing (the one you sent $10 to), and REPLACE it with your own email address.
REMEMBER: Use the same EMAIL ADDRESS that is used with YOUR Paypal account !!!
Paste your newly typed email address over the old one and
then post to 50 Message Boards, Chat Rooms, or Newsgroups. DON´T MULL OVER IT, JUST 30 MIN OF YOUR TIME, THAT´S IT THERE IS NO MORE TO DO!!
ACT FAST AND GET THE GIFT. HONESTLY AND INTEGRITY MAKE THIS PLAN WORK!!
DO TO OTHERS AS YOU WOULD HAVE THEM DO TO YOU. YOUR NAME COULD CYCLE FOR A LONG TIME ! ! THIS MAKES IT THE GIFT THAT KEEPS ON GIVING.
This is excellent seed money to start or expand a business, buy your dream home, car, and pay off what ever bills you may have.
Good luck and God Bless. Play fairly, Good fortune will follow.
WHY THIS PROGRAM WORKS:
!! HONESTY AND INTEGRITY !!
Straight to the point, the reason this program is SO SUCCESSFUL is because when you follow these instructions EXACTLY = GIVE A $10 GIFT and POST this in 50 different message boards, there are only TWO outcomes.
(1) A persons birthday will fall on the same half as yours, therefore, YOU GET THE $10...
OR,
(2) a persons birthday will fall on the other half of the timeline, therefore, YOU STAY IN YOUR POSITION and
get posted in 50 other MESSAGE BOARDS, etc...
BOTTOMLINE: Either you get the $10 or your name gets passed on for other people to give YOU $10 or pass YOUR name on to other people that will. It makes you think though, the more you POST YOUR OWN POSTS, the BETTER the results!!!
4 FACTORS THAT MAKE THIS PROGRAM SO SUCCESSFUL...
* EXTREMELY FAST RESPONSE
* EXTREMELY HIGH RESPONSE RATE
* UNLIMITED PROFIT POTENTIAL
* QUICK, SIMPLE AND CHEAP TO GET STARTED
So there it is. You now have the knowledge that will enable you to make

over $10,000 within the next two weeks. The only thing that can hold you back now is a lack of faith or a lack of self-belief. However, any doubts you may
currently have will disappear within a few days of putting this plan into practice. Trust me on this! You certainly won´t regret it.
SOME NOTES FROM PAYPAL WHICH YOU MAY FIND USEFUL:
PayPal lets you pay anyone with an email address and is the world´s Number 1 online payment service. PayPal is accepted on over 3 million eBay auctions as well as a countless number of online shops. You can also use PayPal to pay your friends - for example, it´s a convenient way to split the phone bill with your room-mate, send cash to your kids in college, or send cash to someone in another country. Better yet, you can also earn a referral bonus of up to $100 each time someone signs up for a PayPal account using your referral URL! When you send money through PayPal, you can fund your payments with your credit card or checking account. You won´t have to worry about your privacy, because PayPal keeps your accounting information safe and secure. Making a purchase
with PayPal is far more secure than mailing a check or giving your credit card number to a stranger. That´s why over 9 MILLION people from around the world use PayPal to move money. Signing up for a PayPal account is free, easy, and it takes only a couple of minutes.
Thank you, and good luck in your ventures.

2267. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-09 23:46:36 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <420aa063.4543663@news.crosslink.net>
Source record: 82204

On Wed, 9 Feb 2005 20:35:14 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>The elevation angle of a radio wave is not related to antenna construction.
>
>It is calculated by trigonometry and is geometrically related to the
>distance between two points on the Earth's surface, the height of the
>ionospheric reflecting layers involved, and the number of hops.
>
>If a radio wave leaves the Earth at one end of the path and returns to Earth
>at the other end, then the elevation angles of the path taken are the same
>at both ends. And the same in the other direction. (To forestall
>nitpickers let it be said things can vary around averages.)
>
>The optimum angle at which to point a radio antenna, either for transmit or
>receive, is obviously the same as the elevation angle of the radio path.
>
>BUT NO AMOUNT OF WAVING THE ANTENNA ABOUT WILL AFFECT THE ELEVATION ANGLE OF
>THE RADIO PATH.
>
>For given points on the Earth's surface, height of reflecting layer, and
>number of hops, the angle of elevation of the radio path is fixed.
>
>The angle at which the radiation from an antenna is a maximum is an entirely
>different matter.
>
>Calculation of a path elevation angle on a curved Earth not very difficult
>but is a little too complicated to be written here.
>
>Up to 1500 groundpath miles the Earth can be considered to be flat. Trig
>calculation is then schoolkids stuff.
>
>Full formulae can be found in maths books under "Spherical Trigonometry" or
>in practical radio engineering books.
>
>Calculations can be interesting but are invariably roughly approximate
>because layer height involves guesswork. And by the time you've finished a
>calculation the height has shifted. Or the number of hops has changed from 2
>to 3. The only things which remain static are your own latitude and
>longitude.
>
>To calculate propagation statistics of one and two hop radio paths,
>including elevation angles, download simple program TWOHOPS in a few seconds
>from website below and run immediately.

The original poster, John, had already indicated the answer to his own question - but Reg was the only one who recognized that and had the correct follow up. Congrats, Reg.

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

2268. © © © Good News! -- Jesus Christ Went To The Cross So You Can Go To Heaven © © ©

You are now a Christian if you said the prayer and allowed
God to save you. Welcome to the family of God.

If you decide to wait till later you may die before you get
another chance to be saved because none of us knows
exactly when we will die.

Have a great day!
Internet Evangelist R.L. Grossi

Free Online Bible
http://www.biblegateway.com

Free Online Movies
http://www.tbn.org/index.php/8/1.html

Animation
http://www.gieson.com/Library/projects/animations/walk/index.html

The Passion Of The Christ
http://www.worshipmusic.com/0310263670.html

Beware Of Cults
http://www.carm.org/cults/cultlist.htm

About Hell
http://www.equip.org/free/DH198.htm

Is Jesus God?
http://www.powertochange.com/questions/qna2.html

2269. Re: Screwdriver Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-10 01:12:13 UTC
From: kg4vdr <pspence@mindspring.com>
Message-ID: <qCyOd.3039$5g5.2129@fe06.lga>
Source record: 82206

I have a High Sierra Sequoia and have used it with great success. You need a good radial setup for optimal use, I made a set of eight 10FT long #12AWG stranded which I arranged in a spoke around the antenna.. I use this for mobile/portable setup; e-comm and field day. I have a mount on my deck rail and 144 sq ft of chicken wire under the deck for a ground plane; but the ground mounted antenna and radials work more efficiently.

I have a Carolina Windom strung up in the trees at home, black wire, fed with coax buried from the house to the tree line. HOA has never noticed I have an antenna up.

"jimbo" <jimbo62@spamex.com> wrote in message
news:1107794940.401795.86360@c13g2000cwb.googlegroups.com...
> The "Screwdriver" antennas by Hi-Q, TarHeel or High Sierra look very
> interesting for HOA restricted locations. Does anyone have any
> experience with one of these antennas? Also, does anyone have
> experience using one as a base rather than mobile?
>
> Thanks for any advice, jimbo
>

2270. Re: Screwdriver Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-10 01:33:28 UTC
From: jimbo <jimbo62@spamex.com>
Message-ID: <1107999208.867847.34310@o13g2000cwo.googlegroups.com>
Source record: 82207

Thanks for all of the great replies! I think one of these antennas is going to work for my "stealth" antenna. I have read the various web sites that offer "screwdriver" antennas until my eyes are crossing. Everyone seems to be trashing eveyone else. Very hard to determine who is straight and who is bull-------. Can anyone offer some insight into stuff like coil diameter vs coil length vs "radiation efficiency" vs anything?

I know that I want full band coverage 10-160, and I only have 100 watts from my transmitter. So, I can't have an antenna that "eats" 90 percent of my transmitter ourput. So what should I look for in a "screwdriver" antenna that will give me the best performance with my specifications and limitations?

Thanks for any advice, jimbo

2271. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-10 02:24:44 UTC
From: radio913@aol.com
Message-ID: <1108002284.858992.224380@o13g2000cwo.googlegroups.com>
Source record: 82208

nospam@nouce.bellatlantic.net wrote:

>
> > Also, solder has VERY little
> >mechanical strength. Almost none.
> >
> > It's a bad idea.
>
> If the connector is holding weight then something else is wrong
> as you would normally secure the cable to the supports. Strength
> is not an issue then. Also most cut a small slot so the corner is
> acutally in a grove, adds imensely to strength.
>

Sure you better have strain relief, but i
still wouldn't rely on the soldered corner of
an SO-239.

>
> > Aluminum is not solderable.
>
> Again your wrong. It's solderable but, you do have to know how and
> use a decent heat source. Though bolted connections would work.
>

Ok, you can solder aluminum, but most
people don't know how, and it's not done often.

> >
> > We used a length of Delrin rod for the center
> >conductor, it's slightly flexible but ultra strong.
> >Don't use a wooden dowel coated w/epoxy, it will break.
>
> Delrin works, not easily obtained and often not the right size
> meaning a machine shop may be needed. Doesnt solve
> the problem of the phasing loop sagging and failing.
>

Wrong. Tap Plastics. In sizes that fit
3/4" or 1/2" or 1" copper perfectly.

Delrin is perfect for the Super J.

Don't use wood.

Our phasing loop doesn't sag and
hasn't failed yet.

> > The phasing loop was something like AWG#4
> >solid copper wire. Hasn't failed for 3 years,
> >but Ca. is a bit less harsh, indeed!
>
> CA is timid save maybe for wind and mountain weather. The use of #4
> CU is very heavy and adds to the problems. The problem in that case
> is #4 has a low strength to weight ratio. Most use hard drawn 1/4"
> copper or brass tube which is far more satisfactory.
>

It may have been #6, but it was fine
for our purposes.

Slick

2272. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-10 02:38:43 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <64il015bv6monrn1ka4on30rps5cep58gk@4ax.com>
Source record: 82209

On 9 Feb 2005 18:24:44 -0800, radio913@aol.com wrote:

> Sure you better have strain relief, but i
>still wouldn't rely on the soldered corner of
>an SO-239.

Try it someday.

> Ok, you can solder aluminum, but most
>people don't know how, and it's not done often.

There are fluxes and solders for this at every local hardware.

> Delrin is perfect for the Super J.
>
> Don't use wood.

Wood is poor.

> Our phasing loop doesn't sag and
>hasn't failed yet.

Wouldnt last through the 30 inches of snow we got here.

> It may have been #6, but it was fine
>for our purposes.

Marginal.

Wanna try a real broadcast FM antenna, try a dual cycloid. Not to
hard to build but has both vertical and horizontal polarization. good
gain too.

Allison

2273. Angle of Radiation - Hawaii

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-10 03:49:58 UTC
From: Rick Frazier <rickf@rickfrazier.com>
Message-ID: <420ADA61.CF307A66@rickfrazier.com>
Source record: 82210

Hello:

I live in Hawaii, the land of metal roofing, and got to thinking on the way home tonight, that instead of complaining about it, I may be able to put the metal roof to some sort of advantage with regard to DX communications.

I'm thinking I can set the angle of radiation for a horizontal dipole, by hanging it the proper distance above (and or towards or away from the desired direction) to essentially add to the desired angle of radiation, if only by some small amount.

Think of the roof as an rf mirror about 60 feet long and 20 feet wide. Pitch is about 5 inches per foot, so it's a relatively low slope. A wire (source) located perpendicular to and centered on the roof/reflector would be a pretty high angle of radiation. Of course, the distance from the reflector to the dipole would want to be an optimum distance so it reinforces the signal instead of cancels it. One would think that this high angle of radiation should be able to be changed (shifted lower) by moving the dipole away from the desired direction of radiation. Of course, I would expect only a relatively small portion of the signal is actually affected this way, because the reflector is only a relatively small percentage of 180 degrees... Or, maybe not... A wire dipole, with a wire reflector behind it does increase gain in the forward direction, and the wire reflector is only an extremely small portion of the nearly 180 degree arc behind the driven element.

OK, now comes the fun part. There are (at least) three questions:

Is there an optimum angle of radiation for DX, (lower is better, to a point?) given that I'm 2300+ miles from the nearest land, and may be most interested in locations half way 'round the world and not just the nearest land, (which I can talk to just fine right now, thank you)?

Though optimizing the location of the dipole for a particular angle of radiation seems good, there will also be a corresponding cancellation of signals at other (calculable) angles of radiation, right?

Is it all for naught anyway? Given the action of a wire reflector, will the sheet metal slab only look like a larger version and only in the general direction perpendicular to the center of the sheet metal axis?

I've gone and done it now, got myself questioning more than I thought I knew... How 'bout you? Got any opinions?

Thanks
-_Rick

2274. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-10 04:33:09 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <420ae59e$1_1@127.0.0.1>
Source record: 82211

John wrote:
> Can someone tell me please an easy way to calculate the optimum angle of
> radiation from a transmitting antenna over a given path on the HF bands
> (160m - 10m)?
>
> OK, I guess its all to do with the height of the reflective layer in play
> and the distance of the QSO but I'd really appreciate some clues as to how
> to work this out.

Try the propagation chapter in the ARRL Antenna Book.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2275. Re: SUPER J-POLE BEATS YAGI BY 1 dB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-10 07:14:00 UTC
From: radio913@aol.com
Message-ID: <1108019640.562167.195970@l41g2000cwc.googlegroups.com>
Source record: 82213

nospam@nouce.bellatlantic.net wrote:
> On 9 Feb 2005 18:24:44 -0800, radio913@aol.com wrote:
>
> > Sure you better have strain relief, but i
> >still wouldn't rely on the soldered corner of
> >an SO-239.
>
> Try it someday.
>

I did. The SO-239 broke, and
we had to haul the antenna down
just to replace it....pain in the
ass.

> > Ok, you can solder aluminum, but most
> >people don't know how, and it's not done often.
>
> There are fluxes and solders for this at every local hardware.
>

But few people ever solder aluminum.

> > Delrin is perfect for the Super J.
> >
> > Don't use wood.
>
> Wood is poor.
>

Wood sucks. Delrin is great,
and it carves and shapes very easily,
yet is extremely strong.

> > Our phasing loop doesn't sag and
> >hasn't failed yet.
>
> Wouldnt last through the 30 inches of snow we got here.
>

Oh yes it would. Snow ain't THAT
heavy!

> > It may have been #6, but it was fine
> >for our purposes.
>
> Marginal.

>

In what way? Hollow tubing would have been
too weak.

> Wanna try a real broadcast FM antenna, try a dual cycloid. Not to
> hard to build but has both vertical and horizontal polarization.
good
> gain too.
>

Yeah, this one is our next one:

http://members.tripod.com/AMN92/cp_ant.htm

A full report when we get it together!

Slick

2276. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-10 09:42:09 UTC
From: Ian White G3SEK <G3SEK@ifwtech.co.uk>
Message-ID: <PT1998CxxyCCFATJ@ifwtech.co.uk>
Source record: 82215

Cecil Moore wrote:
>John wrote:
>> Can someone tell me please an easy way to calculate the optimum angle
>>of radiation from a transmitting antenna over a given path on the HF
>>bands (160m - 10m)?
>> OK, I guess its all to do with the height of the reflective layer in
>>play and the distance of the QSO but I'd really appreciate some clues
>>to how to work this out.
>
>Try the propagation chapter in the ARRL Antenna Book.

That would be a very good introduction to modern software like W6ELPROP. What it teaches you is that angles of arrival vary considerably, even for one given path, for reasons ranging from time of day to time in the 11/22-year sunspot cycle.

Remember that the F-layer is constantly changing height, especially if it's around around dawn and dusk at one of the reflection points. This means that at certain times the propagation has to 'flip' from say 3-hop-F to 4-hop-F, so the angle will flip too. And don't forget the E-layer, if that's there too.

W6ELPROP will actually tell you what propagation modes are the most likely at various times of day... and the reality is *much* more complicated than the simple pictures shown in older books.

The ARRL Antenna Book does rather assume that you can put up any antenna you can dream of; in which case, it will help you design the optimum system. Ideally, the antenna needs to be able to adapt to the needs of the moment.

But for most of us, it's much simpler than that. We can never achieve the low angles that are sometimes needed for some of the most important paths, so it simply comes down to doing the best we can. "Adaptability" comes down to possibly having a second-choice antenna... which at certain times may turn out to be better.

But even if we can't actually *do* anything about it, it's better at least to understand that arrival angles (or conversely, optimum launch angles) are actually very variable.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2277. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-10 10:37:30 UTC
From: Mike Coombes <vk6mo@iinet.net.au>
Message-ID: <420b396a$0$1439$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 82216

Looking at the ARRL Antenna book it seems that the angle of radiation is
pretty well fixed on the type of antenna.
"Ian White G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:PT1998CxxyCCFATJ@ifwtech.co.uk...
> Cecil Moore wrote:
>>John wrote:
>>> Can someone tell me please an easy way to calculate the optimum angle of
>>> radiation from a transmitting antenna over a given path on the HF bands
>>> (160m - 10m)?
>>> OK, I guess its all to do with the height of the reflective layer in
>>> play and the distance of the QSO but I'd really appreciate some clues to
>>> how to work this out.
>>
>>Try the propagation chapter in the ARRL Antenna Book.
>
> That would be a very good introduction to modern software like W6ELPROP.
> What it teaches you is that angles of arrival vary considerably, even for
> one given path, for reasons ranging from time of day to time in the
> 11/22-year sunspot cycle.
>
> Remember that the F-layer is constantly changing height, especially if
> it's around around dawn and dusk at one of the reflection points. This
> means that at certain times the propagation has to 'flip' from say 3-hop-F
> to 4-hop-F, so the angle will flip too. And don't forget the E-layer, if
> that's there too.
>
> W6ELPROP will actually tell you what propagation modes are the most likely
> at various times of day... and the reality is *much* more complicated than
> the simple pictures shown in older books.
>
> The ARRL Antenna Book does rather assume that you can put up any antenna
> you can dream of; in which case, it will help you design the optimum
> system. Ideally, the antenna needs to be able to adapt to the needs of the
> moment.
>
> But for most of us, it's much simpler than that. We can never achieve the
> low angles that are sometimes needed for some of the most important paths,
> so it simply comes down to doing the best we can. "Adaptability" comes
> down to possibly having a second-choice antenna... which at certain times
> may turn out to be better.
>
> But even if we can't actually *do* anything about it, it's better at least
> to understand that arrival angles (or conversely, optimum launch angles)
> are actually very variable.

>
>
>
> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

2278. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-10 11:25:55 UTC
From: Ian White G3SEK <G3SEK@ifwtech.co.uk>
Message-ID: <D35+0HIDT0CCFAwr@ifwtech.co.uk>
Source record: 82217

Mike Coombes wrote:
>Looking at the ARRL Antenna book it seems that the angle of radiation
>is pretty well fixed on the type of antenna.

Talking about "the" angle (as if there was only one) is misleading ourselves.

Every antenna has a *range* of angles over which it radiates (or receives) the best. The aim is to make that coincide with the *range* of angles over which signals are likely to arrive.

This is made very clear in the 18th edition of the Antenna Handbook onwards. It presents arrival angles as a statistical range of probabilities, over a spread of possible propagation conditions.

If you have only one antenna, then obviously you try to make its very best radiation angle coincide with the most *likely* angle of arrival. But it's a game of chance. Occasionally the angle may be very different from the most likely value, so you have to accept that you're going to be some dB down... or dead in the water. And that is where having a choice of different antennas really scores.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2279. Re: ? ? ? Good News! -- Jesus Christ Went To The Cross So You Can Go To Heaven ? ? ?

>
> Dear Jesus Christ, I want to be saved so that I can have
> a home in Heaven when I die. I agree with You that I am a
> sinner. I believe You love me and want to save me. I
> believe that You bled and died on the cross to pay the
> penalty for my sins. I believe that You rose from the dead.
> Please forgive my sins and come into my heart and be my
> Lord and Saviour. Thank You Lord Jesus Christ for
> forgiving me and saving me through Your merciful grace.
> Amen.
>
>
> You are now a Christian if you said the prayer and allowed
> God to save you. Welcome to the family of God.
>
>
> If you decide to wait till later you may die before you get
> another chance to be saved because none of us knows
> exactly when we will die.
>
>
> Have a great day!
> Internet Evangelist R.L. Grossi
>
>
> Free Online Bible
> http://www.biblegateway.com
>
>
> Free Online Movies
> http://www.tbn.org/index.php/8/1.html
>
>
> Animation
> http://www.gieson.com/Library/projects/animations/walk/index.html
>
>
> The Passion Of The Christ
> http://www.worshipmusic.com/0310263670.html
>
>
> Beware Of Cults
> http://www.carm.org/cults/cultlist.htm
>
>
> About Hell
> http://www.equip.org/free/DH198.htm
>
>
> Is Jesus God?

> http://www.powertochange.com/questions/qna2.html
>
>

2280. 10 Mtr Qrp Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-10 13:06:12 UTC
From: Radio Man <puns@verizon.net>
Message-ID: <8%IOd.18999$wc.16656@trnddc07>
Source record: 82219

I have a 10 mtr handheld that requires a telescopic ant
with a bnc connector at the base. I would like this ant
to be 4 ft or less. Is there a site which explains how to
construct the above?

2281. Re: 10 Mtr Qrp Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-10 14:02:26 UTC
From: grasshouse@hotmail.com
Message-ID: <cufpip$n79$1@newsg1.svr.pol.co.uk>
Source record: 82220

not worth making, you can buy one for a quid or so from Doug at Knights CB... that is if your in the UK?

2282. Re: Screwdriver Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-10 14:28:51 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <420b713c$1_2@127.0.0.1>
Source record: 82221

Richard Clark wrote:
.> Let's put that into context. For a 12' vertical radiator operating on
> 160M, you have a 4/160th's wavelength radiator. Radiation resistance
> is running on the order of 1/4th Ohm. If you manage to hold all Ohmic
> resistance to that value, or lower (everywhere - in TOTAL) then you
> verge on 50% efficiency, or better.

And ground losses are likely to be in the neighborhood of ten ohms
or about 2.5% efficiency.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2283. Re: ? ? ? Good News! -- Jesus Christ Went To The Cross So You Can Go To Heaven ? ? ?

2284. Re: 10 Mtr Qrp Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-10 15:45:10 UTC
From: Buck <iam@this.site>
Message-ID: <ra0n015796jbq457kalaen74269f8lcn5l@4ax.com>
Source record: 82123

On Thu, 10 Feb 2005 13:06:12 GMT, "Radio Man" <puns@verizon.net>
wrote:

>I have a 10 mtr handheld that requires a telescopic ant
>with a bnc connector at the base. I would like this ant
>to be 4 ft or less. Is there a site which explains how to
>construct the above?
>

Check Radio Shack and similar stores online to see if they have
replacement antennas for hand-held CB radios.

--
73 for now
Buck
N4PGW

2285. Henry Amps RIP

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-10 17:45:21 UTC
From: Chuck K8CPA <k8cpachuck@gmail.com>
Message-ID: <uc7n015b681pbb1pdn8qsh64j49amnlvji@4ax.com>
Source record: 82124

Hi Guys,

I heard the news via the internet... and it's true. Henry amps are no more...:

Here's the e-mail from Mr. Henry Himself:

From: "Ted Henry" <henryradio@earthlink.net>
To: "Chuck Adkins (K8CPA)" <**********@comcast.net>
Subject: Re: Lost your Lease?
Date: Thursday, February 10, 2005 12:23 PM

There were about 15 reasons why we stopped - the primary reason was that the business has lost money for a number of years. The loss of the lease was about 5th down on the many reasons it made no sense to continue the business.

Thanks for your interest.

Ted Shannon Henry

Ted Shannon
HENRY RADIO, INC.
2050 South Bundy Drive Suite 285
Los Angeles, CA 90025

henryradio@earthlink.net
www.henryradio.com
eBay Store: http://stores.ebay.com/Henry-Radio

310-820-1234 ext 310
310-826-7790 FAX

----- Original Message -----
From: Chuck Adkins (K8CPA)
To: henryradio@earthlink.net
Sent: Thursday, February 10, 2005 8:52 AM
Subject: Lost your Lease?

Hi Guys,

why not just find another building? and Continue on?

Makes no sense to stop.

-Chuck K8CPA

2286. Re: I LOVE COCK!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-10 19:16:35 UTC
From: Doug Adair <N8WWM@arrl.net>
Message-ID: <420bb313@x-privat.org>
Source record: 82125
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

I don't like women anyway slut!
>
"KC8QJP KATHY LEE" <N8WWM@arrl.net> wrote in message
news:42054b11@news.usenetzone.com...
>
> <WA3MOJ@aol.com> wrote in message news:41ffaac7@news.usenetzone.com...
>>I love nigger cock!
>>
> I love cock too but the doctor won't let doug butt bang me anymore.....he
> has a really bad heart.
>
> _____
> Usenet Zone Free Binaries Usenet Server
> More than 120,000 groups
> Unlimited download
> http://www.usenetzone.com to open account

2287. Yaesu G-450XL Controller box

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-10 20:11:06 UTC
From: KA3OYW <pinoleronica@hotmail.com>
Message-ID: <1108066266.104233.26620@l41g2000cwc.googlegroups.com>
Source record: 82126

I need some ideas on how to fix the problem with the G-450XL controller box.
I bought the controller box and the rotor from Ebay...it clearly stated that it had a problem with the controller so I bought it As Is thinking I could fix myself...here is the situation:

The left paddle (CCW), moves the needle counterclockwise but 1) not in accordance with the movement of the rotor. It goes very....very slow and when I stop pressing it it continues moving at the same pace (slooow) at this point the rotor has stop rotating. The Right paddle moves the needle along the pace of the rotor, just fine. Another problem is that the alert light remains on all the time.

Any ideas?

2288. Re: Would like feedback about becoming a private FM translator for commercial station.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-10 20:25:31 UTC
From: "aussieseek.com" <nswamfm@yahoo.com>
Message-ID: <cugfvr$oa2$1@xuxa.iecc.com>
Source record: 82127
Cross-posted to: rec.radio.broadcasting,rec.radio.amateur.antenna

what do you want to relay?

2289. Re: Would like feedback about becoming a private FM translator for commercial station.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-10 21:00:24 UTC
From: drwxr-xr-x <bit-bucket@config.com>
Message-ID: <slrnd0nir8.22te.bit-bucket@shell.config.com>
Source record: 82128

On 10 Feb 2005 20:25:31 GMT, aussieseek.com wrote:
> what do you want to relay?

Oh, yes!! We need to know *that*!
If it's country and western, I won't help.

2290. PART 15 AM antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 00:08:34 UTC
From: Randall J <capt_avatar@yahoo.com>
Message-ID: <6ISOd.286$nD3.243@news02.roc.ny>
Source record: 82129

I operate a Part 15 station for my neighborhood (FM) and have acquired an AM transmitter. I've seen plans for vertical antennas but would rather make my own from the few parts I have. I have 8ft of aluminum tubing and would like to make a loading coil using 3 inch diameter PVC pipe. Given the frequency I operate on (1610khz), 8 ft of tubing, and a 3.5 inch coil form, how many turns of 22AWG insulated wire would I need to wrap? (Oh the tubing is in two pieces and I can slide the top piece up and down).

Is there a program I can download to find this out?

Randall

2291. Re: PART 15 AM antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 00:37:39 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cuguojcgh1@titan.btinternet.com>
Source record: 82130

"Randall J" wrote -
> I operate a Part 15 station for my neighborhood (FM) and have acquired
> an AM transmitter. I've seen plans for vertical antennas but would
> rather make my own

==========

Download program HELICAL3 from website below.
.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp

2292. Re: PART 15 AM antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 00:59:03 UTC
From: jgboyles@aol.com
Message-ID: <1108083543.244454.142990@f14g2000cwb.googlegroups.com>
Source record: 82131

Randall J wrote:
> I operate a Part 15 station for my neighborhood (FM) and have
acquired
> an AM transmitter. I've seen plans for vertical antennas but would
> rather make my own from the few parts I have. I have 8ft of aluminum
> tubing and would like to make a loading coil using 3 inch diameter
PVC
> pipe. Given the frequency I operate on (1610khz), 8 ft of tubing, and
a
> 3.5 inch coil form, how many turns of 22AWG insulated wire would I
need
> to wrap? (Oh the tubing is in two pieces and I can slide the top
piece
> up and down).
>
> Is there a program I can download to find this out?
>
> Randall

Hi Randall, I did this for a friend of mine a few years back.
Download the demo version of EZNEC and model an 8' vertical on 1.610
MHZ. You will find quite a bit of capacitive reactance. Your loading
coil should cancel the reactance. Determine the required inductance by
L=Xl/(2*pi*Fmhz). Xl is reactance you need to cancel.
The coil will be in the millihenries. Consult the ARRL Handbook for
a estimate on the # of turns on a 3.5" form for a given Inductance.

73 Gary N4AST

2293. Re: PART 15 AM antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 02:45:30 UTC
From: Randall J <capt_avatar@yahoo.com>
Message-ID: <e%UOd.256$6p7.44@news01.roc.ny>
Source record: 82132

jgboyles@aol.com wrote:
> Randall J wrote:
>
>>I operate a Part 15 station for my neighborhood (FM) and have
>
> acquired
>
>>an AM transmitter. I've seen plans for vertical antennas but would
>>rather make my own from the few parts I have. I have 8ft of aluminum
>>tubing and would like to make a loading coil using 3 inch diameter
>
> PVC
>
>>pipe. Given the frequency I operate on (1610khz), 8 ft of tubing, and
>
> a
>
>>3.5 inch coil form, how many turns of 22AWG insulated wire would I
>
> need
>
>>to wrap? (Oh the tubing is in two pieces and I can slide the top
>
> piece
>
>>up and down).
>>
>>Is there a program I can download to find this out?
>>
>>Randall
>
>
> Hi Randall, I did this for a friend of mine a few years back.
> Download the demo version of EZNEC and model an 8' vertical on 1.610
> MHZ. You will find quite a bit of capacitive reactance. Your loading
> coil should cancel the reactance. Determine the required inductance by
> L=Xl/(2*pi*Fmhz). Xl is reactance you need to cancel.
> The coil will be in the millihenries. Consult the ARRL Handbook for
> a estimate on the # of turns on a 3.5" form for a given Inductance.
>
> 73 Gary N4AST
>

OK Gary, guess I'm a little dense on the subject but the EZNEC software is a bit complex for me. Can't seem to figure out the Reactance of my 8ft x 1/2inch aluminum antenna. I did find that the "SRC Dat" gave an impedance of 0.2714 - J 9981 ohms. How do I find the reactance?

I do have the 1988 version of the ARRL handbook and have found the formula for finding the inductance which in turn can be solved for "n", the number of turns.

Randall

2294. Re: PART 15 AM antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 03:52:31 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <3_VOd.5538$UX3.1492@newsread3.news.pas.earthlink.net>
Source record: 82133

Randall J wrote:
> I operate a Part 15 station for my neighborhood (FM) and have acquired
> an AM transmitter. I've seen plans for vertical antennas but would
> rather make my own from the few parts I have. I have 8ft of aluminum
> tubing and would like to make a loading coil using 3 inch diameter PVC
> pipe. Given the frequency I operate on (1610khz), 8 ft of tubing, and a
> 3.5 inch coil form, how many turns of 22AWG insulated wire would I need
> to wrap? (Oh the tubing is in two pieces and I can slide the top piece
> up and down).
>
> Is there a program I can download to find this out?
>
> Randall

Hi, Randall -

I have some information directly from the FCC concerning antennas for Part 15 (15.219 Operation in the band 510-1705 kHz) which I will share herewith. My intention is simply informative. I would encourage you to contact the FCC to clarify your own questions. As you can probably see, you must phrase your question as if you are a lawyer. My questions were sent to: labhelp@fcc.gov

I sent the following:

Part 15 regulations says:

[Code of Federal Regulations]
[Title 47, Volume 1]
[Revised as of October 1, 2002]
From the U.S. Government Printing Office via GPO Access
[CITE: 47CFR15.219]

[Page 732]

TITLE 47--TELECOMMUNICATION

CHAPTER I--FEDERAL COMMUNICATIONS COMMISSION

PART 15--RADIO FREQUENCY DEVICES--Table of Contents

Subpart C--Intentional Radiators

Sec. 15.219 Operation in the band 510-1705 kHz.

(a) The total input power to the final radio frequency stage (exclusive of filament or heater power) shall not exceed 100 milliwatts.
(b) The total length of the transmission line, antenna and ground lead (if used) shall not exceed 3 meters.

Concerning the 3 meters maximum length for antenna, transmission, and ground, would a capacitance hat at the top of a vertical radiator be included in the 3 meter limit?

For clarification: Suppose I put a 3 meter vertical monopole on top of an existing structure which has a metal roof. The transmitter would be located at the base of the monopole, so it would require no transmission line. Would I be allowed to install a 3 meter diameter (or more) top hat? The top hat would be shaped like a spoked wheel and would serve the purpose of increasing the current in the monopole through capacitive coupling to the metal roof ground.

Thanks for your assistance.

John Smith

The reply to this message from labhelp@fcc.gov was:

"Answer:

The intent of Section 15.219 is for a maximum 3 meter wire antenna.

The total length of the antenna plus ground lead plus connecting lead must not exceed 3 meters. The rule doesn't permit a 3 meter diameter "top hat" but should be applied to the combined length of each radial. If the combined length of each radial added to the length of the antenna vertical structure added to the length of the ground wire exceeds 3 meters, it would not be permitted."

I then sent the follow up questions:

"Thank you for answering my question concerning capacitive top hats.

I have two other questions about the 3 meter limit in Section 15.219:

Is a 3 meter diameter circular loop antenna allowed?

Is a square loop antenna of 3 meters per side allowed?

Regards,
John"

The reply from labhelp@fcc.gov was:

"I have two other questions about the 3 meter limit in Section 15.219:

Question:

Is a 3 meter diameter circular loop antenna allowed?

Answer:

No, the total length of the antenna must not exceed 3 meters.

Question:

Is a square loop antenna of 3 meters per side allowed?

Answer:

No, the total length of the antenna must not exceed 3 meters."

The point here is that you must be very specific. I suspect that, if you ask "Does a one foot diameter loading coil composed of ten turns constitute part of the antenna specified in the Part 15 regulations?", they will reply that the length of the wire in the coil is part of the antenna.

It would probably not be anything you should worry about unless someone complains, but, if you want to comply with the rules, you should ask them. Try to think like they do, not as if you want to beat the system. You already know they don't want your signal to go very far.

My post was designed to be helpful, not argumentative. I hope you will post your own findings here for everyone's benefit.

John
KD5YI

2295. Re: PART 15 AM antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 10:58:40 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110p3v2riqclbdd@corp.supernews.com>
Source record: 82134

Randall J wrote:
>
> OK Gary, guess I'm a little dense on the subject but the EZNEC software
> is a bit complex for me. Can't seem to figure out the Reactance of my
> 8ft x 1/2inch aluminum antenna. I did find that the "SRC Dat" gave an
> impedance of 0.2714 - J 9981 ohms. How do I find the reactance?
>
> I do have the 1988 version of the ARRL handbook and have found the
> formula for finding the inductance which in turn can be solved for "n",
> the number of turns.
>
> Randall

The reactance is the "J" part, and negative means capacitive. So at the source, the impedance is 0.2714 ohms of resistance in series with 9981 ohms of capacitive reactance. You'll need 9981 ohms of inductive reactance to cancel it out. That would mean an inductance of 9981/(2*pi*f), which would be 1.59 mH at 1 MHz for example.

If your inductor has a Q of 200 (which might be hard to do for that large an inductance), its loss resistance will be 9981/200 = 50 ohms. My guess is that your ground system will also have a resistance of about that, unless you put in quite a few fairly lengthy radials, giving you an overall feedpoint resistance of about 100 ohms. The efficiency would then be 0.2714/100 = 0.27%.

Roy Lewallen, W7EL

2296. Re: Reflector Length??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 11:42:54 UTC
From: 4nec2@gmx.net
Message-ID: <ee90361b.0502110342.4b48c78b@posting.google.com>
Source record: 82135

kelly@dvol.com wrote in message
news:<1107444976.002589.327390@f14g2000cwb.googlegroups.com>...

> There's an offer I can't refuse. After I add a "generic" reflector to
> the model I can ship you an .nwp file probably sometime on Friday,
> Saturday at the latest.

Brian, I did some quick F/B optimization runs runs with the NWplus
model you supplied me. I have included two different Nec-2 based
results. One with limited space in mind, the does require a bit more
space.

****

```
CE
GW 1 20 -8.427 0.25 35 -4.213 8.677 35 0.0026707
GW 2 20 -4.213 8.677 35 0 0.25 35 0.0026707
GW 3 20 0 0.25 35 4.213 8.677 35 0.0026707
GW 4 20 4.213 8.677 35 8.427 0.25 35 0.0026707
GW 5 20 -9.230476 -2.083189 35 -4.615238 -10.20362 35 2.6707e-3
GW 6 20 -4.615238 -10.20362 35 0 -2.083189 35 2.6707e-3
GW 7 20 0 -2.083189 35 4.615238 -10.20362 35 2.6707e-3
GW 8 20 4.615238 -10.20362 35 9.230476 -2.083189 35 2.6707e-3
GS 0 0 .30479
GE 1
GN 0 0 0 0 13 0.005
EX 0 2 20 0 1 0
LD 5 1 1 20 5.8001E7
LD 5 2 1 50 5.8001E7
LD 5 3 1 20 5.8001E7
LD 5 4 1 20 5.8001E7
LD 5 5 1 20 5.8001E7
LD 5 6 1 20 5.8001E7
LD 5 7 1 20 5.8001E7
LD 5 8 1 20 5.8001E7
FR 0 1 0 0 14.1
RP 0 37 73 1000 -90 0 5 5
EN
```

****

```
CE
GW 1 20 -8.427 0.25 35 -4.213 8.677 35 0.0026707
GW 2 20 -4.213 8.677 35 0 0.25 35 0.0026707
GW 3 20 0 0.25 35 4.213 8.677 35 0.0026707
GW 4 20 4.213 8.677 35 8.427 0.25 35 0.0026707
```

```
GW 5 20 -9.068188 -4.483977 35 -4.534094 -12.71031 35 2.6707e-3
GW 6 20 -4.534094 -12.71031 35 0 -4.483977 35 2.6707e-3
GW 7 20 0 -4.483977 35 4.5340941 -12.71031 35 2.6707e-3
GW 8 20 4.5340941 -12.71031 35 9.0681881 -4.483977 35 2.6707e-3
GS 0 0 .30479
GE 1
EX 0 2 20 0 1 0
LD 5 1 1 20 5.8001E7
LD 5 2 1 50 5.8001E7
LD 5 3 1 20 5.8001E7
LD 5 4 1 20 5.8001E7
LD 5 5 1 20 5.8001E7
LD 5 6 1 20 5.8001E7
LD 5 7 1 20 5.8001E7
LD 5 8 1 20 5.8001E7
FR 0 1 0 0 14.1
RP 0 37 73 1000 -90 0 5 5
EN
```

****

With some additional keyboard action you should be able to get the model back into NWplus.

Arie.

2297. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 11:59:32 UTC
From: 4nec2@gmx.net
Message-ID: <ee90361b.0502110359.3cd6c43f@posting.google.com>
Source record: 82136

"John" <my-callsign@qsl.net> wrote in message
news:<F5sOd.6142$xY1.4607@newsfe1-gui.ntli.net>...
> Can someone tell me please an easy way to calculate the optimum angle of
> radiation from a transmitting antenna over a given path on the HF bands
> (160m - 10m)?
>
> OK, I guess its all to do with the height of the reflective layer in play
> and the distance of the QSO but I'd really appreciate some clues as to how
> to work this out.

John, to get some more insight in this, I could suggest to take a look
at
http://elbert.its.bldrdoc.gov/pc_hf/hfwin32.html.

I must admit however that it will require some learning-effort.

If you found the angle of interest, you could then use any antenna
modelling package to determine the antenna height needed for the
frequency used. Or use HFTA for none-flat/sloping surfaces.

Arie.

2298. FA: TUF-TUG FALL PROTECTION HARNESS W/ WIRE ROPE GRAB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 15:30:14 UTC
From: me <nospam@nospam.com>
Message-ID: <3sjp01ptnbb3e8gr4kogev3l198l4gljbm@4ax.com>
Source record: 82137

FA: TUF-TUG FALL PROTECTION HARNESS W/ WIRE ROPE GRAB
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=3872589682

2299. source for small end insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 15:55:45 UTC
From: melbjer@hotmail.com
Message-ID: <eblp01to5t2pvgcgv9kbk9gggaio2kele3@4ax.com>
Source record: 82138

I'm putting up a long wire antenna for a SW receiver. The area I live in has severe restrictions, so I need to hide it, or at least have it not be obvious. For the end insulators I was looking for small, about 1" long skinny plastic or ceramic insulators. I know they used to be available, but I can't find them anywhere. Can anyone point to a source for them? All I can find are 3" insulators with a 1" diameter. These are much too obvious for me to use. Thanks.

Jer

2300. 50th pacc test 2005

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 16:16:20 UTC
From: PA0RHA <pa0rha@planet.nl>
Message-ID: <cuim2rcqt1@reader10.wxs.nl>
Source record: 82139

PACC CONTEST

RULES 2005

DUTCH PACC CONTEST FOREIGN SECTION 2005

The Vereniging voor Experimenteel Radio Onderzoek in Nederland (VERON) has the honour of inviting amateurs all over the world to participate in the 50th Dutch PACC Contest.

Date and Period: Each second full weekend in February from 12.00 GMT on Saturday until 12.00 GMT on Sunday. So in 2005 the Dutch PACC Contest will be held on February 12 th and 13 th.

Bands and Modes: 160, 80, 40, 20, 15 and 10 meters, CW and SSB, no crossmode or crossband contacts allowed.

Please use frequencies according to the IARU Region 1 preferred contest segments:

CW: 1830 - 1850, 3500 - 3560 and 14000 - 14060 kHz

SSB: 3600 - 3650, 3700 - 3800 and 14125 - 14300 kHz

NOTE: SSB QSOs on 160 are not valid in the PACC contest!

Categories : Single operator, Multi operator, SWL and QRP (max 5 W max.output)

Exchange: RS(T) + QSO serial number, starting with 001. Dutch stations give RS(T) + Province abbreviation. These are GR, FR, DR, OV, GD, UT, NH, ZH, FL, ZL, NB and LB (total of 12).

Points: Each QSO with a PA, PB, PC, PF, PG, PE, PH, and PI station counts for 1 (one) point. Contacts must be confirmed with R, TU, OK or QSL. A station may be worked only once per band, irrespective of the mode.

Multipliers: 1 multiplier per Province per band, regardless of mode with a maximum of 6*12=72 or 5*12=60 if SSB only is used.

Final Score: The sum of all QSO points on all bands, multiplied by the sum of all multipliers on all bands.

SWL: Each different Dutch station heard per band counts for 1 (one) point. Multipliers as above. Logs must contain the codegroups transmitted by the Dutch station and the foreign station worked with.

Logs: As usual a score calculation is required. Please use a multiplier column and insert the multiplier in this column only if it is a new one.

Please sign log for observation of the contest rules. The closing date for contest entries is March 31st 2005.

Send your log to:

Ad van Tilborg, PA0ADT

Schepenenveld 141

7327 DB Apeldoorn

Netherlands, Europe

Or via E-mail

pa0adt@dutchpacc.com

2301. Local Oscillator: Frequency Choosing

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 16:17:56 UTC
From: Jason <cheanglong@gmail.com>
Message-ID: <1108138676.315609.186950@g14g2000cwa.googlegroups.com>
Source record: 82140

Hello All

I am thinking of some basic question about LO and I cant figure it out
I need your help to give me some explanation so I can further
investigate my text book.

Say there are 3 signals [frequency at wo-k, wo, wo+k]going into the
input of a LO. Then due to the nonlinearity of LO, we get
Intermodulation harmonics terms. If wo is the desired frequency while
the other two are interferers, my question is at which frequency Local
Oscillator will tune at?

For any theoritical and practical purposes, what is the method to find
the oscillator frequency and/or period?

Maybe this question sounds too general. Therefore, if you have any
further details to complement this question and doubts, kindly share
your views.
Thank you

rgds and thanks
Jason

2302. Re: source for small end insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 16:21:37 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <420cdc36$1_2@127.0.0.1>
Source record: 82141

melbjer@hotmail.com wrote:
> I'm putting up a long wire antenna for a SW receiver. The area I live
> in has severe restrictions, so I need to hide it, or at least have it
> not be obvious. For the end insulators I was looking for small, about
> 1" long skinny plastic or ceramic insulators. I know they used to be
> available, but I can't find them anywhere. Can anyone point to a
> source for them? All I can find are 3" insulators with a 1" diameter.
> These are much too obvious for me to use. Thanks.

Skinny insulators can be made from plastic coat hangers which come in
any number of different colors.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2303. Re: source for small end insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 16:51:14 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <6o5Pd.9250$oO.4032@newsread2.news.atl.earthlink.net>
Source record: 82142

<melbjer@hotmail.com> wrote in message
news:eblp01to5t2pvgcgv9kbk9gggaio2kele3@4ax.com...
>
> I'm putting up a long wire antenna for a SW receiver. The area I live
> in has severe restrictions, so I need to hide it, or at least have it
> not be obvious. For the end insulators I was looking for small, about
> 1" long skinny plastic or ceramic insulators. I know they used to be
> available, but I can't find them anywhere. Can anyone point to a
> source for them? All I can find are 3" insulators with a 1" diameter.
> These are much too obvious for me to use. Thanks.
>

Instead of using special insulators just use some monofiliment fishing line
for the ends. You could even cut up a plastic ink pen if you need an
insulator.

2304. Re: Henry Amps RIP

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 17:04:43 UTC
From: nm5k@wt.net
Message-ID: <1108141483.282540.82470@c13g2000cwb.googlegroups.com>
Source record: 82143

Bill Turner wrote:
> On Thu, 10 Feb 2005 12:45:21 -0500, Chuck K8CPA
<k8cpachuck@gmail.com>
> wrote:
>
> >There were about 15 reasons why we stopped - the primary reason was
> >that the business has lost money for a number of years. The loss of
> >the lease was about 5th down on the many reasons it made no sense to
> >continue the business.
> --
>
> Their business location is in one of the priciest areas in the
country.
> I wonder if they moved elsewhere if they could have survived?

Hard to say...I guess it depends on what level they would want to
exist...I wonder how long parts will last....I've got a 2k classic
console..
I better grab some spare parts I need before they dry up...I assume
they would keep some for at least a year, to cover the last ones
warranty. They made a tank...Mine reminds me of R2-D2....At about
125-130 pounds, I never move it...:/ Sits on the floor to my left,
and sort of makes my table an L, the way the controls,tuner,radios,
wrap around...

MK

2305. Re: source for small end insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 17:13:59 UTC
From: nm5k@wt.net
Message-ID: <1108142039.841219.221140@g14g2000cwa.googlegroups.com>
Source record: 82144

Skinny insulators can be made from plastic coat hangers which come in
any number of different colors. ..

Dang...I had a post printed out saying the same thing, but
I noticed you beat me to it...:/ Good thing I checked...
Those work well, but the UV will kill them after maybe...
2-3-4 years...But for the price, replacements are not a
problem. The fishing line will work also...For normal use,
I've been whacking old broom sticks, or PVC into small bits
for insulators...I drill the holes at right angles, cuz most
seem to do that... MK

2306. Back Into Hobby: Some Basic Questions, Please

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 18:44:48 UTC
From: Robert11 <rgsrose@notme.com>
Message-ID: <odKdnR2mKMuGYJHfRVn-jA@comcast.com>
Source record: 82145

Hi,

Have finally gotten back into hobby, now that I am retired.

Have been reading the ARRL books, a bit, again, and realize I'm still quite confused over the antenna pattern diagrams they show for the various types.

a. What is plotted in these diagrams; the H field, the E field, or the resultant of the two ?

b. When they talk about field strength, what do they mean ? Again, the H field, or... ?

c. Have a receive-only antenna running around the 4 sides of my attic. Open at the end.
Should I tie the end to the beginning, making a horizontal loop up there, or not ?
Why ?

d. Do listening only, from 0 to 30 MHz, and from all compass points.

Would a straight run of wire along one side (thus foresaking the lengths provided by the other 3 sides)
gain me anything, or is the square loop configuration probably the best overall compromise
for pulling stuff in ?

e. Tried to find some but couldn't.
Any pix/diagrams on the web showing the lobe patterns as a function of frequency for:

a single random-length wire
a 4 sided loop, open at the end, like I now am using
a 4 sided loop, closed at the end

Thanks,
Bob

2307. Re: Henry Amps RIP

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 19:43:39 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <ll2q01tecv7hbrndres0hg25uciieabnsd@4ax.com>
Source record: 82146

On 11 Feb 2005 09:04:43 -0800, nm5k@wt.net wrote:

>
>Bill Turner wrote:
>> On Thu, 10 Feb 2005 12:45:21 -0500, Chuck K8CPA
><k8cpachuck@gmail.com>
>> wrote:
>>
>> >There were about 15 reasons why we stopped - the primary reason was
>> >that the business has lost money for a number of years. The loss of
>> >the lease was about 5th down on the many reasons it made no sense to
>> >continue the business.
>> ____
>>
>> Their business location is in one of the priciest areas in the
>country.
>> I wonder if they moved elsewhere if they could have survived?
>
>Hard to say...I guess it depends on what level they would want to
>exist...I wonder how long parts will last....I've got a 2k classic
>console..
>I better grab some spare parts I need before they dry up...I assume
>they would keep some for at least a year, to cover the last ones
>warranty. They made a tank...Mine reminds me of R2-D2....At about
>125-130 pounds, I never move it...:/ Sits on the floor to my left,
>and sort of makes my table an L, the way the controls,tuner,radios,
>wrap around...
>
>MK

from the RadioDan site:

Henry will no longer make any tube type amplifiers or any HF
amplifiers!
Henry lost their main lease, effective 01-31-05
warranties will be honored, service & some parts will be available
Henry will continue to make vhf/uhf solid state amplifiers, order thru
radiodan
if you have any questions about the above info,
e-mail Ted henry at henryradio@earthlink.net

2308. Re: Back Into Hobby: Some Basic Questions, Please

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 20:22:24 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <1pgvd2-uk2.ln1@p400bob.lse.com.au>
Source record: 82150

Hi Bob

Might be worth downloading and playing with 4NEC2 from
http://www.si-list.org/swindex2.html. This will allow you to model
antennas and check radiation patterns (incl E vs H) with and without
ground and other objects influence. Its GPL.

Also have a look at http://www.cebik.com for a stack of info on modelled
antennnas in the amateur service.

Cheers Bob VK2YQA

Robert11 wrote:
> Hi,
>
> Have finally gotten back into hobby, now that I am retired.
--snip--

2309. Re: Extending Icom AH-4 tuner control cable

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 20:30:47 UTC
From: "Jon Gauthier (KB1HTW)" <kb1htw!@!arrl.net>
Message-ID: <cuj4ls$e9c$1@newslocal.mitre.org>
Source record: 82147

When all else fails, start at the beginning.

Found the problem. Cold solder joint on the PL-259 failed in the feedline - obviously due to temperature swings, since I solder perfect connections every time. Yeah, and the pope's Protestant...

Fixed it and now it works - almost. Twice now, a few minutes after it tuned, my radio by itself would key the transmit - both times while I was not even near it! I had to shut down power to kill it! Oh well, one more problem to troubleshoot!

"Jon KB1HTW" <kb1htw!@!arrl.net> wrote in message
news:ctrc1h$21f$1@newslocal.mitre.org...
>I need to extend the control cable for my AH-4 tuner. I have lots of Cat 5
>Ethernet cable. The four leads to the tuner are Key, Start, +13.8Vdc, and
>Ground. I initially hooked up each to each of the four pairs in the
>Ethernet cable (i.e., Key to Blue/Blue-White). My thinking was parallel
>each pair so I have less current loss, but I think I blew the capacitance
>out of the water and the Key/Start pulses are getting smeared along the
>100+ foot run.
>
> What's the best way to wire things up so to the twisted pairs so any RFI
> gets nulled out? Ground to each of the 4 White leads, and Key to say Blue,
> Start to Green, and +13.8V to Orange? That way each twisted pair would
> have a "signal" and ground. Or I could use the Brown for Ground, and
> connect the AH-4 factory cable's shield to the four white leads. Which is
> the preferred route for minimizing RFI or cable capacitance affecting the
> Start/Key pulse signals?
>
> Jon - KB1HTW
>

2310. Re: Local Oscillator: Frequency Choosing

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 20:37:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <h45q0114rgt52jd8r9o268qiga3b40e5nu@4ax.com>
Source record: 82148

On 11 Feb 2005 08:17:56 -0800, "Jason" <cheanglong@gmail.com> wrote:
>Say there are 3 signals [frequency at wo-k, wo, wo+k]going into the
>input of a LO.

Hi Jason,

This is a shaky start, the Local Oscillator has no input. I will
presume you are speaking of the Mixer.

> Then due to the nonlinearity of LO,

This pretty much confirms you mean Mixer (or converter).

>we get Intermodulation harmonics terms.

In abundance.

>If wo is the desired frequency while
>the other two are interferers, my question is at which frequency Local
>Oscillator will tune at?

All depends on the receiver's Intermediate Frequency. The LO is
always tuned to the desired frequency ï¿½IF. If you are tuning to
10MHz, then the LO is tuned to either 10 + IF or 10 - IF. There are
also Synchronous Detection receivers where you tune the LO to exactly
the desired frequency. There are other receivers that demodulate the
signal using other LO systems (your question is much to vague).

>For any theoritical and practical purposes, what is the method to find
>the oscillator frequency and/or period?

Use a frequency counter (but I presume that your question is not being
literal - which means you are being too vague again). My discussion
above your paragraph's question should have answered that already.

>Maybe this question sounds too general. Therefore, if you have any
>further details to complement this question and doubts, kindly share
>your views.

Try asking your question from the perspective of intended use rather
than framed with the presumed terms of an answer to an unstated
problem.

73's
Richard Clark, KB7QHC

2311. Re: Back Into Hobby: Some Basic Questions, Please

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 21:02:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gt5q01d5fasuu9t7s0376bccrpa03bps17@4ax.com>
Source record: 82149

On Fri, 11 Feb 2005 13:44:48 -0500, "Robert11" <rgsrose@notme.com>
wrote:

>a. What is plotted in these diagrams; the H field, the E field, or the
>resultant of the two ?

Presumably E Field.
>
>b. When they talk about field strength, what do they mean ? Again, the H
>field, or... ?

That should be expressed in the units consistent with H or E. If no
units are expressed, then it is usually a comparison with dB, dBi, or
dBd.

>c. Have a receive-only antenna running around the 4 sides of my attic. Open
>at the end. Should I tie the end to the beginning, making a horizontal loop up
>there, or not ? Why ?

Yes(No). It is (is not) important.

>d. Do listening only, from 0 to 30 MHz, and from all compass points.

-Oh- Well that changes everything!

> Would a straight run of wire along one side (thus foresaking the
>lengths provided by the other 3 sides) gain me anything, or is the square loop
>configuration probably the best overall compromise for pulling stuff in ?

This changes even more!

>e. Tried to find some but couldn't.
> Any pix/diagrams on the web showing the lobe patterns as a function of
>frequency for:
>
> a single random-length wire
> a 4 sided loop, open at the end, like I now am using
> a 4 sided loop, closed at the end

Hi Bob,

The same geometry at all the different frequencies you propose do not
yield the same lobe patterns. That is your first lesson.

You express the desire to receive from all 360ï¿½ which will certainly
happen for many of the designs you describe above, but only through
happenstance and being in the attic (which means close to ground, as
in earth, not wood/stone/mortar).

What you want to concentrate on is keeping noise out of your antenna
(this will probably be answered in the course of the thread).

The long and short of it is without spectacular care, those lobes are
rarely observed unless you have your antenna in the air, and more than
a quarter wavelength above ground - difficult to do with your
> from 0 to 30 MHz,
...Quarterwave of 0MHz is pretty high up.

A simple dipole is handy, so is a loop, and so is an open loop, as is
a vertical, or phased elements - but only with respect to their size
at any particular frequency.

Your basic question is far more complex to answer than any complex
question which often resolves to a simple yes/no.

73's
Richard Clark, KB7QHC

2312. Re: source for small end insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 21:12:06 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <mrednavWkIE6gpDfRVn-ug@comcast.com>
Source record: 82151

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
news:6o5Pd.9250$oO.4032@newsread2.news.atl.earthlink.net...
>
> <melbjer@hotmail.com> wrote in message
> news:eblp01to5t2pvgcgv9kbk9gggaio2kele3@4ax.com...
>>
>> I'm putting up a long wire antenna for a SW receiver. The area I live
>> in has severe restrictions, so I need to hide it, or at least have it
>> not be obvious. For the end insulators I was looking for small, about
>> 1" long skinny plastic or ceramic insulators. I know they used to be
>> available, but I can't find them anywhere. Can anyone point to a
>> source for them? All I can find are 3" insulators with a 1" diameter.
>> These are much too obvious for me to use. Thanks.
>>
>
> Instead of using special insulators just use some monofiliment fishing
> line
> for the ends. You could even cut up a plastic ink pen if you need an
> insulator.
>
>
I have also heard of people using buttons.

Tam/WB2TT

2313. Small loops for reception

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 21:40:00 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <qE9Pd.9498$Lu7.6995@fe09.lga>
Source record: 82152

For the first time in many years I have been listening a lot on the low bands (160/80/40). It seems there is much more background noise than when I was in my teens, but that may be my selective memory at work. I am in the far suburbs trying to use a half-sloper and an inverted V -- both with the peak at about 53 feet. I think most of the noise is "natural" (except for a 15Khz harmonic every now and then.)

I started reading about small loops for receiving on 160 and 80. In particular I have been reading about:

(1) the 4-turn loop on 4-foot cross arms (W1FB),
(2) the 4-turn coax loop (in a 9-inch diameter) (W1FB),
(3) an 18-inch ferrite rod unit described by G2BZQ

All of these were described as better receiving antennas "in the house" than the authors' more conventional outside antennas. W1FB thought the 9-inch loop was better than the 4-foot unshielded loop and apparently did not think much of ferrite-stick antennas.

What is the experience of those on this newsgroup? Are these antennas really better (in the house, and even in the basement) than conventional outdoor antennas? Are they significantly better when used outside and perhaps elevated a bit? I realize they are inconvenient because they must be tuned even for small frequency changes. It seems they are very directional for nulls but fairly broad for other responses. Is the same loop good for 160 and 80 (and maybe even 40)?

Bill
W2WO

2314. Re: source for small end insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 22:31:33 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <xlaPd.658$u16.188@bignews6.bellsouth.net>
Source record: 82153

lots of good ideas so far - I liked buttons-
- add another -
black cable ties.
or
saw off a half-inch piece of half-inch PVC pipe. - the grey electrical
stuff-
or
just use a piece of black nylon fishing leader
-
hundreds more - stay tuned

2315. Re: 10 Mtr Qrp Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 22:38:12 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <MraPd.659$u16.87@bignews6.bellsouth.net>
Source record: 82154

"Radio Man" <puns@verizon.net> wrote in message
news:8%IOd.18999$wc.16656@trnddc07...
> I have a 10 mtr handheld that requires a telescopic ant
> with a bnc connector at the base. I would like this ant
> to be 4 ft or less. Is there a site which explains how to
> construct the above?
>
>
If you're qrp-ing - remember the less power you use - the more important the
antenna becomes.
Strap a quarter-wave whip onto your beanie!

2316. Re: source for small end insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 22:49:45 UTC
From: Mike <"sandy_arbuthnot\\@yahoo.,com">
Message-ID: <dEaPd.194344$w62.181168@bgtnsc05-news.ops.worldnet.att.net>
Source record: 82155

If you use insulated wire, you could even use push pins for supports and
run it along a fence.

Mike

melbjer@hotmail.com wrote:
> I'm putting up a long wire antenna for a SW receiver. The area I live
> in has severe restrictions, so I need to hide it, or at least have it
> not be obvious. For the end insulators I was looking for small, about
> 1" long skinny plastic or ceramic insulators. I know they used to be
> available, but I can't find them anywhere. Can anyone point to a
> source for them? All I can find are 3" insulators with a 1" diameter.
> These are much too obvious for me to use. Thanks.
>
> Jer

2317. Re: 10 Mtr Qrp Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-11 23:17:59 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <H2bPd.4038$aW6.3762@newssvr22.news.prodigy.net>
Source record: 82156

And, dont forget the Aluminium foil suit , for your counter-poise!
NN7K

Hal Rosser wrote:
> "Radio Man" <puns@verizon.net> wrote in message
> news:8%IOd.18999$wc.16656@trnddc07...
>
>>I have a 10 mtr handheld that requires a telescopic ant
>>with a bnc connector at the base. I would like this ant
>>to be 4 ft or less. Is there a site which explains how to
>>construct the above?
>>
>>
>
> If you're qrp-ing - remember the less power you use - the more important the
> antenna becomes.
> Strap a quarter-wave whip onto your beanie!
>
>

2318. top vs bottom fed tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 00:32:25 UTC
From: ml <m@di.net>
Message-ID: <m-0B1A6A.19321911022005@news.verizon.net>
Source record: 82157

I was thinking about putting up a hopfully soon , to be built horizontal
center fed dipole

my plan now seems to favor a tuner like a sgc231

I sorta have 2 choices but want to know a few pro /con's

option 1 is putting the tuner ontop of the mast and feeding the dipole
pretty straight foward

option 2 would be to pu the tuner near the bottom of the mast (5ft)
and running some wire up to the top of the mast w/a glass insulator

questions

would it be ineficient to do option 2?? how bad would it be??

what type of run should it be, 450 ohm ladder line or just 2 wires run
spaced apart

does doing option 2 sorta defeat the point of using a far end tuner?

if that support mast in option 2 is metal, is that 'bad' how far must
my verticle wire be run away from the mast or must i use plastic/pvc??

I understand that the topside tuner would allow more power out over my
coax run, but this isn't my main concern as if i lost a bit of power i
just wouldn't mind or can compensate --i am more concerned about all
the other factors (tvi, resnonance, efficiency)

thanks

2319. Re: Small loops for reception

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 00:46:21 UTC
From: flashback <ndcoder@srt.com>
Message-ID: <110qkf01ecgkqfe@corp.supernews.com>
Source record: 82158

I found this same situation when I went to get on low band after 40 years
away from it.

I found that what sounded like natural background noise was not natural.

With a suggestion from a ham in Wisconsin, I found several insulators on
power poles near my home arcing. You can find these poles with a simple
battery powered am radio. Go back at night after you find a noisy one and
use binoculars to see the actual arcing. Now you can call the power company
and point out the bad insulator. This worked for me.

I have a 60 foot random wire antenna and it is very quiet now. Putting up a
loop will not fix the noisy insulators.
BTW these insualtors arc more in damp weather than when it is dry.

Michael

"Bill Ogden" <wogden@attglobal.net> wrote in message
news:qE9Pd.9498$Lu7.6995@fe09.lga...
> For the first time in many years I have been listening a lot on the low
> bands (160/80/40). It seems there is much more background noise than when
> I
> was in my teens, but that may be my selective memory at work. I am in the
> far suburbs trying to use a half-sloper and an inverted V -- both with the
> peak at about 53 feet. I think most of the noise is "natural" (except for
> a
> 15Khz harmonic every now and then.)
>
> I started reading about small loops for receiving on 160 and 80. In
> particular I have been reading about:
>
> (1) the 4-turn loop on 4-foot cross arms (W1FB),
> (2) the 4-turn coax loop (in a 9-inch diameter) (W1FB),
> (3) an 18-inch ferrite rod unit described by G2BZQ
>
> All of these were described as better receiving antennas "in the house"
> than
> the authors' more conventional outside antennas. W1FB thought the 9-inch
> loop was better than the 4-foot unshielded loop and apparently did not
> think
> much of ferrite-stick antennas.
>
> What is the experience of those on this newsgroup? Are these antennas
> really better (in the house, and even in the basement) than conventional
> outdoor antennas? Are they significantly better when used outside and
> perhaps elevated a bit? I realize they are inconvenient because they must

> be tuned even for small frequency changes. It seems they are very
> directional for nulls but fairly broad for other responses. Is the same
> loop
> good for 160 and 80 (and maybe even 40)?
>
> Bill
> W2WO
>
>

2320. Re: source for small end insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 00:47:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110qkhnlrao5973@corp.supernews.com>
Source record: 82159

I'd like to caution you against using plastic that's not intended for outdoor use. Most types will deteriorate rapidly from the UV in sunlight, and turn brittle and very weak in a short time. Even here in western Oregon, most plastics become useless in a year or two, and in a place like Denver (5000 feet high and lots of sun) you only get a few months at most.

A better idea, in my opinion, would be to use fishing line as others suggested, or make your own from a piece of ABS pipe or something similar.

Roy Lewallen, W7EL

Cecil Moore wrote:
> melbjer@hotmail.com wrote:
>
>> I'm putting up a long wire antenna for a SW receiver. The area I live
>> in has severe restrictions, so I need to hide it, or at least have it
>> not be obvious. For the end insulators I was looking for small, about
>> 1" long skinny plastic or ceramic insulators. I know they used to be
>> available, but I can't find them anywhere. Can anyone point to a
>> source for them? All I can find are 3" insulators with a 1" diameter.
>> These are much too obvious for me to use. Thanks.
>
>
> Skinny insulators can be made from plastic coat hangers which come in
> any number of different colors.

2321. Re: top vs bottom fed tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 01:06:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3clq01h4qm4b96hai7gs7vmlr548bc53u7@4ax.com>
Source record: 82161

On Sat, 12 Feb 2005 00:32:25 GMT, ml <m@di.net> wrote:

>I sorta have 2 choices but want to know a few pro /con's

Hi OM,

Either will probably be indistinguishable from the other. If the
tuner is lower, then keep the twin line, or its facsimile away from
the metal support by three or so times the separation distance of the
two feed lines.

Don't forget to put chokes on the Transmission line to the tuner, and
on the control lines to the tuner - at the tuner inputs for each.

73's
Richard Clark, KB7QHC

2322. Re: Back Into Hobby: Some Basic Questions, Please

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 01:07:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110qlmkcienkn11@corp.supernews.com>
Source record: 82160

Robert11 wrote:
> Hi,
>
> Have finally gotten back into hobby, now that I am retired.
>
> Have been reading the ARRL books, a bit, again, and realize I'm still quite
> confused over the antenna pattern diagrams they show for the various types.
>
> a. What is plotted in these diagrams; the H field, the E field, or the
> resultant of the two ?

Either one. Once you get more than a fraction of a wavelength from an antenna, the E and H fields are in a fixed ratio (E/H = 377 ohms). So plots of the two are identical, except for the 377 ohm scale factor. The pattern is more often expressed in dB relative to some reference (most often to an isotropic source, expressed as dBi). This numerical value is then the E field, H field, or power density far from the antenna relative to the reference. The pattern shape and dBi value of all three are the same.

> b. When they talk about field strength, what do they mean ? Again, the H
> field, or... ?

Field strength technically means either the E field (in volts/meter) or H field (in amps/meter) but, as I said above, once you know one you can easily calculate the other unless you're very close to the antenna. Pattern plots are nearly always for the far field, where E and H have a fixed ratio and the pattern shape is the same regardless of distance. In the near field (which isn't of any interest for your application), the pattern is different for each distance, and the ratio of E to H isn't fixed. Therefore, near field data are usually given in tabular form.

>
> c. Have a receive-only antenna running around the 4 sides of my attic. Open
> at the end.
> Should I tie the end to the beginning, making a horizontal loop up
> there, or not ?
> Why ?

Tying the end might change the pattern enough to make a difference in your ability to receive, depending on the directions of the signals you want to hear and of incoming noise. There's no single answer for everyone. You'll simply have to grit your teeth and experiment.
>
> d. Do listening only, from 0 to 30 MHz, and from all compass points.
>

> Would a straight run of wire along one side (thus foresaking the
> lengths provided by the other 3 sides)
> gain me anything, or is the square loop configuration probably the best
> overall compromise
> for pulling stuff in ?

See the above answer.

>
> e. Tried to find some but couldn't.
> Any pix/diagrams on the web showing the lobe patterns as a function of
> frequency for:
>
> a single random-length wire
> a 4 sided loop, open at the end, like I now am using
> a 4 sided loop, closed at the end

There are a number of free antenna modeling programs that will help you answer your questions. Just keep in mind that for HF receiving, gain in the desired direction is of no consequence by itself. The only thing that will help you receive better is to have a pattern that has more gain in the direction(s) of the desired signals than in the direction(s) which noise comes from. If the signal and noise come from the same direction, there's nothing you can do to improve your ability to hear signals. In that case, more gain will make both the signal and the noise louder in the same proportion. You can get the same effect a whole lot easier by turning up the volume control.

Roy Lewallen, W7EL

2323. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 01:43:10 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cujmve$p44$1@hercules.btinternet.com>
Source record: 82162

"Reg Edwards" wrote
> The elevation angle of a radio wave is not related to antenna
construction.
>
> It is calculated by trigonometry and is geometrically related to the
> distance between two points on the Earth's surface, the height of the
> ionospheric reflecting layers involved, and the number of hops.
>
> If a radio wave leaves the Earth at one end of the path and returns to
Earth
> at the other end, then the elevation angles of the path taken are the same
> at both ends. And the same in the other direction. (To forestall
> nitpickers let it be said things can vary around averages.)
>
> The optimum angle at which to point a radio antenna, either for transmit
or
> receive, is obviously the same as the elevation angle of the radio path.
>
> BUT NO AMOUNT OF WAVING THE ANTENNA ABOUT WILL AFFECT THE ELEVATION ANGLE
OF
> THE RADIO PATH.
>
> For given points on the Earth's surface, height of reflecting layer, and
> number of hops, the angle of elevation of the radio path is fixed.
>
> The angle at which the radiation from an antenna is a maximum is an
entirely
> different matter.
>
> Calculation of a path elevation angle on a curved Earth not very difficult
> but is a little too complicated to be written here.
>
> Up to 1500 groundpath miles the Earth can be considered to be flat. Trig
> calculation is then schoolkids stuff.
>
> Full formulae can be found in maths books under "Spherical Trigonometry"
or
> in practical radio engineering books.
>
> Calculations can be interesting but are invariably roughly approximate
> because layer height involves guesswork. And by the time you've finished a
> calculation the height has shifted. Or the number of hops has changed from
2
> to 3. The only things which remain static are your own latitude and

> longitude.
>
> To calculate propagation statistics of one and two hop radio paths,
> including elevation angles, download simple program TWOHOPS in a few
seconds
> from website below and run immediately.
> ----
> ....
> Regards from Reg, G4FGQ
> For Free Radio Design Software go to
> http://www.btinternet.com/~g4fgq.regp
> ....
>
==

Why should my answer to the question be altogether different to everybody
else's? Especially as I'm right.

Reg.

2324. Re: Local Oscillator: Frequency Choosing

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 01:58:40 UTC
From: Mack <gator2@webmail.co.za>
Message-ID: <37566mF5b3brlU1@individual.net>
Source record: 82163

Sometimes they are chosen in order
to have images fall outside the band.

2325. who sells the portable extenda flagpoles?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 02:15:39 UTC
From: goboatgo <cape_vincent@hotmail.com>
Message-ID: <5BdPd.16404$mu6.4910@bignews5.bellsouth.net>
Source record: 82164

What's the site of the guy selling the aluminum portable extenda poles (28 feet) at Dayton that work great for field day or stationary-mobile setup?

Thanks, n2cv

2326. right angle feed thru?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 02:29:31 UTC
From: ml <m@di.net>
Message-ID: <m-2FF00E.21293111022005@news.verizon.net>
Source record: 82165

does anyone know of a place where i can get a right angle wall feed thru w/so-239 connectors??

thanks

2327. Re: Local Oscillator: Frequency Choosing

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 02:32:54 UTC
From: Jason <cheanglong@gmail.com>
Message-ID: <1108175574.617011.39230@l41g2000cwc.googlegroups.com>
Source record: 82166

Hi Richard and Mack

Thank you so much for the answers and advice.
I have cleared much of my doubts.
Do you know if Gilbert Cell is using Synchronous Detection or the one
with +/-IF?
Thank you and hear from you all

rgds and thanks
Jason

2328. Re: Local Oscillator: Frequency Choosing

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 02:32:59 UTC
From: Jason <cheanglong@gmail.com>
Message-ID: <1108175579.431982.301570@g14g2000cwa.googlegroups.com>
Source record: 82167

Hi Richard and Mack

Thank you so much for the answers and advice.
I have cleared much of my doubts.
Do you know if Gilbert Cell is using Synchronous Detection or the one
with +/-IF?
Thank you and hear from you all

rgds and thanks
Jason

2329. Re: top vs bottom fed tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 02:38:00 UTC
From: ml <m@di.net>
Message-ID: <m-899C4B.21380011022005@news.verizon.net>
Source record: 82168

thank you very much for your help

i wounder

I sorta thought w/a sgc tuner at antenna a 'choke' wouldn't be needed,-

since the tuner has pl259's do you know a place that makes a water
proof choke (as opposed to looping the coax or trying to rig turns
around a core myself ??

the control cable chokes, would a snap on type do it could you recomend
r a good place to get those or what ever is best , specifically , i
never bought any of those

thanks very much again

In article <3clq01h4qm4b96hai7gs7vmlr548bc53u7@4ax.com>,
Richard Clark <kb7qhc@comcast.net> wrote:

> On Sat, 12 Feb 2005 00:32:25 GMT, ml <m@di.net> wrote:
>
> >I sorta have 2 choices but want to know a few pro /con's
>
> Hi OM,
>
> Either will probably be indistinguishable from the other. If the
> tuner is lower, then keep the twin line, or its facsimile away from
> the metal support by three or so times the separation distance of the
> two feed lines.
>
> Don't forget to put chokes on the Transmission line to the tuner, and
> on the control lines to the tuner - at the tuner inputs for each.
>
> 73's
> Richard Clark, KB7QHC

2330. Re: Local Oscillator: Frequency Choosing

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 03:08:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <glsq01ptl0h7fo2qkvf3ai77qa7ar6eglm@4ax.com>
Source record: 82169

On 11 Feb 2005 18:32:54 -0800, "Jason" <cheanglong@gmail.com> wrote:
>Thank you so much for the answers and advice.
>I have cleared much of my doubts.
>Do you know if Gilbert Cell is using Synchronous Detection or the one
>with +/-IF?

Hi Jason,

The Gilbert Cell was one of the first linear ICs and useful for
balanced Mod/Demod. What comes with it is strictly your choice
(regarding the question of IF or Synchronous Detection).

It would be simpler if you simply said what you need.

73's
Richard Clark, KB7QHC

2331. Re: top vs bottom fed tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 03:13:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hrsq01p0mhmja8f54cgjnon27jk7j13j9o@4ax.com>
Source record: 82170

On Sat, 12 Feb 2005 02:38:00 GMT, ml <m@di.net> wrote:

>I sorta thought w/a sgc tuner at antenna a 'choke' wouldn't be needed,-

Hi OM,

This is called dreaming in technicolor and surround sound.

> since the tuner has pl259's do you know a place that makes a water
>proof choke (as opposed to looping the coax or trying to rig turns
>around a core myself ??

C'Mon, now, that is just too simple to make complex. Adding anything
"waterproof" is far more likely to become waterlogged. Browse the
conventional retail sites that cater to Hams.

>the control cable chokes, would a snap on type do it could you recomend
>r a good place to get those or what ever is best , specifically , i
>never bought any of those

Radio Shack.... Buy several.

73's
Richard Clark, KB7QHC

2332. Re: source for small end insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 04:34:54 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <420d890b$1_1@127.0.0.1>
Source record: 82171

Hal Rosser wrote:
> or just use a piece of black nylon fishing leader

Also, the black UV resistant tie wraps should make
pretty good insulators.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2333. Re: source for small end insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 04:50:04 UTC
From: Mike <km6ab@REMOVETHIS.pacbell.net>
Message-ID: <0WfPd.3364$lz5.253@newssvr24.news.prodigy.net>
Source record: 82072

Monofilament fishing line breaks down very fast in the sun, you might
get a year out of it at best. If youï¿½re going to attach a Dacron, Nylon,
etc line to extend your wire, why do you need an insulator anyway?
Mike

Ralph Mowery wrote:
> <melbjer@hotmail.com> wrote in message
> news:eblp01to5t2pvgcgv9kbk9gggaio2kele3@4ax.com...
>
>>I'm putting up a long wire antenna for a SW receiver. The area I live
>>in has severe restrictions, so I need to hide it, or at least have it
>>not be obvious. For the end insulators I was looking for small, about
>>1" long skinny plastic or ceramic insulators. I know they used to be
>>available, but I can't find them anywhere. Can anyone point to a
>>source for them? All I can find are 3" insulators with a 1" diameter.
>>These are much too obvious for me to use. Thanks.
>>
>
>
> Instead of using special insulators just use some monofiliment fishing line
> for the ends. You could even cut up a plastic ink pen if you need an
> insulator.
>
>

2334. Re: source for small end insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 05:09:15 UTC
From: Howard <mensch90249@yahoo.com>
Message-ID: <5m3r01l1gblppam7bd317ust8i1hjec6vp@4ax.com>
Source record: 82073

On Fri, 11 Feb 2005 22:34:54 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Hal Rosser wrote:
>> or just use a piece of black nylon fishing leader
>
>Also, the black UV resistant tie wraps should make
>pretty good insulators.

How about using a wood dowel? Cut a suitable length, drill holes and
apply a few coats of varnish. Might work fine, though not as creative
as the poster who suggested buttons.
Howard

2335. Re: source for small end insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 06:46:51 UTC
From: Graywolf <graywolf@nospam.org>
Message-ID: <LIhPd.60443$a66.60202@fe07.lga>
Source record: 82074

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:110qkhnlrao5973@corp.supernews.com...
> I'd like to caution you against using plastic that's not intended for
> outdoor use. Most types will deteriorate rapidly from the UV in sunlight,
> and turn brittle and very weak in a short time. Even here in western
> Oregon, most plastics become useless in a year or two, & in a place like
> Denver (5000 feet high and lots of sun) you only get a few months at
> most.
>
> A better idea, in my opinion, would be to use fishing line as others
> suggested, or make your own from a piece of ABS pipe or something
> similar.
>
> Roy Lewallen, W7EL
>
> Cecil Moore wrote:
>> melbjer@hotmail.com wrote:
>>
>>> I'm putting up a long wire antenna for a SW receiver. The area I live
>>> in has severe restrictions, so I need to hide it, or at least have it
>>> not be obvious. For the end insulators I was looking for small, about
>>> 1" long skinny plastic or ceramic insulators. I know they used to be
>>> available, but I can't find them anywhere. Can anyone point to a
>>> source for them? All I can find are 3" insulators with a 1" diameter.
>>> These are much too obvious for me to use. Thanks.
>>
>>
>> Skinny insulators can be made from plastic coat hangers which come in
>> any number of different colors.

Roy et al.,

The polystyrene that plastic coat hangers are normally made from has a moderately good ultraviolet resistance - much better than nylon monofilament line.

But for a cheap, extremely effective, insulator which has excellent ultraviolet resistance, cut the top off a PET soft-drink bottle (where the screw threads are found). The dielectric properties are excellent and few plastics fare better to ultraviolet and acid rain exposure than does polyethylene terephthalate.

I have had a number of insulators up for years that were made from fiberglass loaded PET tensile test bars. The only problem was dulling of drill bits from the glass. A carbide tipped drill solved that problem.

73, Barry WA4VZQ ornitzSPAM-NOT@tricon.net

2336. IP3 calculation and estimation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 09:46:43 UTC
From: Jason <cheanglong@gmail.com>
Message-ID: <1108201603.868729.174450@c13g2000cwb.googlegroups.com>
Source record: 82075

Hello All

May I know if there is anyone here really have experience in
calculating or estimateing IP3 intercept point for any mixer real
case,(cmos or bipolar mixer)?
I need some advice on this topic
Thank you and hear from you all

rgds and thanks
Jason

2337. Re: Small loops for reception

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 10:47:46 UTC
From: nm5k@wt.net
Message-ID: <1108205266.120365.83310@o13g2000cwo.googlegroups.com>
Source record: 82076

Bill Ogden wrote:
> For the first time in many years I have been listening a lot on the
low
> bands (160/80/40). It seems there is much more background noise than
when I
> was in my teens, but that may be my selective memory at work. I am
in the
> far suburbs trying to use a half-sloper and an inverted V -- both
with the
> peak at about 53 feet. I think most of the noise is "natural"
(except for a
> 15Khz harmonic every now and then.)
>
> I started reading about small loops for receiving on 160 and 80. In
> particular I have been reading about:
>
> (1) the 4-turn loop on 4-foot cross arms (W1FB),

Mine is closest to this one...Mine is a 44 inch per side diamond, using
5 turns.

> (2) the 4-turn coax loop (in a 9-inch diameter) (W1FB),

I have to wonder how he is tuning 4 turns on a 9 inch form?

Seems it would tune quite high in freq...

I have a 16 inch circular loop, but it takes about 12 turns to tune
MW..

> (3) an 18-inch ferrite rod unit described by G2BZQ

Worst of the bunch, no doubt....
>
> All of these were described as better receiving antennas "in the
house" than
> the authors' more conventional outside antennas. W1FB thought the
9-inch
> loop was better than the 4-foot unshielded loop and apparently did
not think
> much of ferrite-stick antennas.
>
> What is the experience of those on this newsgroup? Are these
antennas
> really better (in the house, and even in the basement) than
conventional

> outdoor antennas?

Depends on the use, and also depends on the source of the noise.
If the noise source is local, they can work very well to null that
noise. If the noise is just general atmospheric noise, the results
won't
be as good. Yes, the nulls are very sharp.

Are they significantly better when used outside and
> perhaps elevated a bit?

I've heard of people elevating, but myself, I'm not really convinced
it makes any difference. I keep mine on the floor, here in the shack
on stands, so I can rotate them. They work fine , even on the ground.

I realize they are inconvenient because they must
> be tuned even for small frequency changes. It seems they are very
> directional for nulls but fairly broad for other responses. Is the
same loop
> good for 160 and 80 (and maybe even 40)?

Ok for 160, but not really sure about the other bands. I use mine more
for MW use than anything...But mine does work 160m. The *best* time
for
a loop is actually in the daytime for MW ground wave use. They work
great
for that. They do help at night a bit as far as nulling some noise, or
unwanted stations, but the nulls on a skywave signal as not near as
deep
as for ground wave. To have a better idea if it's worth a try, will
probably depend on the source of your noise. If it's a local source,
could be worth a try. You can null that source down to nearly nothing..
But if you have multiple sources of noise, the results won't be as
good.
A loop won't be in the leaque of say a beverage or whatever, for say
160m dx...
MK

2338. Re: IP3 calculation and estimation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 11:36:59 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37689bF595vj3U1@individual.net>
Source record: 82077

I do NOT have experience of this, but using one's
background training as an aspiring engineer, I would
use the output of a calibrated signal generator as the input
signal, together with an accurate - and variable - attenuator.

Connect an RF Voltmeter to the output of the mixer.

Now you can plot input power against output power, assuming
that it is within your capabilities to assess the output impedance of the
mixer.

This should give you sufficient points to plot the response curve up
to the 1dB compression point.

However, there is a problem here, and that is, at the point at which
the straight line starts to curve off, you are not just measuring the
output power of the desired output, but also are including that of the
newly-arrived distortion products.

However, as I said, I don't have the answer for you (We are, after all,
amateurs and not professionals), but perhaps I have given you food for
thought?

"Jason" <cheanglong@gmail.com> wrote in message
news:1108201603.868729.174450@c13g2000cwb.googlegroups.com...
> Hello All
>
> May I know if there is anyone here really have experience in
> calculating or estimateing IP3 intercept point for any mixer real
> case,(cmos or bipolar mixer)?
> I need some advice on this topic
> Thank you and hear from you all
>
> rgds and thanks
> Jason
>

2339. Re: source for small end insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 12:41:26 UTC
From: Pippa Reeves <send_pdreeves_no-spam@bigpond.net.au>
Message-ID: <pan.2005.02.13.04.40.15.95680@bigpond.net.au>
Source record: 82078

On Fri, 11 Feb 2005 15:55:45 +0000, melbjer wrote:

>
> I'm putting up a long wire antenna for a SW receiver. The area I live
> in has severe restrictions, so I need to hide it, or at least have it
> not be obvious. For the end insulators I was looking for small, about
> 1" long skinny plastic or ceramic insulators. I know they used to be
> available, but I can't find them anywhere. Can anyone point to a
> source for them? All I can find are 3" insulators with a 1" diameter.
> These are much too obvious for me to use. Thanks.
>
> Jer

Try farm equipment suppliers..... You should be able to get suitable
items intended to be used as electric fence insulators.

Pip

2340. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 12:49:02 UTC
From: grasshouse@hotmail.com
Message-ID: <cul2c8tos1@newsg2.svr.pol.co.uk>
Source record: 82079

hello Reg I've downloaded some of your programs.
very helpful, thank you very much.
Were you a maths teacher or something like in a past life?

Excellent programs, from Reg for free...

http://www.btinternet.com/~g4fgq.regp

2341. Re: Local Oscillator: Frequency Choosing

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 14:48:54 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <Er6dnTUb1arLipPfRVn-rw@comcast.com>
Source record: 82080

"Jason" <cheanglong@gmail.com> wrote in message
news:1108175574.617011.39230@l41g2000cwc.googlegroups.com...
> Hi Richard and Mack
>
> Thank you so much for the answers and advice.
> I have cleared much of my doubts.
> Do you know if Gilbert Cell is using Synchronous Detection or the one
> with +/-IF?
> Thank you and hear from you all
>
> rgds and thanks
> Jason
>
I don't know exactly what you want to do, but I have used the Motorola MC1330 Synchronous Video detector as a CW-SSB/AM synchronous detector at a 9 MHz IF. The MC1330 uses Gilbert Cells. For AM you need an LC tuned circuit at the IF frequency; For CW-SSB you feed a BFO signal (square wave works fine) into the MC1330 at the same point. The DC level at the MC1330 output depends on the signal amplitude; so, that can be used to derive an AGC voltage. Tuning an AM signal is uncanny, in that a signal will sort of pop in.

Tam/WB2TT

There is no zero or $ in comcast.

2342. Re: right angle feed thru?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 15:04:27 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <606s015klfv65tm5alkcn9o98s4btmgl6d@4ax.com>
Source record: 82081

On Sat, 12 Feb 2005 02:29:31 GMT, ml <m@di.net> wrote:

>does anyone know of a place where i can get a right angle wall feed thru
>w/so-239 connectors??
>
>
>thanks

You don't say how thick the wall is, but your best bet would probably
be a feedthrough adaptor with females at each end, combined with a
right angle connector. You could call the Wireman, RF Davis,
RadioWorks -- they all have web sites & phone numbers.

The feedthroughs come in lengths up to 12".

bob
k5qwg

2343. Re: source for small end insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 16:41:05 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <420e3252$1_2@127.0.0.1>
Source record: 82082

Pippa Reeves wrote:
> Try farm equipment suppliers..... You should be able to get suitable
> items intended to be used as electric fence insulators.

Most of those are ceramic and large but they make
excellent RF insulators.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2344. Re: source for small end insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 16:51:26 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <376qmoF58irmbU1@individual.net>
Source record: 82083

A plastic cable tie, looped, is virtually invisible to
meet with the OP's requirements.

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:420e3252$1_2@127.0.0.1...
> Pippa Reeves wrote:
> > Try farm equipment suppliers..... You should be able to get suitable
> > items intended to be used as electric fence insulators.
> Most of those are ceramic and large but they make
> excellent RF insulators.

2345. JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel supernaturally to a virgin Jewish woman named Mary. He lived a sinless life for thirty-three years and then sacrificed His sinless blood and died on a cross to pay the death penalty for our sins.....

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 18:09:23 UTC
From: Evangelist_2005@sbcglobal.net
Message-ID: <1108231763.520470.129440@l41g2000cwc.googlegroups.com>
Source record: 82084

Good News!

Do you know how simple it is to go to Heaven after this life has ended?

The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel supernaturally to a virgin Jewish woman named Mary. He lived a sinless life for thirty-three years and then sacrificed His sinless blood and died on a cross to pay the death penalty for our sins.

After Jesus died He rose from the dead three days later as He said He would. The Holy Bible also tells us that Jesus Christ ascended into Heaven and that all who accept Him as their Lord and Saviour will live forever with Him in Heaven where there is no more death, sorrow, sickness and pain.

The Holy Bible very clearly explains how simple it is to be saved and on your way to Heaven, "For if you confess with your mouth, "Jesus is Lord," and believe in your heart that God raised him from the dead, you WILL BE SAVED." (Romans 10:9)

You can be saved right now and on your way to Heaven if you will open your heart to Jesus and pray the following prayer:

Dear Jesus Christ, I want to be saved so that I can have a home in Heaven when I die. I agree with You that I am a sinner. I believe You love me and want to save me. I believe that You bled and died on the cross to pay the penalty for my sins. I believe that You rose from the dead. Please forgive my sins and come into my heart and be my Lord and Saviour. Thank You Lord Jesus Christ for forgiving me and saving me through Your merciful grace. Amen.

You are now a Christian if you said the prayer and allowed
God to save you. Welcome to the family of God.

If you decide to wait till later you may die before you get
another chance to be saved because none of us knows
exactly when we will die.

Have a great day!
Internet Evangelist R.L. Grossi

Free Online Bible
http://www.biblegateway.com

Free Online Movies
http://www.tbn.org/index.php/8/1.html

Animation
http://www.gieson.com/Library/projects/animations/walk/index.html

The Passion Of The Christ
http://www.worshipmusic.com/0310263670.html

Beware Of Cults
http://www.carm.org/cults/cultlist.htm

About Hell
http://www.equip.org/free/DH198.htm

Is Jesus God?
http://www.powertochange.com/questions/qna2.html

2346. Re: right angle feed thru?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 18:26:30 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <420E4AD4.7BFA7ADB@shaw.ca>
Source record: 82085

ml wrote:
>
> does anyone know of a place where i can get a right angle wall feed thru
> w/so-239 connectors??
>
> thanks

How about RG-8 or variants with connectors on both ends! Goes around
corners very nicely!

Irv Ve^BP
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/index.html
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/index.htm
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/index.htm
---
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2347. Smith Chart Plotter ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 23:21:15 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <LbwPd.46655$iC4.40186@newssvr30.news.prodigy.com>
Source record: 82086

At the Ada hamfest I got a DIELECTRIC PROD. ENG. CO. INC Raymond, Maine, Smith Chart Impedance Plotter, Type No. 100P. It was in a nice wooden box, no accesories but included a 1971 gov't invoice of $1125.00 transferring it from Ft. Belvoir to Kelly AFB. I've put a couple of pix up at alt.binaries.pictures.radio. I haven't opened it up yet and nothing on Google. Any info apprecaited.
tnx

--

73
Hank WD5JFR

2348. Re: Smith Chart Plotter ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-12 23:55:49 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <9IwPd.30763$xt.9633@fed1read07>
Source record: 82087

Here is a lead to DIELECTRIC PROD. ENG. CO. Raymond, Maine,

http://www.dielectric.com/broadcast/history.asp

--
Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:LbwPd.46655$iC4.40186@newssvr30.news.prodigy.com...
> At the Ada hamfest I got a DIELECTRIC PROD. ENG. CO. INC Raymond, Maine,
> Smith Chart Impedance Plotter, Type No. 100P. It was in a nice wooden
> box,
> no accesories but included a 1971 gov't invoice of $1125.00 transferring
> it
> from Ft. Belvoir to Kelly AFB. I've put a couple of pix up at
> alt.binaries.pictures.radio. I haven't opened it up yet and nothing on
> Google. Any info apprecaited.
> tnx
>
> --
>
> 73
> Hank WD5JFR
>
>

2349. Re: Small loops for reception

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-13 01:47:44 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cumbk0$6uh$1@hercules.btinternet.com>
Source record: 82088

Very approximately -

To compare one loop with another, at a given frequency, the receiving sensitivity of small loops is very simply proportional to the area enclosed and tends to decrease as the number of turns.

Best to use very thick wire with a single turn loop (as with magloops) and a tuning capacitor to suit. Multi-turn loops are used ONLY because of availability of paractical sizes of tuning capacitors.

With a multi-turn ferrite rod antenna of given dimensions, sensitivity increases roughy proportional to the permeability of the core material but decreases according to loss in the core. Permeabilty increases the effective area enclosed. So use an HF core material - not one intended for VLF power transformers.

Ferrite rod receiving antennas appear to do very well ONLY because medium and long-wave broadcast transmitters are generally high power. They are high power because of the poor sensitivity of very small (in comparison with a wavelength) receiving antennas.

Reg.

2350. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-13 01:47:44 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cumbk0$6uh$2@hercules.btinternet.com>
Source record: 82089

> hello Reg I've downloaded some of your programs.
> very helpful, thank you very much.
> Were you a maths teacher or something like in a past life?
>
> Excellent programs, from Reg for free...
>
> http://www.btinternet.com/~g4fgq.regp
>
==========

Not having an Eastern religion I have no recollection of a past life. But the nearest I ever got to being a teacher in my present life was to teach myself after the age of 14. It all happened purely by chance.

Although in the last few years of my career I did present, by invitation, some one-day lectures to international audiences on the subject of how to locate faults on oceanic submarine cables. And even in those far-off days, when the repair ship captain chose to go 1/4-speed ahead and grapple for the cable, depended on what he had had for breakfast. I understand cables now contain optical-fibers but still contain a few copper wires for fault location purposes.

But submarine telephone cables were a small part of my career. However they did introduce me to transmission lines and communications in general. My first connection with radio began, indirectly, a few years earlier, during WW2, when I was a mechanical engineering apprentice in the tool-room and machine shop of a well-known electric-motor manufacturer. British-Thompson-Houston.

At the age of 16, while high explosives and incendiary bombs were falling on the industrial City of Birmingam*, I set-up and operated precision lathes and millers and broaches and shapers to manufacture what appeared to me to be very small electric motors. (As distinct from anything up to 1000 horse-power motors and generators which was normal production.)

Having joined the RAF in 1943 as a radar technician, in 1944, by chance, I came across these small electric motors once again. Actually, the articles I had helped to manufacture were top-secret selsyns to be used to synchronise airborne Radar plan-position indicating screens with their respective airborne, rotating parabolic antennas.

The radar equipment was installed in Lancaster bombers, the most efficient of the RAF's killing machines. The fire storms on German cities, almost as good as the gas chambers, were more efficient than the Hiroshima and Nagasaki weapons of mass-destruction. It just took a few hours longer.

The results of the latter weapons, in 1945, I witnessed and spoke to the few survivors while wearing my blue RAF uniform. There were no signs of animosity. The Japanese, an ancient educated and civilised people, were as polite to me as a sort of tourist, thousands of miles from my home in Birmingham (which they immediately recognised from a map sketched on the back of a cigarette packet) as they were to each other.

My programs and Mathematics. There's very little advanced mathematics in my programs. My arithmetic is entirely self-taught. But there's no two ways about it - maths is either all right or all wrong. And either way it can eventually be proved. That's the beauty of it.

University professors write books on it, plagiarise each other, and make a living under false pretences - but they add nothing except something illogical and misunderstood (usually a language problem) to haggle about in newsgroups. Same applies to radio. KISS.

The key to my programs is a logical understanding of distributed electrical circuits. It's just elementary electrical engineering. If YOU can understand them then you are well away. If you can't understand them then its because I have been deficient in my introductory notes.

Your comment on the 'excellence' of my programs is appreciated. But bear in mind, regarding quality, I have never claimed them to be numerically more accurate than needed for the purpose intended - whatever that may be.

==========

*On the same night as the infamous air raid on Coventry, a greater weight of bombs fell on the City of Birmingham and the industrial Black Country. Three days later fires were still burning in the adjacent town of West Bromwich. (These days West Bromwich is better noted for its football team.)

But Coventry, the City of Three Spires, three cathedrals, and Lady Godiva, was the greatest concentration of war factories in the UK. Tanks, guns, aircraft engines, fire pumps, motor vehicles, communications equipment were all being made in the city, all intermingled with inflammable medieval buildings to be ravaged by fire in the raid. Most of the human casualties were due to a single bomb - a direct hit on an air-raid shelter.

Incidentally, the 3000 MHz, 50 KW, Cavity Magnetron had just been invented by Randall and Boot in the Birmingham University laboratories which were themselves surrounded by large factories, under air attack, such as the well known Austin motor vehicle and the Aerial motorcycle works.

The magnetron was used to guide Lancaster bomber crews to their unfortunate targets where 10's of thousands of the inhabitants were burned alive, their husbands and brothers dying on the Eastern Front against Russian rockets and T54 tanks.

The magnetron was also used in the 5-year long Battle of the North Atlantic.

On the average a 10,000-ton food and munitions ship was sunk every day. More than 100,000 merchant seamen, civilians, without military pensions for their families, lost their lives in Davy Jones locker.

Towards the end of the war German submarine crews were on suicide missions. U-boat commanders, once detected by radar, had little option but to stay on the surface, uncover the guns, and fight it out. To submerge they were dead by depth charges. Their precise locations being located and remembered by airborne radar.

These days we have other forms of suicide. There are people who are living such enforced miserable lives and in such oppressed conditions they prefer to sacrifice their own lives in the hope of improving the future lives of their families and their decendents.

Citizens of the United States, and others, ask yourselves WHY?

Tonight I'm on a Bordeaux Claret. Vive L'entente Cordiale.

Reg, Amateur Radio, G4FGQ

2351. vacume capacitor?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-13 03:53:16 UTC
From: ml <m@di.net>
Message-ID: <m-89AA6B.22531112022005@news.verizon.net>
Source record: 82090

I know what a vacume tube is

and a capacitor

but never really heard of a vacume cap

what is it??

I've seen it in a tuner unit i was considering

thanks

2352. Re: vacume capacitor?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-13 04:03:16 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <8kAPd.550$SO.275@newsread3.news.atl.earthlink.net>
Source record: 82091

A VACUUM capacitor is exactly what the name implies, the VACUUM
is the dialectric instead of paper or air.
It has bellows that is air tight, or should I say vacuum tight.

2353. Re: vacume capacitor?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-13 04:40:00 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <420ed94a.14820080@news.crosslink.net>
Source record: 82092

On Sun, 13 Feb 2005 04:03:16 GMT, "John Franklin"
<jpfrank@peoplepc.com> wrote:

> A VACUUM capacitor is exactly what the name implies, the VACUUM
>is the dialectric instead of paper or air.
>It has bellows that is air tight, or should I say vacuum tight.
>
>
The other responder described an "adjustable" vacuum capacitor. The
more general vacuum capacitor has no bellows. The plates of a vacuum
capacitor are concentric or coaxial conducting tubes, which is not
that important. The important things are that they are sealed in
relatively heavy glass envelopes with electrodes at each end and are
capable of handling high RF currents at high DC potentials with
extremely low leakage.

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

2354. Re: vacume capacitor?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-13 05:19:13 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <110toquiq56k38f@corp.supernews.com>
Source record: 82093

W9DMK (Robert Lay) wrote:
> On Sun, 13 Feb 2005 04:03:16 GMT, "John Franklin"
> <jpfrank@peoplepc.com> wrote:
>
>
>> A VACUUM capacitor is exactly what the name implies, the VACUUM
>>is the dialectric instead of paper or air.
>>It has bellows that is air tight, or should I say vacuum tight.
>>
>>
>
> The other responder described an "adjustable" vacuum capacitor. The
> more general vacuum capacitor has no bellows. The plates of a vacuum
> capacitor are concentric or coaxial conducting tubes, which is not
> that important. The important things are that they are sealed in
> relatively heavy glass envelopes with electrodes at each end and are
> capable of handling high RF currents at high DC potentials with
> extremely low leakage.
>
>
> Bob, W9DMK, Dahlgren, VA
> Replace "nobody" with my callsign for e-mail
> http://www.qsl.net/w9dmk
> http://zaffora/f2o.org/W9DMK/W9dmk.html
>
It should be noted that it is very unhealthy to get across one of these
baby's when they are live.

Dave WD9BDZ

2355. Re: vacume capacitor?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-13 05:32:02 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <420ee705$1_2@127.0.0.1>
Source record: 82094

W9DMK (Robert Lay) wrote:
> The other responder described an "adjustable" vacuum capacitor. The
> more general vacuum capacitor has no bellows. The plates of a vacuum
> capacitor are concentric or coaxial conducting tubes, which is not
> that important. The important things are that they are sealed in
> relatively heavy glass envelopes with electrodes at each end and are
> capable of handling high RF currents at high DC potentials with
> extremely low leakage.

Can a doorknob cap rated at 20 KVDC be used to
resonate a small loop?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2356. Re: 10 Mtr Qrp Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-13 06:27:00 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <BpCPd.8577$sh.8442@bignews4.bellsouth.net>
Source record: 82095

Ahh yes - the knights of the round table had no idea their armor would make
a great counterpoise for a 10-meter whip.

"Jim - NN7K" <nn7kexk7zfg@NOSPAMsbcglobal.net> wrote in message
news:H2bPd.4038$aW6.3762@newssvr22.news.prodigy.net...
> And, dont forget the Aluminium foil suit , for your counter-poise!
> NN7K
>
> Hal Rosser wrote:
> > "Radio Man" <puns@verizon.net> wrote in message
> > news:8%IOd.18999$wc.16656@trnddc07...
> >
> >>I have a 10 mtr handheld that requires a telescopic ant
> >>with a bnc connector at the base. I would like this ant
> >>to be 4 ft or less. Is there a site which explains how to
> >>construct the above?
> >>
> >>
> >
> > If you're qrp-ing - remember the less power you use - the more important
the
> > antenna becomes.
> > Strap a quarter-wave whip onto your beanie!
> >
> >

2357. Re: 10 Mtr Qrp Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-13 06:54:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <h8ut0156v7egphlh9e51t7me2jrlb0vdi3@4ax.com>
Source record: 82096

On Sun, 13 Feb 2005 01:27:00 -0500, "Hal Rosser"
<hmrosser@bellsouth.net> wrote:

>Ahh yes - the knights of the round table had no idea their armor would make
>a great counterpoise for a 10-meter whip.
>
Hmmm, I am pretty certain when they had it horizontally polarized and
end fed against another horse mounted knight, that they did indeed
appreciate that their armor served to counterpoise the inertia of
making a contact.

73's
Richard Clark, KB7QHC

2358. FA: TUF-TUG FALL PROTECTION HARNESS W/ WIRE ROPE GRAB

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-13 15:30:45 UTC
From: me <nospam@nospam.com>
Message-ID: <3lsu01ppvn0qfk8u0nl8k5peke2t93a5sd@4ax.com>
Source record: 82097

FA: TUF-TUG FALL PROTECTION HARNESS W/ WIRE ROPE GRAB
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=3872589682

2359. Re: IP3 calculation and estimation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-13 17:22:12 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <81MPd.28586$K54.19363@edtnps84>
Source record: 82098

The procedure is explained in detail, in an application note on
"Mini-Circuits" web site,
at: http://www.minicircuits.com/appnote/mxr1-18.pdf

Regards,

Frank

"Airy R.Bean" <Me@privacy.net> wrote in message
news:37689bF595vj3U1@individual.net...
>I do NOT have experience of this, but using one's
> background training as an aspiring engineer, I would
> use the output of a calibrated signal generator as the input
> signal, together with an accurate - and variable - attenuator.
>
> Connect an RF Voltmeter to the output of the mixer.
>
> Now you can plot input power against output power, assuming
> that it is within your capabilities to assess the output impedance of the
> mixer.
>
> This should give you sufficient points to plot the response curve up
> to the 1dB compression point.
>
> However, there is a problem here, and that is, at the point at which
> the straight line starts to curve off, you are not just measuring the
> output power of the desired output, but also are including that of the
> newly-arrived distortion products.
>
> However, as I said, I don't have the answer for you (We are, after all,
> amateurs and not professionals), but perhaps I have given you food for
> thought?
>
> "Jason" <cheanglong@gmail.com> wrote in message
> news:1108201603.868729.174450@c13g2000cwb.googlegroups.com...
>> Hello All
>>
>> May I know if there is anyone here really have experience in
>> calculating or estimateing IP3 intercept point for any mixer real
>> case,(cmos or bipolar mixer)?
>> I need some advice on this topic
>> Thank you and hear from you all
>>
>> rgds and thanks
>> Jason

>>
>
>

2360. Re: IP3 calculation and estimation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-13 17:31:30 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <S9MPd.28592$K54.27624@edtnps84>
Source record: 82099

It does not appear to explicitly state in the app. note, but output IP3 is
calculated by taking the ratio, of the
desired output tone (all in dB) with the largest output 3rd order product,
dividing by 2, and adding to the desired tone. If the input
IP3 is required simply subtract the mixer gain from the output IP3. Take
not of the signs. If the mixer gain is < 0 then the input IP3> output IP3.

Frank

"Frank" <ve6cb@nospam.telus.net> wrote in message
news:81MPd.28586$K54.19363@edtnps84...
> The procedure is explained in detail, in an application note on
> "Mini-Circuits" web site,
> at: http://www.minicircuits.com/appnote/mxr1-18.pdf
>
> Regards,
>
> Frank
>
>
> "Airy R.Bean" <Me@privacy.net> wrote in message
> news:37689bF595vj3U1@individual.net...
>>I do NOT have experience of this, but using one's
>> background training as an aspiring engineer, I would
>> use the output of a calibrated signal generator as the input
>> signal, together with an accurate - and variable - attenuator.
>>
>> Connect an RF Voltmeter to the output of the mixer.
>>
>> Now you can plot input power against output power, assuming
>> that it is within your capabilities to assess the output impedance of the
>> mixer.
>>
>> This should give you sufficient points to plot the response curve up
>> to the 1dB compression point.
>>
>> However, there is a problem here, and that is, at the point at which
>> the straight line starts to curve off, you are not just measuring the
>> output power of the desired output, but also are including that of the
>> newly-arrived distortion products.
>>
>> However, as I said, I don't have the answer for you (We are, after all,
>> amateurs and not professionals), but perhaps I have given you food for
>> thought?
>>

>> "Jason" <cheanglong@gmail.com> wrote in message
>> news:1108201603.868729.174450@c13g2000cwb.googlegroups.com...
>>> Hello All
>>>
>>> May I know if there is anyone here really have experience in
>>> calculating or estimateing IP3 intercept point for any mixer real
>>> case,(cmos or bipolar mixer)?
>>> I need some advice on this topic
>>> Thank you and hear from you all
>>>
>>> rgds and thanks
>>> Jason
>>>
>>
>>
>
>

2361. Re: IP3 calculation and estimation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-13 17:32:58 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <ebMPd.28593$K54.12916@edtnps84>
Source record: 82100

I mean: "Take note of the signs"

"Frank" <ve6cb@nospam.telus.net> wrote in message
news:S9MPd.28592$K54.27624@edtnps84...
> It does not appear to explicitly state in the app. note, but output IP3 is
> calculated by taking the ratio, of the
> desired output tone (all in dB) with the largest output 3rd order product,
> dividing by 2, and adding to the desired tone. If the input
> IP3 is required simply subtract the mixer gain from the output IP3. Take
> not of the signs. If the mixer gain is < 0 then the input IP3> output
> IP3.
>
> Frank
>
>
> "Frank" <ve6cb@nospam.telus.net> wrote in message
> news:81MPd.28586$K54.19363@edtnps84...
>> The procedure is explained in detail, in an application note on
>> "Mini-Circuits" web site,
>> at: http://www.minicircuits.com/appnote/mxr1-18.pdf
>>
>> Regards,
>>
>> Frank
>>
>>
>> "Airy R.Bean" <Me@privacy.net> wrote in message
>> news:37689bF595vj3U1@individual.net...
>>>I do NOT have experience of this, but using one's
>>> background training as an aspiring engineer, I would
>>> use the output of a calibrated signal generator as the input
>>> signal, together with an accurate - and variable - attenuator.
>>>
>>> Connect an RF Voltmeter to the output of the mixer.
>>>
>>> Now you can plot input power against output power, assuming
>>> that it is within your capabilities to assess the output impedance of
>>> the
>>> mixer.
>>>
>>> This should give you sufficient points to plot the response curve up
>>> to the 1dB compression point.
>>>
>>> However, there is a problem here, and that is, at the point at which

>>> the straight line starts to curve off, you are not just measuring the
>>> output power of the desired output, but also are including that of the
>>> newly-arrived distortion products.
>>>
>>> However, as I said, I don't have the answer for you (We are, after all,
>>> amateurs and not professionals), but perhaps I have given you food for
>>> thought?
>>>
>>> "Jason" <cheanglong@gmail.com> wrote in message
>>> news:1108201603.868729.174450@c13g2000cwb.googlegroups.com...
>>>> Hello All
>>>>
>>>> May I know if there is anyone here really have experience in
>>>> calculating or estimateing IP3 intercept point for any mixer real
>>>> case,(cmos or bipolar mixer)?
>>>> I need some advice on this topic
>>>> Thank you and hear from you all
>>>>
>>>> rgds and thanks
>>>> Jason
>>>>
>>>
>>>
>>
>>
>
>

2362. Re: IP3 calculation and estimation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-13 17:43:21 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <_kMPd.30925$xt.8781@fed1read07>
Source record: 82101

The person who first posed this question is a student
And he comes here for clarification and answers
This is a testament to the effectiveness of this group - BRAVO
Not sure what it says about our school system, tho (:-)

--
Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?

"Frank" <ve6cb@nospam.telus.net> wrote in message
news:81MPd.28586$K54.19363@edtnps84...
> The procedure is explained in detail, in an application note on
> "Mini-Circuits" web site,
> at: http://www.minicircuits.com/appnote/mxr1-18.pdf
>
> Regards,
>
> Frank
>
>

2363. Re: vacume capacitor?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-13 17:45:42 UTC
From: Crazy George <munsch@atglobal.net>
Message-ID: <420f955d_1@news1.prserv.net>
Source record: 82102

Yes, but the ceramic is only 1/2"-3/4" in diameter, and thus power limited. I've seen at least one used that way which
ended up in two pieces with lots of plastic shrapnel produced.

--
Crazy George
the ATTGlobal.net address is a SPAM trap. Use the att dot biz version.

"Cecil Moore" <w5dxp@hotmail.com> wrote in message news:420ee705$1_2@127.0.0.1...
> W9DMK (Robert Lay) wrote:
> > The other responder described an "adjustable" vacuum capacitor. The
> > more general vacuum capacitor has no bellows. The plates of a vacuum
> > capacitor are concentric or coaxial conducting tubes, which is not
> > that important. The important things are that they are sealed in
> > relatively heavy glass envelopes with electrodes at each end and are
> > capable of handling high RF currents at high DC potentials with
> > extremely low leakage.
>
> Can a doorknob cap rated at 20 KVDC be used to
> resonate a small loop?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> ----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
> ---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2364. Ham Radio Forums, Picture Galleries, Photo Classifieds

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-13 21:31:01 UTC
From: Eric <k4sci@hamradioforums.com>
Message-ID: <1108330261.753908.324450@l41g2000cwc.googlegroups.com>
Source record: 82103

Hello fellow Hams,

I just started a new website, http://www.hamradioforums.com with Radio Forums, !0 megs of picture gallery space per user, and photo classifieds. It's all free, and I invite you to visit, and join.

Running vBulletin 3.0.6, Photopost 4.86, and Photo Classifieds 2.1 on a dedicated server with redundant internet connections. It's FAST! Give it a look, you need not join to post in the forums, but a quick one minute sigh up is required to use the classifieds. Give it a try!

http://www.hamradioforums.com - k4sci

2365. Re: vacume capacitor?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-13 23:34:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <110vp11nu3s268a@corp.supernews.com>
Source record: 82104

Cecil Moore wrote:
>
> Can a doorknob cap rated at 20 KVDC be used to
> resonate a small loop?

Sure, but I think you'd end up with a pretty poor antenna.

I don't know for sure, but guess that doorknobs are typically made from Z5U or similar ceramic. If so, the capacitance is a strong function of both temperature and voltage. Therefore, the loop tuning will change with both those factors. I'd also guess that the Q wouldn't be too hot, so you'd also incur a lot more loss than you would if you used an air dielectric part.

Roy Lewallen, W7EL

2366. The HIGHER the BETTER

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 00:17:29 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <110vrhc5msu0l4e@news.supernews.com>
Source record: 82105
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Raised my M2 Horizontal Loop antenna from 20ft above ground to 45ft above ground and picked up a full S-unit (s7 to s8) at a receiving station 70 miles away. Mode was SSB and frequency was 144.200 mhz. Also my receiving ability was enhanced dramatically....

The HIGHER the BETTER !!!!

Photos and tech info on the M2 HO Loop antenna at the site listed below....

--

Charlie
Ham Radio - AD5TH
www.ad5th.com

2367. Re: IP3 calculation and estimation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 00:23:47 UTC
From: Jason <cheanglong@gmail.com>
Message-ID: <1108340627.853010.271650@c13g2000cwb.googlegroups.com>
Source record: 82106

Hello All(Airy, Caveat, Frank, Richard...)

Thank you for all the comments and advices given.
Do allow me some time to check that application notes out before
posting back to you .
I hope we can discuss more sooner
Kindly be patient

Thank you all

best rgds and thanks
Jason

2368. Re: G5RV with end bits

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 00:39:12 UTC
From: conconemail@libero.it
Message-ID: <bcd1b798.0502131639.23e31540@posting.google.com>
Source record: 82107

try http://www.dxzone.com

they have lots of antenna software and homebrew antenna plans

2369. Re: The HIGHER the BETTER

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 01:51:18 UTC
From: Glenn <aa5pk@hotmail.com>
Message-ID: <luTPd.8673$Ps.7054@okepread06>
Source record: 82108
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"Charlie" <charlie@earthlink.com> wrote in message
news:110vrhc5msu0l4e@news.supernews.com...
> The HIGHER the BETTER !!!!

That's always been the rule on VHF/UHF.

73 de Glenn AA5PK

2370. Re: vacume capacitor?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 02:48:18 UTC
From: W3JXP <jxp16@psu.edu>
Message-ID: <0Yidnb6bfu7vjI3fRVn-hA@adelphia.com>
Source record: 82109

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:110vp11nu3s268a@corp.supernews.com...
> Cecil Moore wrote:
>>
>> Can a doorknob cap rated at 20 KVDC be used to
>> resonate a small loop?
>
> Sure, but I think you'd end up with a pretty poor antenna.
>
> I don't know for sure, but guess that doorknobs are typically made from
> Z5U or similar ceramic. If so, the capacitance is a strong function of
> both temperature and voltage. Therefore, the loop tuning will change with
> both those factors. I'd also guess that the Q wouldn't be too hot, so
> you'd also incur a lot more loss than you would if you used an air
> dielectric part.
>
> Roy Lewallen, W7EL

It's not just the voltage but the RF current too. If this is a compact loop,
the RF current can be high and just because a capacitor can withstand a high
voltage doesn't mean it an also pass a high RF current. The spec's I've seen
call out the max voltage and a max RF current for transmitting capacitors.

--
John Passaneau W3JXP
State College Pa.
W3JXP@adelphia.net

2371. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 02:57:14 UTC
From: richardharrison@webtv.net
Message-ID: <9248-4210138A-205@storefull-3253.bay.webtv.net>
Source record: 82111

Reg, G4FGQ wrote:
"The fire storms on German cities, almost as good as gas chambers, were more efficient than Hiroshima and Nagasaki weapons of mass-destruction."

Just to quibble a bit, the atomic bomb was efficient for an explosive of its weight, equal to megatons of conventional explosives. My ship carried some of the first occupation forces into the Nagasaki area which I got to see. Our ship`s company armed ourselves and marched through town to see if it were safe to disgorge our soldiers there. Our captain outranked the army commander. The Japs were meek. They had suffered real stun and awe. Near ground zero about all that was left were fire-proof safes.

News here this week included a story on a German memorial celebration of the 60th anniversary of the destruction of Dresden by a single American/British airaid which produced one of those firestorms with massive conventional explosives and incendiary devices. The Germans don`t want to forget it.

The raid was of course OK as it was retribution for such destruction of English and other European cities.

Best regards, Richard Harrison, KB5WZI

2372. 2m Antenna for Pickup

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 02:57:52 UTC
From: Slip'er <cjhixon1@cox.net>
Message-ID: <esUPd.31024$xt.27785@fed1read07>
Source record: 82110

Elmer,
I'd like to install a 2m antenna in one of the stake pockets on my 02 F-150. For now I am just using a HT in the cab. Eventually, I'd like to put a mobile radio in there but the HT will have to do for now. Are some whips better than others? I just want a vertical whip for now (I need to keep the wife happy. The best would be a BNC connector that I could hide the antenna when she is using the truck...but I doubt that would hold up under 100mph highway driving). What do I need to consider when mounting the antenna? And what is the best coax to use? Tips on sealing the connectors? I am using a Vertex Standard VXA-700. Is there a whip that works well on TX for aviation and 2m bands? My emphasis for now is 2m though. I've read enough to make something work...I'd just like sage advise of folks who have been there and done that...

Feeling like a CBer right now, can't wait to start homebrewing my base station...but I need to get ready for a trip in 1 week!

Thanks,
Carl
[so new my call isn't in the database yet...I think it's lost!!!]

2373. Announcing a New Release

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 05:41:00 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <421039bf.55842907@news.crosslink.net>
Source record: 82112

Announcing a New Release ---- SmartSmith version 1.7.2
SmartSmith is a free Smith Chart Plotting program.

Since the last publicized release (ver 1.6.2), there have been many
improvements, as follows:

Main Window -
The main window has been re-organized to separate the transmission
line data and to move the current admittance and impedance displays
out of the Smith Chart area.

Control over Design Elements -
The Short Circuit Stub control now has a more rational Up/Down
control. It starts at 90 degrees length and goes to zero length. The
counter reading and the separate electrical degrees display now agree
with one another. All 3 transmission line controls now display
fractions of a wavelength in addition to the electrical degrees.

The Help File has been updated to cover all of the new features.

Previous Installation Problems Resolved -
Releases are packaged so that there should no longer be a problem
installing on any 32 bit versions of Windows - i.e., Win 98 or later.
See the list of download sites at the end of this file.

Awareness of Regional Options -
The program is now aware of the Regional Settings as set in the
Control Panel. Thus, European users will now see a comma as the
decimal separator instead of the period and will use the comma as the
decimal separator for data entry.

Transmission Line Database made user friendly -
The user can create or edit the Transmission Line Database as an ASCII
text file using any text editor, such as Notepad. Two pre-defined
Master Transmission Line Databases are supplied with the program - one
for Western Europe and one for USA. The appropriate database is to be
selected by the user at first use and saved. Afterwards, that database
will automatically be used unless the user chooses use a different
one. It is possible to create and save many different transmission
line databases.

An Auto-Erase feature has be added -
This feature allows the user to erase plotted points by backing up
over them. This feature is useful when the user overshoots the desired
value.

User Configuration Features Added -
In addition to the configuration of the transmission line characteristics and the open and short circuit stub impedances, the user can also configure:

- the Font used for displays.
- the Auto-Erase flag (turns Auto-Erase on or off)
- the width of the points in Auto-Erase mode

Saving the Configuration -
The configuration is now saved in an INI file whenever the user chooses to save the configuration. The INI file initializes the program with the user saved configuration at each start up. The configuration items that are saved include the following:

- Font
- Auto-Erase flag and the width of the plot points in Auto-Erase mode
- Transmission Line Database Filename
- Line velocity factor, characteristic impedance and Frequency
- Stub termination resistance, capacitance and inductance

New Tools -
The Tool set now includes a tool for adding another Transmission Line Type to the Transmission Line Database. The tool accepts two points on the attenuation versus frequency curve and converts that to coefficients, "a" and "k" used in the transmission line database. The user also enters a velocity factor, characteristic impedance, Ro, and a description. The tool appends a new record to the user specified database or starts a new database.

Plotting Package -
The plotting package, NetworkProcessor, which is designed specifically to support SmartSmith, has been upgraded (as of 2/9/2005) to include SWR plotting (in addition to both magnitude and phase angle of Voltage, Current and Impedance).

Packaging -
The download packages are as follows:
SmartSmith and the Plotting Package, NetworkProcessor, are now packaged together as a single installation kit.
Network Processor (the plotting package), is also available as a separate package from the f20 site and the qsl site.

Download Site:
http://zaffora.f2o.org/W9DMK/W9dmk.html
High Speed Download Site:
http://64.217.230.66
Limited Site:
http://www.qsl.net/w9dmk (this site has NetworkProcessor plotting package and other free software offerings but does not have SmartSmith)

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail

http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

2374. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 07:15:06 UTC
From: Graywolf <graywolf@nospam.org>
Message-ID: <xjYPd.1504$C74.444@fe07.lga>
Source record: 82113

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:9248-4210138A-205@storefull-3253.bay.webtv.net...
> Just to quibble a bit, the atomic bomb was efficient for an explosive of
> its weight, equal to megatons of conventional explosives.

To quibble a bit more, the "Little Boy" uranium atomic bomb dropped on
Hiroshima weighed about four to five tons and was the equivalent of about
10 to 15 kilotons of conventional (TNT) explosives. The "Fat Man"
plutonium bomb dropped on Nagasaki had the equivalent of about 20 to 22
kilotons of conventional explosives. The variance in numbers is based on
quotes from different sources.

2375. Re: The HIGHER the BETTER

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 07:17:15 UTC
From: David 01 <ifiwantspam@illask.org>
Message-ID: <1110k49lgbo3obb@corp.supernews.com>
Source record: 82114
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"Glenn" <aa5pk@hotmail.com> wrote in message
news:luTPd.8673$Ps.7054@okepread06...
> "Charlie" <charlie@earthlink.com> wrote in message
news:110vrhc5msu0l4e@news.supernews.com...
> > The HIGHER the BETTER !!!!
>
> That's always been the rule on VHF/UHF.
>
> 73 de Glenn AA5PK
>

UNLESS you're working through repeaters and live in the valleys of a mountainous area. Then you're working bounces and if you get too high (high off the ground, but not as high as the hilltops around you), you can get up out of the signal.

2376. Tv antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 07:22:19 UTC
From: Archer <alexberkman@comcast.net>
Message-ID: <1108365739.263431.66850@l41g2000cwc.googlegroups.com>
Source record: 82115

I have a Radio Shack roof top antenna, I bought about five years ago, it still works great.

It's a long range antenna, model vu 210, the best one they made, but they don't make it anymore.

I had a similar antenna about thirty years ago, it seemed to have a longer range

I lived in rural upstate New York lots of mountains, but I could get stations as far away as 141 miles, namely Ottawa and stations 75 miles away like Montreal.

But here in the Chicago area flat terrain and the same hight, I get Milwaukee very clear, but nowhere near the range I got years ago.

I have a theory, that it might be that the flat 300 ohm wire used in those days had better reception, and I know a lot more interference.

Right now I am using rg6 quadshield cable and have a high end booster connected.

Is my theory correct about the wire?

2377. Re: Tv antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 10:01:13 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <ag96e2-oam.ln1@p400bob.lse.com.au>
Source record: 82116

A few possible reasons;

- 300 ohm ribbon certainly has less loss than RG6 but given you have a masthead preamp (booster) this is a mute point (The main idea of the preamp being to overcome line losses)
- The propogation conditions (inversions and bending etc) may have been better around NY than IL. Maybe the terrain helped too (eg knife edge) I wouldnt know though cause I am on the other side of the world!
- The general noise floor in the TV band has no doubt risen over the years with a lot more transmitters and general frequency use. In other words your TV may be able to resolve a low signal but it is blanked out by general band noise. We just did a test in the Melbourne CBD on the noise floor on VHF pager freqs. -76dBm was quite normal. The pagers work down to about -102dBm but with the noise that high are severely limited.

The noise floor problem is very hard to beat. You can point the antenna to reduce the noise from a known direction, using it to null interference rather than get max signal from the TV transmitter. Of course if the noise is all around you you are kind of stuffed!

- Your masthead preamp maybe being overloaded by strong signals and swamping the TV receiver. This will also serve to reduce the apparent sensitivity.

Selecting a preamp with good dynamic range or tuning specific to the station you want to watch may help. Realise though that these are commercial devices priced accordingly. If it has the capability try reducing the gain of the preamp and see if it improves things. You may also be able to purpose build an antenna for a particular frequency (tuned for gain and f/b etc) but this may not actually help. It all depends on how important it is to you!

Cheers Bob VK2YQA

Archer wrote:
> I have a Radio Shack roof top antenna, I bought about five years ago,
> it still works great.
>
> It's a long range antenna, model vu 210, the best one they made, but
> they don't make it anymore.
>
> I had a similar antenna about thirty years ago, it seemed to have a
> longer range
>
> I lived in rural upstate New York lots of mountains, but I could get
> stations as far away as 141 miles, namely Ottawa and stations 75 miles

> away like Montreal.
>
> But here in the Chicago area flat terrain and the same hight, I get
> Milwaukee very clear, but nowhere near the range I got years ago.
>
> I have a theory, that it might be that the flat 300 ohm wire used in
> those days had better reception, and I know a lot more interference.
>
> Right now I am using rg6 quadshield cable and have a high end booster
> connected.
>
> Is my theory correct about the wire?
>

2378. Re: Tv antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 13:22:00 UTC
From: Tom Ring <news0001@taring.org>
Message-ID: <4210a5bb$0$38728$39cecf19@news.twtelecom.net>
Source record: 82117

Archer wrote:
> I have a Radio Shack roof top antenna, I bought about five years ago,
> it still works great.
>
> It's a long range antenna, model vu 210, the best one they made, but
> they don't make it anymore.
>
> I had a similar antenna about thirty years ago, it seemed to have a
> longer range
>
> I lived in rural upstate New York lots of mountains, but I could get
> stations as far away as 141 miles, namely Ottawa and stations 75 miles
> away like Montreal.
>

I also used to live in NNY, Potsdam, and did quite a bit of 2m and 6m weak signal work, as well as the obligatory FM. The St Lawrence Valley plus the ducting from all the moisture from Lake Ontario are most of what you were seeing. You could often trip the Watertown W2WLR repeater from Ottawa with a handheld in a modestly tall building, say 4 stories. Ottawa (CHEZ ?) and Montreal (CHOM, as I remember) FM broadcast were audible over all of St Lawrence County, and well into Jefferson County most of the time on a car radio.

Tom
K0TAR

2379. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 13:24:26 UTC
From: richardharrison@webtv.net
Message-ID: <11820-4210A68A-303@storefull-3257.bay.webtv.net>
Source record: 82118

Graywolf wrote:
"To quibble a bit more, the "Little Boy" uranium atomic bomb dropped on Hiroshima weighed about 4 or 5 tons and was the equivalent of about 10 to 15 hilotons of conventional (TNT) explosives."

That`s about 3000 times more powerful. Sorry I exagerated in ignorance. Atomic bombs took destruction to a new level.

Best regards, Richard Harrison, KB5WZI

2380. Re: IP3 calculation and estimation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 14:44:32 UTC
From: Crazy George <munsch@atglobal.net>
Message-ID: <4210bc70_2@news1.prserv.net>
Source record: 82120

Jason:

Now that you have been directed to the theoretical discussion, let me alert you to some of the practical problems in
doing these measurements. Because of the very nature of the effect to be measured, the dynamic range required of the
test equipment approaches and sometimes exceeds the limits of even the very most expensive laboratory equipment.
Getting accurate measurements using average grade equipment requires a lot of caution, novel approaches, and it is often
simply not possible to make measurements with accuracy and repeatability of better then +/- 3 dB. Some quick examples:
power summers (dividers) are non-linear, intermodulation occurs in the most unexpected places, filters are either too
lossy or too broad, and so on.

--
Crazy George

the ATTGlobal.net is a SPAM trap. Use the att dot biz account.
"Jason" <cheanglong@gmail.com> wrote in message
news:1108340627.853010.271650@c13g2000cwb.googlegroups.com...
> Hello All(Airy, Caveat, Frank, Richard...)
>
> Thank you for all the comments and advices given.
> Do allow me some time to check that application notes out before
> posting back to you .
> I hope we can discuss more sooner
> Kindly be patient
>
> Thank you all
>
> best rgds and thanks
> Jason
>

2381. Millen 90672

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 15:12:29 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <xd3Qd.9576$D34.6579@newssvr12.news.prodigy.com>
Source record: 82121
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

I was looking for one of these for years and finally found one in excellent condition. I put a pic up at alt.binaries.pictures.radio.

--

73
Hank WD5JFR

2382. Re: Small loops for reception

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 16:02:05 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <VZ3Qd.21617$XB1.18838@fe09.lga>
Source record: 82119

Thank you for the comment about power line noise. Fortunately I live in an area with underground power. There can still be problems, of course, but single-point power arcing *usually* has a fairly distinctive sound.

Several direct replies to me indicate that other people have had the same experience that low-band noise is greater now than in the good old days. Perhaps it is simply the cumulative effect of many small sources.

Implied in my question about small receiving loops is whether they are less sensitive to this type of noise. (A dipole is often less sensitive to noise than a vertical when storms are around; is there a somewhat similar noise rejection effect with small loops?)

I realize that a small loop will produce lower level output than a larger loop (or other antenna) but, provided the S/N is good then either the receiver gain or a front end amplifier should take care of the level.

I am not attempting to compare a loop with a Beverage or other exotic antennas. I am attempting to compare it with a relatively low dipole or a simple vertical.

Thus far, replies indicate that basement operation is not very practical and that elevation does not help much.
Does anyone have A:B comparisons with simple dipoles and verticals?
Subjective comparisons are fine if they are based on real experiences.

Bill
W2WO

"flashback" <ndcoder@srt.com> wrote in message
news:110qkf01ecgkqfe@corp.supernews.com...
> I found this same situation when I went to get on low band after 40 years
> away from it.
>
> I found that what sounded like natural background noise was not natural.
>
> With a suggestion from a ham in Wisconsin, I found several insulators on
> power poles near my home arcing. You can find these poles with a simple
> battery powered am radio. Go back at night after you find a noisy one and
> use binoculars to see the actual arcing. Now you can call the power
company
> and point out the bad insulator. This worked for me.
>
> I have a 60 foot random wire antenna and it is very quiet now. Putting up
a
> loop will not fix the noisy insulators.

> BTW these insualtors arc more in damp weather than when it is dry.
>
> Michael
>
>
> "Bill Ogden" <wogden@attglobal.net> wrote in message
> news:qE9Pd.9498$Lu7.6995@fe09.lga...
> > For the first time in many years I have been listening a lot on the low
> > bands (160/80/40). It seems there is much more background noise than
when
> > I
> > was in my teens, but that may be my selective memory at work. I am in
the
> > far suburbs trying to use a half-sloper and an inverted V -- both with
the
> > peak at about 53 feet. I think most of the noise is "natural" (except
for
> > a
> > 15Khz harmonic every now and then.)
> >
> > I started reading about small loops for receiving on 160 and 80. In
> > particular I have been reading about:
> >
> > (1) the 4-turn loop on 4-foot cross arms (W1FB),
> > (2) the 4-turn coax loop (in a 9-inch diameter) (W1FB),
> > (3) an 18-inch ferrite rod unit described by G2BZQ
> >
> > All of these were described as better receiving antennas "in the house"
> > than
> > the authors' more conventional outside antennas. W1FB thought the
9-inch
> > loop was better than the 4-foot unshielded loop and apparently did not
> > think
> > much of ferrite-stick antennas.
> >
> > What is the experience of those on this newsgroup? Are these antennas
> > really better (in the house, and even in the basement) than conventional
> > outdoor antennas? Are they significantly better when used outside and
> > perhaps elevated a bit? I realize they are inconvenient because they
must
> > be tuned even for small frequency changes. It seems they are very
> > directional for nulls but fairly broad for other responses. Is the same
> > loop
> > good for 160 and 80 (and maybe even 40)?
> >
> > Bill
> > W2WO
> >
> >
>

>

2383. Re: Tv antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 16:40:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fvk111l015qle22tuc1f715agbonpl674t@4ax.com>
Source record: 82024

On 13 Feb 2005 23:22:19 -0800, "Archer" <alexberkman@comcast.net>
wrote:
>But here in the Chicago area flat terrain and the same hight, I get
>Milwaukee very clear, but nowhere near the range I got years ago.

Hi OM,

Those transmitters in NY and Canada were also on mountains.

>Is my theory correct about the wire?

Seems unlikely. If anything, the quality would have been worse in
"the good ol' days."

73's
Richard Clark, KB7QHC

2384. Re: The HIGHER the BETTER

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 16:47:52 UTC
From: Buck <iam@this.site>
Message-ID: <8el111trj1vusslu9digm50nej3u9fm4v7@4ax.com>
Source record: 82023
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

On Mon, 14 Feb 2005 02:17:15 -0500, "David 01"
<ifiwantspam@illask.org> wrote:

>UNLESS you're working through repeaters and live in the valleys of a
>mountainous area. Then you're working bounces and if you get too high (high
>off the ground, but not as high as the hilltops around you), you can get up
>out of the signal.
>

One can also have a problem with height if the get so high as to key
multiple repeaters on a common frequency. While this is more commonly
a problem with aeronautical mobile stations, it also happens around
here for stations on hills between several repeaters or whose beams
line up with more than one repeater.

Buck

Buck
--
For what it's worth.

2385. Re: Tv antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 17:36:00 UTC
From: Archer <alexberkman@comcast.net>
Message-ID: <1108402560.593957.297440@o13g2000cwo.googlegroups.com>
Source record: 82025

remember) FM broadcast were
audible over all of St Lawrence County, and well into Jefferson County
most of the time on a car radio.

Yes that is true, I used to get great fm on rabbit ears now I live
outside
Chicago and use the above mentioned antenna for fm also,

2386. Re: The HIGHER the BETTER

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 17:40:12 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <ufo1111ofiufae2bfq9j4phinr8dnug72i@4ax.com>
Source record: 82022
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

On Mon, 14 Feb 2005 11:47:52 -0500, Buck <iam@this.site> wrote:

>On Mon, 14 Feb 2005 02:17:15 -0500, "David 01"
><ifiwantspam@illask.org> wrote:
>
>
>>UNLESS you're working through repeaters and live in the valleys of a
>>mountainous area. Then you're working bounces and if you get too high (high
>>off the ground, but not as high as the hilltops around you), you can get up
>>out of the signal.
>>
>One can also have a problem with height if the get so high as to key
>multiple repeaters on a common frequency. While this is more commonly
>a problem with aeronautical mobile stations, it also happens around
>here for stations on hills between several repeaters or whose beams
>line up with more than one repeater.
>
I have run into this when hiking, and operating from various summits.
I keyed up a repeater in Boston from the summit of Mt. Monadnock
(southern NH) and also got a repeater on the same frequency in CT.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

2387. Re: 2m Antenna for Pickup

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 18:20:59 UTC
From: antenna_dude <antenna_dude@nospam.com>
Message-ID: <4210EC08.D90BD01F@nospam.com>
Source record: 82026

Hi,

Here are a few links for you,

Build this one for a few dollars or free if you have the items at the shop.

http://www.eham.net/articles/7005

http://www.ac6v.com/antprojects.htm#2M

for coax, rg-58 just fine for short run in the truck,
just run the coax out the back of the cab same way
the taillight wires pass from the back of the cab at
the rubber gromet.

Mount the antenna on a 2x4 and slip in in the stake pocket.
Take it down or perhaps the xyl won't notice it ! ha ha.

Welcome to 2m !

dude

2388. cartoon Martian antennas: practical?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 18:31:07 UTC
From: Dan Jacobson <jidanni@jidanni.org>
Message-ID: <878y5r8044.fsf@jidanni.org>
Source record: 82031

What about those antennas atop the heads of cartoon Martians: rabbit ears shishkabobing hula hoops, i.e., spikes with rings floating along them. What good might they be as antennas? Sorry no graphic handy.

2389. mountains reflect signal anyway?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 18:39:50 UTC
From: Dan Jacobson <jidanni@jidanni.org>
Message-ID: <874qgf7zpl.fsf@jidanni.org>
Source record: 82030

The setting: city to the west, mountains to the east. For 2 meter transmissions, should one feel bad that half the coverage area of ones vertical antenna is wasted on unpopulated mountains, or might the mountains reflect most of the signal anyway, especially if right east of us is an idealized vertical mountain wall? Thus no hurry to upgrade to a yagi?

2390. 5/8 wave 6m vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 19:01:26 UTC
From: pdrunen@aol.com
Message-ID: <1108407686.522329.318180@g14g2000cwa.googlegroups.com>
Source record: 82027

Hi Group,

I have a older 5/8 wave 6m vertical base antenna. It has a tuning ring down at the bottom for SWR adjustment and it does not have any radials.

Anyone know who the manufacturer and model number?

Also, the fact that it does not have radials an issue? Should I add them?

The SWR is pretty good.

de KJ4UO

2391. Re: 5/8 wave 6m vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 19:17:16 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <0P6Qd.31156$xt.8687@fed1read07>
Source record: 82028

I suspect you have a Cushcraft 6M 1/2 wave AR-6 Ringo

If so the manual is on their site
http://www.cushcraft.com/support/pdf/951285.pdf

And NO don't add radials for this model -- it is self contained

--
Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?

<pdrunen@aol.com> wrote in message
news:1108407686.522329.318180@g14g2000cwa.googlegroups.com...
> Hi Group,
>
> I have a older 5/8 wave 6m vertical base antenna. It has a tuning ring
> down at the bottom for SWR adjustment and it does not have any radials.
>
> Anyone know who the manufacturer and model number?
>
> Also, the fact that it does not have radials an issue? Should I add
> them?
>
> The SWR is pretty good.
>
> de KJ4UO
>

2392. Re: 5/8 wave 6m vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 19:36:34 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <657Qd.26$OU1.22@newssvr21.news.prodigy.com>
Source record: 82029

BINGO! And, because it is essentually an end fed dipole, it
does not require radials for a counter-poise. As info, Jim NN7K

Caveat Lector wrote:
> I suspect you have a Cushcraft 6M 1/2 wave AR-6 Ringo
>
> If so the manual is on their site
> http://www.cushcraft.com/support/pdf/951285.pdf
>
> And NO don't add radials for this model -- it is self contained
>

2393. Confused About Noise Floor and Sensitivity

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 20:02:01 UTC
From: Al <ABurzynski@nojunk.satx.rr.com>
Message-ID: <Zs7Qd.56315$uL5.24565@fe2.texas.rr.com>
Source record: 82032

In QST Jan 2000 the ARRL published some specifications about receivers including the Icom R75. Regarding the R75 it stated that the Noise Floor (mds) is -130dBm under certain specific conditions. It also states that the AM Sensitivity, 10dB (S + N)/N, under the same conditions is 1.7uV.

I am trying to equate the two specs into the same units. -130dBm is equal to 0.071uV; 1.7uV is equal to -102.5dBm. That is a difference of 27.5dB.

It is my understanding (and this is where the fault probably lies) that 10dB above the noise floor should put the signal at -120dBm, which is 0.22uV not 1.7uV. They are putting the signal at -102.5dBm. Where is the extra 17.5dB loss coming from? Doesn't 10dB (S + N)/N mean 10dB above the noise?

All input is greatly appreciated. Thank you.

Al KA5JGV

2394. Re: 5/8 wave 6m vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 20:06:25 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <5x7Qd.31184$xt.22259@fed1read07>
Source record: 82033

Very good -- neat antenna -- I have worked 48 states with it -- have Alaska
and Hawaii still need AR and KY (:-)
Some caribbean DX also
Some F-Layer skip but mostly sporadic E

--
Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?

"Jim - NN7K" <nn7kexk7zfg@NOSPAMsbcglobal.net> wrote in message
news:657Qd.26$OU1.22@newssvr21.news.prodigy.com...
> BINGO! And, because it is essentually an end fed dipole, it
> does not require radials for a counter-poise. As info, Jim NN7K
>
>
> Caveat Lector wrote:
>> I suspect you have a Cushcraft 6M 1/2 wave AR-6 Ringo
>>
>> If so the manual is on their site
>> http://www.cushcraft.com/support/pdf/951285.pdf
>>
>> And NO don't add radials for this model -- it is self contained
>>

2395. Re: Automatic vs. Manual Tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 20:11:56 UTC
From: Dee Flint <deeflint01@comcast.net>
Message-ID: <kLSdnbRREMY8j4zfRVn-hg@comcast.com>
Source record: 82040

"Bill Brannick" <wmlb@sbcglobal.net> wrote in message
news:5u3211pd6q94pm6djl2ce164qp4a218um5@4ax.com...
>I was wondering, aside from the obvious , what the trade-offs might be
> between a moderately priced manual tuner (example: Palstar AT1KM) and
> a auto tuner such as the LDG AT-100 Pro or the soon to be released
> AT-200 Pro
>
> I guess it is obvious that you have more control with the manual tuner
> and are more likely to achieve a match with minimal inductance..(or
> losses)
>
> Not famliar enough with these auto tuners to know if that try to
> replicate a low-loss match that you can genarally achieve with a
> manual tuner or not.....
>
> Would appreciate any helpful comments
>
>

Manual tuners tend to have a much wider range of conditions under which they
can achieve a match.

Dee D. Flint, N8UZE

2396. Re: Tv antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 20:15:53 UTC
From: Archer <alexberkman@comcast.net>
Message-ID: <1108412153.860193.320420@f14g2000cwb.googlegroups.com>
Source record: 82034

Seems unlikely. If anything, the quality would have been worse in
"the good ol' days."

True it probably wasn't as good as I remember it, after all the picture
was black and white, and I settled for less back then.

Even now when I watch video tapes I recorded twenty years ago, before
cable. I could not believe I settled for that kind of reception.

But I do remember getting a strong signal from stations far away, the
only time I get that now is when there is a thunderstorm in the area.

I have had cable since 1990, Iove the technology of tv, not
necessarily the programming that is on it, that is why am messing
around with antennas and so on.

I primarily use it for fm and back up if cable goes off.

2397. FA: Z-11 Auto Tuner and Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 20:24:11 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <LN7Qd.554$9J5.153@newsread2.news.atl.earthlink.net>
Source record: 82035

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5751900870&ssPageName=ADME:B:LC:US:1

2398. Re: mountains reflect signal anyway?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 20:38:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pu221152tiv79otm250co5qkeq7ukd4eri@4ax.com>
Source record: 82036

On Tue, 15 Feb 2005 02:39:50 +0800, Dan Jacobson <jidanni@jidanni.org>
wrote:

>The setting: city to the west, mountains to the east. For 2 meter
>transmissions, should one feel bad that half the coverage area of ones
>vertical antenna is wasted on unpopulated mountains, or might the
>mountains reflect most of the signal anyway, especially if right
>east of us is an idealized vertical mountain wall? Thus no hurry to
>upgrade to a yagi?

Hi Dan,

That's how it works here in Seattle for some. We have a lot of hills
that hide repeater antennas. We also have a lot of mountains that
reflect them (even from the opposite angle).

73's
Richard Clark, KB7QHC

2399. Re: Confused About Noise Floor and Sensitivity

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 20:49:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ei3211pk3fp95m8lkiisq0u4aa35kbvdu3@4ax.com>
Source record: 82037

On Mon, 14 Feb 2005 20:02:01 GMT, "Al" <ABurzynski@nojunk.satx.rr.com>
wrote:
>-130dBm under certain specific conditions

Hi Al,

Using the 500 Hz filter (not normally used in AM reception).

Comparing apples and donuts.

73's
Richard Clark, KB7QHC

2400. Ameritron ARB-704 Photos and Schematics

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 20:51:49 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <11123rns68sej6d@news.supernews.com>
Source record: 82038
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

I installed this key line buffer today and photographed it inside and out. I scanned the schematic (which has component values) and posted everything on the following web page. Images and schematic are also available as a zipped download of about 1.3M.

1. http://www.ad5th.com/ARB-704.html

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

2401. Automatic vs. Manual Tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 21:02:51 UTC
From: Bill Brannick <wmlb@sbcglobal.net>
Message-ID: <5u3211pd6q94pm6djl2ce164qp4a218um5@4ax.com>
Source record: 82039

I was wondering, aside from the obvious , what the trade-offs might be between a moderately priced manual tuner (example: Palstar AT1KM) and a auto tuner such as the LDG AT-100 Pro or the soon to be released AT-200 Pro

I guess it is obvious that you have more control with the manual tuner and are more likely to achieve a match with minimal inductance..(or losses)

Not famliar enough with these auto tuners to know if that try to replicate a low-loss match that you can genarally achieve with a manual tuner or not.....

Would appreciate any helpful comments

2402. Re: mountains reflect signal anyway?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 21:08:33 UTC
From: dplatt@radagast.org
Message-ID: <11124qhpikig24c@corp.supernews.com>
Source record: 82041

>The setting: city to the west, mountains to the east. For 2 meter
>transmissions, should one feel bad that half the coverage area of ones
>vertical antenna is wasted on unpopulated mountains, or might the
>mountains reflect most of the signal anyway, especially if right
>east of us is an idealized vertical mountain wall? Thus no hurry to
>upgrade to a yagi?

My guess - the mountains reflect some of the signal, but in a rather unpredictable manner and with much of the energy being reflected upwards.

The mountain reflections might help fill in a few gaps in your coverage pattern. However, the reflections are likely to _hurt_ coverage in some areas, due to multipath interference with the direct (non-reflected) signal. You might find that your signal suffers from a greater amount of picket-fencing due to multipath, than it would if the mountains were not present or if the antenna's pattern didn't include the mountains. The more vertical (and the more reflective) the mountain wall is, the stronger the reflections, and perhaps the more pronounced the picket-fencing.

It might well be worth your while to experiment with a simple somewhat-directional antenna. A single reflector, located perhaps .1 to .2 wavelengths on the mountainside side (sorry :-) of your current vertical, cut to perhaps 5% longer than a half-wavelength, could be used to shape your antenna's pattern into something vaguely cardioid. This would send your transmit energy (and your receive sensitivity) where it will do you the most good. Play around with the antenna-to-reflector spacing and see what it does to your pattern.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

2403. Re: Small loops for reception

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 22:29:39 UTC
From: nm5k@wt.net
Message-ID: <1108420179.108306.23730@c13g2000cwb.googlegroups.com>
Source record: 82042

Bill Ogden wrote:
>
>
> Implied in my question about small receiving loops is whether they
are less
> sensitive to this type of noise. (A dipole is often less sensitive
to noise
> than a vertical when storms are around; is there a somewhat similar
noise
> rejection effect with small loops?)

No. Actually, I don't even agree that a dipole is any quieter than
a vertical. It just depends on the polarization of the noise which
is best...You'll get about a 20 db attenuation of any signal, if the
polarization is 90 degrees out from another antenna....

>
> I realize that a small loop will produce lower level output than a
larger
> loop (or other antenna) but, provided the S/N is good then either the
> receiver gain or a front end amplifier should take care of the level.

There is no magic noise reduction using a small loop in general. But
you will see a tighter bandwidth compared to a larger antenna, and that

can act to reduce some noise. The Q will depend on the dia of the wire,
etc..
The real advantage to a small loop is it's sharp nulls, and the ability
to set it up to be easily turned. I suppose you could use very small
dipoles,
or verticals as the elements, but I don't see any change in s/n between

them. Naturally, the verticals would need some kind of phasing device
to
steer...You could turn the mini dipole indoors I suppose..."pre-amp
needed
I would think". But I don't know which would have the sharper nulls,
the
small dipole, or the small loop. In theory, I don't think should be
that
much difference...A larger small loop does have a better s/n ratio than
a
smaller, small loop, but you have to be in a quiet QTH to take
advantage
of it...IE: the lower the atmospheric and local noise, the more
advantage

to a larger loop. If the noise is high, IE: summer, often the smaller loops work about as well as the larger ones...
>
> I am not attempting to compare a loop with a Beverage or other exotic
> antennas. I am attempting to compare it with a relatively low dipole or a
> simple vertical.

Well, if you mean full size low dipoles, and verticals, of course, the nulls on the small loop would be much better, and more useful as far as

nulling a noise source.
>
> Thus far, replies indicate that basement operation is not very practical and
> that elevation does not help much.
> Does anyone have A:B comparisons with simple dipoles and verticals?

Sure...Do it all the time.....If I'm on MW, I prefer
the small loop over any of the usual wire antennas...
On 160, depends...There, I actually listen on my transmit antenna more than the small loops...IE: DX...DX will often come in better on a vertical, than the small loops, I think just due to the polarization...
My small loops are horizontal...IE: diamond, fed at the bottom...
I have an inv L, and also a top loaded vertical on 160, so it's probably not unusual to hear some dx better on those, than the loop.
I also have a Z dipole on 160....
My loops are mainly for MW and LW....On 160, it's a toss which is best...The loop is often good for ragchew listening...
MK

2404. Re: Antennas vs Antennae

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 23:39:47 UTC
From: "Percival P. Cassidy" <Nobody@NotMyISP.net>
Message-ID: <slaQd.19929$Sk2.4987@fe04.lga>
Source record: 82043

English Grammar is simpler than that of most European languages, but the total absence of rules for pronunciation is ridiculous. E.g., laughter, daughter; tough, through, cough, plough, though.

Perce

On 02/07/05 01:16 am Bill Turner tossed the following ingredients into the ever-growing pot of cybersoup:

> Some years ago I worked with a Brazilian-born gent who had lived in
> Europe and was then living in America. This fellow spoke seven
> languages. He observed that of all seven, English was the easiest to
> learn enough to get by, but the most difficult to master.
>
> Perhaps that is why English is the most-spoken second language in the
> world and at the same time, the most eloquent first language. (Bias
> showing, I admit).

2405. Re: The HIGHER the BETTER

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 23:42:34 UTC
From: David 01 <ifiwantspam@illask.org>
Message-ID: <1112drg4llojlf8@corp.supernews.com>
Source record: 82044
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"Gary S." <Idontwantspam@net> wrote in message
news:ufo1111ofiufae2bfq9j4phinr8dnug72i@4ax.com...
> On Mon, 14 Feb 2005 11:47:52 -0500, Buck <iam@this.site> wrote:
>
> >On Mon, 14 Feb 2005 02:17:15 -0500, "David 01"
> ><ifiwantspam@illask.org> wrote:
> > >
> > >
> > >>UNLESS you're working through repeaters and live in the valleys of a
> > >>mountainous area. Then you're working bounces and if you get too high
(high
> > >>off the ground, but not as high as the hilltops around you), you can get
up
> > >>out of the signal.
> > >>
> > >One can also have a problem with height if the get so high as to key
> > >multiple repeaters on a common frequency. While this is more commonly
> > >a problem with aeronautical mobile stations, it also happens around
> > >here for stations on hills between several repeaters or whose beams
> > >line up with more than one repeater.
> > >
> > I have run into this when hiking, and operating from various summits.
> > I keyed up a repeater in Boston from the summit of Mt. Monadnock
> > (southern NH) and also got a repeater on the same frequency in CT.
> >
> > Happy trails,
> > Gary (net.yogi.bear)
> > --
> > at the 51st percentile of ursine intelligence
> >
> > Gary D. Schwartz, Needham, MA, USA
> > Please reply to: garyDOTschwartzATpoboxDOTcom

Yeah, I experienced that too in 1991 on top of Mt Mitchell, NC, 6685 ft.
back when few repeaters used tone squelch. 5 watts and I made several people
angry in the southern states.

2406. Re: cartoon Martian antennas: practical?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-14 23:58:26 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <CWaQd.456$VI5.25@newsread3.news.atl.earthlink.net>
Source record: 82045

"Dan Jacobson" <jidanni@jidanni.org> wrote in message
news:878y5r8044.fsf@jidanni.org...
> What about those antennas atop the heads of cartoon Martians: rabbit
> ears shishkabobing hula hoops, i.e., spikes with rings floating along
> them. What good might they be as antennas? Sorry no graphic handy.

Outside of being cartoons, if you mount a vhf or above antenna on your hat
you will usually gain some range. If you put a HT on your belt the antenna
is against your body and use a speaker/mic most of the signal is abosrbed
you your body. By placing the antenna on your hat you gain height and don't
have your body in the way.

2407. Re: The HIGHER the BETTER

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 00:22:00 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <4uf211t06uqimq6tf079t27b2dipjip58a@4ax.com>
Source record: 82046
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

On Mon, 14 Feb 2005 18:42:34 -0500, "David 01"
<ifiwantspam@illask.org> wrote:

>"Gary S." <Idontwantspam@net> wrote in message
>news:ufo1111ofiufae2bfq9j4phinr8dnug72i@4ax.com...
>> >
>> I have run into this when hiking, and operating from various summits.
>> I keyed up a repeater in Boston from the summit of Mt. Monadnock
>> (southern NH) and also got a repeater on the same frequency in CT.
>>
>> Happy trails,
>> Gary (net.yogi.bear)

>Yeah, I experienced that too in 1991 on top of Mt Mitchell, NC, 6685 ft.
>back when few repeaters used tone squelch. 5 watts and I made several people
>angry in the southern states.
>
No one really angry, but a few people in Boston were confused when
they only heard my side of the conversation with the ham in CT,
although there was no other traffic on the Boston repeater. Only the
Boston repeater has tone, the other one doesn't.

I have also seen some areas deal with tone added for intermod control
by having all of the repeaters in the area (coastal Maine for example)
use the same CTSCC tone. This simplified things for hams with older
equipment.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

2408. FA: MFJ-949E DELUXE VERSA TUNER II - Ham Radio Antenna Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 00:35:06 UTC
From: Richard <r4@tgbs4thra.com>
Message-ID: <1402200519350655 88%r4@tgbs4thra.com>
Source record: 82047
Cross-posted to: alt.marketplace.online.ebay,rec.radio.amateur.antenna,rec.radio.amateur.equipment

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5752038810

2409. Re: 5/8 wave 6m vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 00:51:28 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <1108428688.761395.69120@l41g2000cwc.googlegroups.com>
Source record: 82048

Caveat Lector wrote:
> I suspect you have a Cushcraft 6M 1/2 wave AR-6 Ringo
>
> If so the manual is on their site
> http://www.cushcraft.com/support/pdf/951285.pdf
>
> And NO don't add radials for this model -- it is self contained

Except for the beads on the feedline. Ringos are *notorious* for
feedline radiation.

w3rv

>
> --
> Caveat Lector (Reader Beware)
> Help The New Hams
> Someone Helped You
> Or did You Forget That ?
>
>
>
> <pdrunen@aol.com> wrote in message
> news:1108407686.522329.318180@g14g2000cwa.googlegroups.com...
> > Hi Group,
> >
> > I have a older 5/8 wave 6m vertical base antenna. It has a tuning
ring
> > down at the bottom for SWR adjustment and it does not have any
radials.
> >
> > Anyone know who the manufacturer and model number?
> >
> > Also, the fact that it does not have radials an issue? Should I
add
> > them?
> >
> > The SWR is pretty good.
> >
> > de KJ4UO
> >

2410. Hook up

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 01:03:47 UTC
From: gcotterl@co.riverside.ca.us
Message-ID: <1108429427.680239.306450@l41g2000cwc.googlegroups.com>
Source record: 82049

What is the best way to hook up:

a new, regular TV antenna (not dish or cable)
an antenna-signal amplifier
a 25-year old TV set
a new DVD player
a new VCR?

2411. Re: Hook up

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 01:17:33 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <42114d35.35360004@news.crosslink.net>
Source record: 82050

On 14 Feb 2005 17:03:47 -0800, gcotterl@co.riverside.ca.us wrote:

>What is the best way to hook up:
>
>a new, regular TV antenna (not dish or cable)
>an antenna-signal amplifier
>a 25-year old TV set
>a new DVD player
>a new VCR?
>

You could use RG-59 for everything except the DVD player - that could
use either composite, component or S-video.
Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

2412. Re: Hook up

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 01:22:57 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <e8cQd.328$dr2.57@bignews6.bellsouth.net>
Source record: 82051

wires and duct tape

"W9DMK (Robert Lay)" <nobody@crosslink.net> wrote in message
news:42114d35.35360004@news.crosslink.net...
> On 14 Feb 2005 17:03:47 -0800, gcotterl@co.riverside.ca.us wrote:
>
> >What is the best way to hook up:
> >
> >a new, regular TV antenna (not dish or cable)
> >an antenna-signal amplifier
> >a 25-year old TV set
> >a new DVD player
> >a new VCR?
> >
>
> You could use RG-59 for everything except the DVD player - that could
> use either composite, component or S-video.
> Bob, W9DMK, Dahlgren, VA
> Replace "nobody" with my callsign for e-mail
> http://www.qsl.net/w9dmk
> http://zaffora/f2o.org/W9DMK/W9dmk.html
>

2413. Re: Hook up

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 01:26:20 UTC
From: Archer <alexberkman@comcast.net>
Message-ID: <1108430780.079503.125250@l41g2000cwc.googlegroups.com>
Source record: 82052

Since you don't have audio video inputs on your tv you need and rf
converter
here is a link for what you need and details of how it works. It's
about 50 dollars but worth it.

http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F003%5F010%5F011%5F000&product%5Fid=15%2D1988

2414. Re: The HIGHER the BETTER

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 02:05:33 UTC
From: Glenn <aa5pk@hotmail.com>
Message-ID: <NNcQd.8786$Ps.3659@okepread06>
Source record: 82053
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"David 01" <ifiwantspam@illask.org> wrote in message
news:1110k49lgbo3obb@corp.supernews.com...
>
> "Glenn" <aa5pk@hotmail.com> wrote in message
> news:luTPd.8673$Ps.7054@okepread06...
>> "Charlie" <charlie@earthlink.com> wrote in message
> news:110vrhc5msu0l4e@news.supernews.com...
>> > The HIGHER the BETTER !!!!
>>
>> That's always been the rule on VHF/UHF.
>>
>> 73 de Glenn AA5PK
>>
> UNLESS you're working through repeaters and live in the valleys of a
> mountainous area. Then you're working bounces and if you get too high (high
> off the ground, but not as high as the hilltops around you), you can get up
> out of the signal.

He did say he was operating SSB.

2415. Re: 5/8 wave 6m vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 02:26:39 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <t1dQd.259$II2.82@bignews5.bellsouth.net>
Source record: 82054

Sounds like a Ringo Ranger

<pdrunen@aol.com> wrote in message
news:1108407686.522329.318180@g14g2000cwa.googlegroups.com...
> Hi Group,
>
> I have a older 5/8 wave 6m vertical base antenna. It has a tuning ring
> down at the bottom for SWR adjustment and it does not have any radials.
>
> Anyone know who the manufacturer and model number?
>
> Also, the fact that it does not have radials an issue? Should I add
> them?
>
> The SWR is pretty good.
>
> de KJ4UO
>

2416. Re: The HIGHER the BETTER

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 02:37:27 UTC
From: David 01 <ifiwantspam@illask.org>
Message-ID: <1112o3am817s7c2@corp.supernews.com>
Source record: 82055
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"Glenn" <aa5pk@hotmail.com> wrote in message
news:NNcQd.8786$Ps.3659@okepread06...
> "David 01" <ifiwantspam@illask.org> wrote in message
news:1110k49lgbo3obb@corp.supernews.com...
> >
> > "Glenn" <aa5pk@hotmail.com> wrote in message
> > news:luTPd.8673$Ps.7054@okepread06...
> >> "Charlie" <charlie@earthlink.com> wrote in message
> > news:110vrhc5msu0l4e@news.supernews.com...
> >> > The HIGHER the BETTER !!!!
> >>
> >> That's always been the rule on VHF/UHF.
> >>
> >> 73 de Glenn AA5PK
> >>
> > UNLESS you're working through repeaters and live in the valleys of a
> > mountainous area. Then you're working bounces and if you get too high
(high
> > off the ground, but not as high as the hilltops around you), you can get
up
> > out of the signal.
>
> He did say he was operating SSB.
>
>

Yes he did and you just made a broad statement concerning VHF/UHF. That was
the statement I commented about.

2417. Re: Extending Icom AH-4 tuner control cable

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 03:24:01 UTC
From: Ivan Makarov <miv@hotmail.com>
Message-ID: <VMudneVWEOOi9ozfRVn-oA@rogers.com>
Source record: 82056

Jon,

I bet what you experiencing now is stray RF triggering either the tuner or the radio. Because 706 has CMOS at its control circuits, this does not have to be a strong RF signal, may be your local broadcast station or your 802.11 router will induce enough energy into the cable to trigger the circuit. If you removed the ferrite beads from your cable, put them back on. To improve noise suppression make a turn or two through the beads. If the hole diameter is not big enough, put one more bead. Locate the beads near the unit. If you can not replace your TP cable with a shielded one, I would suggest to connect one wire of each TP to the ground. You asked how come the Ethernet works fine with TP - you can not compare these things. Ethernet transciever may use differential input amplifiers which supress common mode noise by design, noise-immune modulation and different voltage swing. In your case it is a single ended control wire, so all induced noise will get inside the radio. If you can, put 0.01 uF bypass capacitors from the control wires to the ground at the transciever side. I read AH-4 has chokes inside, so concentrate youe efforts on the transciever side. The transciever may also have some noise supressors inside, but people's experience with the remote head control cable shows they are not effective enough. Sometimes Icom does weird things. One of them is about the remote head control cable, First, at the remote head side its shield is not connected to anything. Second, at the transciever side, its shield is electrically connected to the enclosure through a black oxidized screw, which , if not tightened enough, works as an insulator, because it is made of an oxideized material. Look at yours by the way. I replace that screw with a stainless steel one. This is the thing to look at if you use the head remotely. When the head is sitting at the unit, it works OK. Sorry for a bit of an off-topic..

Good luck with your troubleshooting,
Ivan
--

"Jon Gauthier (KB1HTW)" <kb1htw!@!arrl.net> wrote in message
news:cuj4ls$e9c$1@newslocal.mitre.org...
> When all else fails, start at the beginning.
>
> Found the problem. Cold solder joint on the PL-259 failed in the
feedline -
> obviously due to temperature swings, since I solder perfect connections
> every time. Yeah, and the pope's Protestant...
>
> Fixed it and now it works - almost. Twice now, a few minutes after it
tuned,
> my radio by itself would key the transmit - both times while I was not

even
> near it! I had to shut down power to kill it! Oh well, one more problem to
> troubleshoot!
>
>
> "Jon KB1HTW" <kb1htw!@!arrl.net> wrote in message
> news:ctrc1h$21f$1@newslocal.mitre.org...
> >I need to extend the control cable for my AH-4 tuner. I have lots of Cat
5
> >Ethernet cable. The four leads to the tuner are Key, Start, +13.8Vdc, and
> >Ground. I initially hooked up each to each of the four pairs in the
> >Ethernet cable (i.e., Key to Blue/Blue-White). My thinking was parallel
> >each pair so I have less current loss, but I think I blew the capacitance
> >out of the water and the Key/Start pulses are getting smeared along the
> >100+ foot run.
> >
> > What's the best way to wire things up so to the twisted pairs so any RFI
> > gets nulled out? Ground to each of the 4 White leads, and Key to say
Blue,
> > Start to Green, and +13.8V to Orange? That way each twisted pair would
> > have a "signal" and ground. Or I could use the Brown for Ground, and
> > connect the AH-4 factory cable's shield to the four white leads. Which
is
> > the preferred route for minimizing RFI or cable capacitance affecting
the
> > Start/Key pulse signals?
> >
> > Jon - KB1HTW
> >
>
>

2418. Re: Hook up

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 03:40:40 UTC
From: Rick Frazier <rickf@rickfrazier.com>
Message-ID: <42116FB9.5618654@rickfrazier.com>
Source record: 82057

Here's how I've had them hooked up at my QTH:

Assuming sufficient signal strength at the antenna for decent picture to begin with:

RG6 or RG59 cable connects to TV antenna via weatherproof transformer. Other end of Cable feeds the VCR (Antenna Input), with the DVD player feeding the VCR via the analog composite video and audio signals (rca jacks marked composite input or Aux. Red/white are audio, yellow is video)

Output of the VCR (marked TV) feeds the antenna signal amplifier, which has a splitter (or multiple outlets) that feed cables to local TV set and several other rooms.

Works great. Local channels can be tuned by VCR and sent out on Channel 3 or 4, or Passed through for each set to choose it's own channel. In VCR mode, you can select the Aux Video and the DVD plays on the TV. With a splitter after (or part of the amplifier) every TV in the house sees the same signal, so with multiple sets on, you can move from room to room and not miss much of your "favorite" program.

If you are in a "far fringe" area, and signal strength at the antenna isn't all that great, you may also need along with having an antenna mounted signal amplifier between the antenna and the cable (at the antenna end). This will mean you also have a power injector (part of the remote signal amplifier) before the VCR. However, bear in mind that if you don't have a good signal to begin with, you will be amplifying noise along with the signal and you may not get much better than without the remote amplifier. In this case, you really need to get a satellite dish and subscribe to local networks if you can.

gcotterl@co.riverside.ca.us wrote:

> What is the best way to hook up:
>
> a new, regular TV antenna (not dish or cable)
> an antenna-signal amplifier
> a 25-year old TV set
> a new DVD player
> a new VCR?

2419. Re: Hook up

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 03:47:17 UTC
From: Archer <alexberkman@comcast.net>
Message-ID: <1108439237.205959.141900@z14g2000cwz.googlegroups.com>
Source record: 82058

It is not a good idea to to connect the dvd player through the input of the vcr, many dvd's are copyguarded which creates a bad picture, when played via the vcr inputs.
U

2420. Confused About Noise Floor and Sensitivity

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 04:04:32 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_42117dde@fidonet.org>
Source record: 82063

"Al" bravely wrote to "All" (14 Feb 05 20:02:01)
--- on the heady topic of "Confused About Noise Floor and Sensitivity"

Al> From: "Al" <ABurzynski@nojunk.satx.rr.com>
Al> Xref: aeinews rec.radio.amateur.antenna:5148

Al> In QST Jan 2000 the ARRL published some specifications about receivers
Al> including the Icom R75. Regarding the R75 it stated that the Noise
Al> Floor (mds) is -130dBm under certain specific conditions. It also
Al> states that the AM Sensitivity, 10dB (S + N)/N, under the same
Al> conditions is 1.7uV.
Al> I am trying to equate the two specs into the same units. -130dBm is
Al> equal to 0.071uV; 1.7uV is equal to -102.5dBm. That is a difference of
Al> 27.5dB.
Al> It is my understanding (and this is where the fault probably lies)
Al> that 10dB above the noise floor should put the signal at -120dBm,
Al> which is 0.22uV not 1.7uV. They are putting the signal at -102.5dBm.
Al> Where is the extra 17.5dB loss coming from? Doesn't 10dB (S + N)/N
Al> mean 10dB above the noise?
Al> All input is greatly appreciated. Thank you.

Al> Al KA5JGV

I think it's a typo I calculated 0.775uV not 1.7uV. They might have
added a 1 in front of the decimal instead of a zero.

A*s*i*m*o*v

2421. Re: cartoon Martian antennas: practical?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 04:18:32 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421178cf$1_2@127.0.0.1>
Source record: 82059

Ralph Mowery wrote:
> Outside of being cartoons, if you mount a vhf or above antenna on your hat
> you will usually gain some range. If you put a HT on your belt the antenna
> is against your body and use a speaker/mic most of the signal is abosrbed
> you your body. By placing the antenna on your hat you gain height and don't
> have your body in the way.

I have an aluminum hard hat with a 1/4WL 2m antenna on top.
I've wondered how much RF my brain is getting.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2422. Re: copper plate antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 07:07:52 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <11137uf9upii79f@corp.supernews.com>
Source record: 82060

It will not work as a rediating antenna. I bet this setup could be incorporated into an antenna system somehow though. We have some pretty sharp dudes in this group so if it's possibel that it will assist some type of antenna, this is the place to monitor.

Butch Magee KF5DE

ml wrote:

> i just discovered a part of my roof which is flat, is covered with
> copper, it measures about 50ft by 75ft and soldered it's still new so
> it shows good w/my ohmmeter
>
> just wondering as it's not grounded, if i tried to tune this up w/my
> tuner , how effective would this by on hf??
>
>
> tnx

2423. Re: Henry Amps RIP

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 07:32:01 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <4211A571.2090803@cableone.net>
Source record: 82061

It matters if you are loosing millions EVERY year that rolls around.
You must be a democrat.

Butch KF5DE

Chuck K8CPA wrote:

> Hi Guys,
>
> I heard the news via the internet... and it's true. Henry amps are no
> more...:
>
> Here's the e-mail from Mr. Henry Himself:
>
> From: "Ted Henry" <henryradio@earthlink.net>
> To: "Chuck Adkins (K8CPA)" <**********@comcast.net>
> Subject: Re: Lost your Lease?
> Date: Thursday, February 10, 2005 12:23 PM
>
> There were about 15 reasons why we stopped - the primary reason was
> that the business has lost money for a number of years. The loss of
> the lease was about 5th down on the many reasons it made no sense to
> continue the business.
>
> Thanks for your interest.
>
> Ted Shannon Henry
>
> Ted Shannon
> HENRY RADIO, INC.
> 2050 South Bundy Drive Suite 285
> Los Angeles, CA 90025
>
> henryradio@earthlink.net
> www.henryradio.com
> eBay Store: http://stores.ebay.com/Henry-Radio
>
> 310-820-1234 ext 310
> 310-826-7790 FAX
>
> ----- Original Message -----
> From: Chuck Adkins (K8CPA)
> To: henryradio@earthlink.net
> Sent: Thursday, February 10, 2005 8:52 AM
> Subject: Lost your Lease?

>
>
> Hi Guys,
>
> why not just find another building? and Continue on?
>
> Makes no sense to stop.
>
> -Chuck K8CPA
>
>
>
>

2424. Re: Confused About Noise Floor and Sensitivity

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 08:15:43 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37dpjrF5bbvmuU1@individual.net>
Source record: 82062

The noise floor from Boltzmannian theory is, ISTR, -174dBm/Hz.

That is, per Hz of Bandwith.

Therefore, 3.4 kHz of BW will give you an increase of +35.3 dB,
giving you theoretical a noise floor of -138.7dBm, which you must
then degrade by the noise contributions from the RX itself.

"Al" <ABurzynski@nojunk.satx.rr.com> wrote in message
news:Zs7Qd.56315$uL5.24565@fe2.texas.rr.com...
> In QST Jan 2000 the ARRL published some specifications about receivers
> including the Icom R75. Regarding the R75 it stated that the Noise Floor
> (mds) is -130dBm under certain specific conditions. It also states that
the
> AM Sensitivity, 10dB (S + N)/N, under the same conditions is 1.7uV.

2425. Re: 5/8 wave 6m vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 11:14:55 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <v4m311t9mn9mjhavntkvfgqpl3e8ss0ril@4ax.com>
Source record: 82064

On 14 Feb 2005 11:01:26 -0800, pdrunen@aol.com wrote:

>Hi Group,
>
>I have a older 5/8 wave 6m vertical base antenna. It has a tuning ring
>down at the bottom for SWR adjustment and it does not have any radials.
>
>Anyone know who the manufacturer and model number?
>
>Also, the fact that it does not have radials an issue? Should I add
>them?
>
>The SWR is pretty good.
>
>de KJ4UO

If it is 10.1' long, it is probably the Cushcraft 6m 1/2 wave FM
Ringo, rated at 3 db & 1000 watts.

bob
k5qwg

2426. the right moves makeing money at the speed of the internet

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 13:01:25 UTC
From: topspeedlc3@yahoo.com
Message-ID: <1108472485.934436.298530@l41g2000cwc.googlegroups.com>
Source record: 82065

$$

Parents of 15 year old find $71,000 in CASH in closet!

$$

Does this headline look familiar? Of course it does. You most likely have just seen this story recently featured on a major nightly news program (USA).

His mother was cleaning and putting laundry away when she came across a large brown paper bag that was suspiciously buried beneath some clothes and a skateboard in the back of her son's closet. Nothing could have prepared her for the shock she got when she opened the bag and found it was full of cash. Five dollar bills, twenties, fifties and hundreds- all neatly rubber-banded in labeled piles. "My first thought was that he had robbed a bank", says the 41-year-old woman, "There was over $71,000 dollars in that bag- that's more than my husband earns in a year."

The woman immediately called her husband at the car-dealership where he worked to tell him what she'd discovered. He came home right away and they drove thogether to the boy's school and picked him up. Little did they suspect that where the money came from was more shocking than actually finding it in the closet.

As it turns out, the boy had been sending out via E-mail on the internet a type of 'chain-letter' to E-mail addresses that he obtained off of the internet. Everyday after school for the past 2 months, he had been doing this right on his computer in his bedroom.

"I just got the E-mail one day and I figured what the heck, I put my name on it like the instructions said and I started sending it out", says the clever 15-year-old.

The E-mail letter listed 3 addresses and contained instructions to send one $5 dollar bill to the person at the top of the list, then delete that address and move the other 2 addresses up, and finally to add your name to the bottom of the list. The letter goes on to state that you would receive several thousand dollars in 5$ dollar bills within 2 weeks if you sent out the letter with your name at the bottom of the 3-address list "I get junk E-mail all the time, and I really didn't think it was gonna work", the boy continues.

Within the first few days of sending out the E-mail, the Post Office Box that his parents had gotten for his video-game magazine subscriptions began to fill up with not magazines, but envelopes

containing $5 dollar bills. "about a week later I rode (my bike) down to the post office and my box had 1 magazine and about 300 envelopes stuffed in it. There was a yellow slip that said I had to go up to the (post office) counter- I thought I was in trouble or something (laughs)". He goes on, "I went up to the counter and they had a whole box of more mail for me. I had to ride back home and empty out my backpack 'cause I couldn't carry it all".

Over the next few weeks, the boy continued sending out the E-mail. "The money just kept coming in and I just kept sorting it and stashing it in the closet, I barely had time for my homework". He had also been riding his bike to several of the area's banks and exchanging the $5 bills for twenties, fifties and hundreds. "I didn't want the banks to get suspicious so I kept riding to different banks with like five thousand at a time in my backpack. I would usually tell the lady at the bank counter that my dad had sent me in (to exchange the money) and he was outside waiting for me. One time the lady gave me a really strange look and told me that she wouldn't be able to do it for me and my dad would have to come in and do it, but I just rode to the next bank down the street (laughs)".

Surprisingly, the boy didn't have any reason to be afraid. The reporting news team examined and investigated the so-called 'chain-letter' the boy was sending out and found that it wasn't a chain-letter at all. In fact, it was completely legal according to US Postal and Lottery Laws, Title 18, Section 1302 and 1341, or Title 18, Section 3005 in the US code, also in the code of federal regulations, Volume 16, Sections 255 and 436, which states a product or service must be exchanged for money received.

Every five dollar bill that he received contained a little note that read, "Please add me to your mailing list". This simple note made the letter legal because he was exchanging a service (adding the purchasers name to his mailing list) for a five dollar fee. Here is the letter that the 15-year-old was sending out by E-mail, you can do the exact same thing he was doing, simply by following the instructions in the letter.

Here are instructions on how to make $10,000 US cash in the next 2 weeks:

There are 3 addresses listed below.

Send the person at the top of the list a $5 bill wrapped in 2 pieces of paper (to securely hide it), along with a note that says: "Please add me to your list".

Then delete that name, move the other 2 up and put your name at the bottom.

Now start sending this ENTIRE E-mail back out to people. When 20
people receive it, those 20 people will move your name up to the
middle position and they will each send out 20. That totals 400
people that will receive this letter with your name in the middle.
Then, those 400 people will move your name to the top and they will
each sen you a $5 bill.

8,000 people each sending you a $5 bill = $40,000 cash. That's if
everyone responds to this E-mail, but not everyone will, so you can
expect more realistically to receive about $10,000 cash $5 bills in
your mailbox.

This will work for anyone, anywhere in the world in any country, but
send only a US CASH $5 bill.

The more E-mails you send out, the more cash you will receive. If
each person sends out 100 E-mails, there will be 1,000,000 people that
receive this letter when your name reaches the top. If only 1% of
those people respond, you will get $50,000 cash.

Here is the list:
---

1) A Wyrick
1628 Silverlake
Centerville, Oh 45458

2) Enrique Martinez
2427 N Avenue
National City, CA 91950

3)Lorenzo Sadler
3908 yorkland dr
comstockpark, 49321

THERE'S NOTHING MORE TO DO! When your name reaches the top in a few
days, you will start receiveing $5 bills from other people just like
yourself, who are willing to invest a $5 bill to receive $10,000 cash.

If you don't try it-you will never know!

Reply To This Message

2427. Building a cheap easy cb antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 13:56:13 UTC
From: stryped@hotmail.com
Message-ID: <1108475773.567070.263850@g14g2000cwa.googlegroups.com>
Source record: 82066

How would I go about making a cheap, easy cb antenna for a base station at my house? How far would it need to be from my 2 meter antenna?

Could I make a whip by cutting an aluminum 3/8 rod to a 1/4 wave and thread the end to go into one of those 3/8-24 so239 mounts?

2428. Re: 5/8 wave 6m vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 15:02:18 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <_9oQd.301$OU1.287@newssvr21.news.prodigy.com>
Source record: 82067

I was thinking about the radiation from the coax, myself, but
unless you run very high power, not that much of a concern
Reason would be more to prevent stray rf into power supplies,
ect. (rf in voltage regulator circuits can have some very
undesired effects), but the change in the pattern should be
minimal. What DOES concern me, however (I ran one in beacon
service for many years) is that they dont seem to like EXTREME
WEATHER! If you are in a normal location, then it is no problem.
If, like where my 6 meter beacon was located, is at 8,000 feet,
surrounded with winds up to 125 M.P.H., and heavy iceing, then this
antenna will be a stub in a few weeks, at most! Lost 2 of them in 6
weeks , finally brought it down to reasonable location, useing
stealth antenna to hide it. Not the coverage but not replaceing
antennas all the time , either! For what it is, (a vertical dipole),
I'll give the devil its due-- it actually does work pretty well, with-
out excessive claims as to its capabilities! Jim NN7K

Brian Kelly wrote:
> Caveat Lector wrote:
>
>>I suspect you have a Cushcraft 6M 1/2 wave AR-6 Ringo
>>
>>If so the manual is on their site
>>http://www.cushcraft.com/support/pdf/951285.pdf
>>
>>And NO don't add radials for this model -- it is self contained
>
>
> Except for the beads on the feedline. Ringos are *notorious* for
> feedline radiation.
>
> w3rv

2429. Re: cartoon Martian antennas: practical?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 16:18:55 UTC
From: clvrmnky <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <PhpQd.91289$vO1.570780@nnrp1.uunet.ca>
Source record: 82068

On 14/02/2005 11:18 PM, Cecil Moore wrote:
> Ralph Mowery wrote:
>
>> Outside of being cartoons, if you mount a vhf or above antenna on your
>> hat
>> you will usually gain some range. If you put a HT on your belt the
>> antenna
>> is against your body and use a speaker/mic most of the signal is abosrbed
>> you your body. By placing the antenna on your hat you gain height and
>> don't
>> have your body in the way.
>
>
> I have an aluminum hard hat with a 1/4WL 2m antenna on top.
> I've wondered how much RF my brain is getting.

There has been a fair amount of research on this. In Canada, your Basic Qualification test may, in fact, contain questions based on information from Health Canada's /Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz, Safety Code 6/ (<http://www.hc-sc.gc.ca/hecs-sesc/ccrpb/publication/99ehd237/toc.htm>.) At least the parts of this document that pertain to the Amateur Bands allocated to Amateurs in Canada.

I'm guessing there are similar government or private bodies around the world which have the same sorts of documents available.

This seems to boil down (pun not intended) to:

"Although not a requirement of the Code, it is suggested that whenever possible, the organ-averaged SAR for the eye not exceed 0.4 W/kg. As stated in Appendix VII, this suggestion shall remain until sufficient scientific information is available to accurately assess the health effects of RF exposure on the eye."

Translation: when working with reasonable powered RF transmitting devices, especially at higher frequencies, minimize exposure to your eyes.

Apparently, this is something they want amateurs to remember, because this is directly related to a few of the questions in the Basic Qualification question bank.

I read somewhere that some amateurs cringe when they see VHF/UHF amateurs wandering around at ham events wearing head-mounted mobile units, not unlike your hardhat rig. I suppose a QRP rig would be no

worse than a mobile phone.

Of course, I have been thinking about getting a headset for /that/.
--
clvrmnky <mailto:clvrmnky@COLDmail.com.INVALID>

Heat up and unmunge email to reply.

2430. Re: Building a cheap easy cb antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 16:37:28 UTC
From: clvrmnky <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <czpQd.91299$vO1.570867@nnrp1.uunet.ca>
Source record: 82069

On 15/02/2005 8:56 AM, stryped@hotmail.com wrote:
> How would I go about making a cheap, easy cb antenna for a base station
> at my house? How far would it need to be from my 2 meter antenna?
>
> Could I make a whip by cutting an aluminum 3/8 rod to a 1/4 wave and
> thread the end to go into one of those 3/8-24 so239 mounts?
>
I've had a lot of success with Google and the keyword "homebrew". There
is a lot of stuff out there.

For example: <http://www.google.com/search?hl=en&q=homebrew+CB+antenna>

2431. the antennas is formed by the tree itself

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 16:43:42 UTC
From: Dan Jacobson <jidanni@jidanni.org>
Message-ID: <87is4thiyp.fsf@jidanni.org>
Source record: 81972

I was going to ask if it would be OK to perch my 2 meter vertical antenna in the branches of a tree, or will nearby limbs detract from the signal, but I see http://www.preservedpalm.net/gsm.shtml "The product used in Palm antennas is formed by the tree itself and the fronds", but perhaps that only applies at those higher frequencies.

2432. How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 17:21:30 UTC
From: Jedi Knight <azdjedi@hotmail.com>
Message-ID: <1108488090.039788.191480@o13g2000cwo.googlegroups.com>
Source record: 82070

Hello,

I've been searching for an answer to this question for years. I'm hoping somebody here can answer it or at least point me in the direction. Or maybe I'm totally off base on my basic understanding and so this question is out in left field.

I've been to howstuffworks.com and read a few articles on radio; I learned a few cool things, but not what I was after.

Here's my question. When a radio tower, or whatever, sends out a wave it has to propagate somehow. I figure this works by making electrons do their thing, vibrate or whatever those crazy nothings do. If a group of electrons is creating a field or sending a wave it has to be at a specific frequency, but what I don't understand is how can there be the plethora of frequencies all at the same time in the same place? Can't an electron only vibrate at one frequency at a time? In simple terms: how can my radio have the potential to tune into all the stations; how do the waves not interfere with each other?

In wave theory, in physics class, I remember sending one water wave from one end, and another from another end, and they cancelled each other out. Wouldn't a radio wave work the same way?

So many questions, so little time...

Thanks,
Bodi

2433. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 18:04:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qjc41196auv0rofr5qlc9fgarkoktl4kve@4ax.com>
Source record: 82071

On 15 Feb 2005 09:21:30 -0800, "Jedi Knight" <azdjedi@hotmail.com>
wrote:

>Here's my question. When a radio tower, or whatever, sends out a wave
>it has to propagate somehow. I figure this works by making electrons
>do their thing, vibrate or whatever those crazy nothings do. If a
>group of electrons is creating a field or sending a wave it has to be
>at a specific frequency, but what I don't understand is how can there
>be the plethora of frequencies all at the same time in the same place?

Hi Bodi,

Let's start without electrons, but limit ourselves to how a "message"
propagates: You are in a theater waiting for your friend that you
have saved a seat for. You see your friend come in, you wave. Your
friend sees you, and waves back.

Now, a message has propagated and no power was transferred. You
didn't have to move any electrons to do it and we needn't go into the
discussion of light waves and interference or any of that to explain
it either.

A radio tower doesn't work this way, so now we can investigate what is
all that power for? It is not to push electrons at you or to suck
them either (one has to account for both directions in AC). But it
does have to do with attracting or repelling what electrons you do
have (if you didn't have any, believe me, you would never get to see
South Park on TV).

The attraction and the repulsion is a Force that is propagated. It
happens to have a frequency (or vibration as you describe).

>Can't an electron only vibrate at one frequency at a time?

Dangerous question, because, yes it can; but rarely does this have to
do with anything practical. It is properly known as a de Broglie wave
and it exists in every material object, but it is very remote from RF.

>In simple terms: how can my radio have the potential to tune into all the stations;

This is called resonance and Q: the ability to select one from many.

>how do the waves not interfere with each other?

The same way you can hear a conversation in a crowd. Interest in the
topic is resonance, interest in the speaker is Q. If you are only
mildly interested in the speaker, other speakers will divert you. If
you are only interested in the speaker, then the resonance is probably

romantic (and has nothing to do with topic of conversation).

>In wave theory, in physics class, I remember sending one water wave
>from one end, and another from another end, and they cancelled each
>other out.

Your recollection is rather hazy, or you have not described the
complete experiment.

> Wouldn't a radio wave work the same way?

It didn't work that way in the first place.

When you speak of cancellation, you must first intrude yourself or a
proxy for yourself into the situation, otherwise nothing "happens."
That proxy is often a detector (in the form of a load with a meter) or
your eye (another detector with a load), or your ear (guess what?
another detector...), or....

73's
Richard Clark, KB7QHC

2434. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 18:34:05 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <xgrQd.31660$xt.15314@fed1read07>
Source record: 81973

Just a few simple thoughts (;-)
Two folks talk at the same time
A listener hears both without interference NOTE1
Repeat for a telephone - same result
Electromagnetic waves work in a similar fashion
Key here is signals don't mix or interfere in a linear device or media

NOTE 1: the above doesn't work if one of the speakers is your mother-in-law
(;-)

Separation of signals is done with selective circuits -- tune to 14.200 MHz
and the selective circuits rejects all the others.
The human ear can do this -- I never hear my mother-in-law

Suspect this will get the flames (;-(
--
Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?

"Jedi Knight" <azdjedi@hotmail.com> wrote in message
news:1108488090.039788.191480@o13g2000cwo.googlegroups.com...
> Hello,
>
> I've been searching for an answer to this question for years. I'm
> hoping somebody here can answer it or at least point me in the
> direction. Or maybe I'm totally off base on my basic understanding and
> so this question is out in left field.
>
> I've been to howstuffworks.com and read a few articles on radio; I
> learned a few cool things, but not what I was after.
>
> Here's my question. When a radio tower, or whatever, sends out a wave
> it has to propagate somehow. I figure this works by making electrons
> do their thing, vibrate or whatever those crazy nothings do. If a
> group of electrons is creating a field or sending a wave it has to be
> at a specific frequency, but what I don't understand is how can there
> be the plethora of frequencies all at the same time in the same place?
> Can't an electron only vibrate at one frequency at a time? In simple
> terms: how can my radio have the potential to tune into all the
> stations; how do the waves not interfere with each other?
>
> In wave theory, in physics class, I remember sending one water wave
> from one end, and another from another end, and they cancelled each

> other out. Wouldn't a radio wave work the same way?
>
> So many questions, so little time...
>
> Thanks,
> Bodi
>

2435. Re: Automatic vs. Manual Tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 19:01:34 UTC
From: TomS <nobody@home.com>
Message-ID: <cutgud$6ul$1@avnika.corp.mot.com>
Source record: 81974

I had a variety of wire and "experimental" antennas fed to a remote switch then down to the manual tuner in the shack. With the bands being what they have been lately, I was doing a lot of band hopping which required a lot of knob twiddling. I have since purchased an Icom AH-4 remote tuner (to go with my IC718) and installed a 75 foot loop in the attic with the AH-4 at the feed point. Using the cable that went to the antenna switch, I now just press a button on the rig and the tuner has a better then 1.5:1 match in less then 2 seconds. Much easier. Your mileage may vary.....

Tom - AC9TS

"Bill Brannick" <wmlb@sbcglobal.net> wrote in message news:5u3211pd6q94pm6djl2ce164qp4a218um5@4ax.com...
> I was wondering, aside from the obvious , what the trade-offs might be
> between a moderately priced manual tuner (example: Palstar AT1KM) and
> a auto tuner such as the LDG AT-100 Pro or the soon to be released
> AT-200 Pro
>
> I guess it is obvious that you have more control with the manual tuner
> and are more likely to achieve a match with minimal inductance..(or
> losses)
>
> Not famliar enough with these auto tuners to know if that try to
> replicate a low-loss match that you can genarally achieve with a
> manual tuner or not.....
>
> Would appreciate any helpful comments
>
>

2436. Re: cartoon Martian antennas: practical?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 20:09:01 UTC
From: Dan Jacobson <jidanni@jidanni.org>
Message-ID: <87oeelfuw2.fsf@jidanni.org>
Source record: 81980

```
Mainly I'm curious about effect of the rings, seen here in cross section:
Like a finger with several rings,
|
o | o
o | o
or with wider rings as one goes toward the base,
|
o | o
o | o
```

2437. Re: mountains reflect signal anyway?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 20:29:38 UTC
From: Dan Jacobson <jidanni@jidanni.org>
Message-ID: <87k6p9ftxp.fsf@jidanni.org>
Source record: 81979

D> It might well be worth your while to experiment with a simple
D> somewhat-directional antenna. A single reflector, located perhaps
D> .1 to .2 wavelengths on the mountainside side (sorry :-) of your
D> current vertical, cut to perhaps 5% longer than a half-wavelength,
D> could be used to shape your antenna's pattern into something
D> vaguely cardioid.

Yes! Say, can one just cut the reflector 5% longer than the antenna?
The antenna is some complex double 5/8 wavelength job.
If the reflector is shorter than the antenna, it becomes a director?
What if the reflector is just a pole jabbed into the ground, thus
grounded and longer downwards than the 5%? What if the pole is "very
much longer than the antenna in both directions"?
How about the thickness of the reflector? Only as thick as the antenna
itself (but wait, the antenna has two thicknesses, top thin, bottom
thick), or just grab any iron pipe (wait, metal type and shape
important?)

2438. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 21:52:38 UTC
From: richardharrison@webtv.net
Message-ID: <9248-42126F26-487@storefull-3253.bay.webtv.net>
Source record: 81975

Bondi wrote:
"---but what I don`t understand is how can there be a plethora of frequencies all at the same time in the same place?"

In a linear system or medium, individual frequencies don`t mix, but they coexist without affecting each other. They "superpose".

The superposition theorem says that when any number of frequencies are applied to the linear network simultaneously, their combined voltage and current are the sums of their components as if the individual components had acted alone.

An antenna can deliver many frequencies to a receiver which can select, by using a proper filter, the desired frequency.

A radio wave consists of equal-enengy electric and magnetic fields. Each field generates the other. These fields travel through the complete void of deep space where there are few or no electrons to be excited by the waves.

Sunlight is an electromagntic radiation, much like a radio wave but of higher frequency. It is composed of many colors (frequencies) which may be separated. Taken together, the colors are perceived as white light.

Bodi also recalled waves from opposite ends of a water tank cancelling. That happens at some places, but they reinforce at other places. Radio waves cancel and reinforce too. However, radio waves traveling in opposite directions rarely affect each other`s progress, and they pass through each other as if the other never existed.. The summation of two waves at any particular point may be vastly different from their summation at a different point.

Traveling waves of the same freuency can produce stationary interference patterns called "standing waves".

Waves in far space don`t propagate by causing a group of electrons out there to vibrate. The wave`s electric field changes according to its cycle and this change generates a magnetic field and vice versa.

Best regards, Richard Harrison, KB5WZI

2439. trees are nature's towers and antenna combined

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 22:06:03 UTC
From: Dan Jacobson <jidanni@jidanni.org>
Message-ID: <871xbhiilw.fsf@jidanni.org>
Source record: 81978

Hmmm, don't see much these days on this 100 year old concept:
http://www.rexresearch.com/squier/squier.htm "trees --- all trees, of
all kinds and all heights, growing anywhere --- are nature's own
wireless towers and antenna combined."

Perhaps wire is cheap these days so there is little practicality left
to his idea?

2440. A bit off topic but...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 22:11:30 UTC
From: Joshua Leahy <jleahy@gmail.com>
Message-ID: <cuts2h$745$1@news.freedom2surf.net>
Source record: 81976

Hey all,

I'd have posted this somewhere else but couldn't find a group more suited. I've just got run-of-the-mill 2.45ghz bluetooth dongle and frustrated with its range ripped off its cover to find a wonderfully custom pcb inside. Anyways, theres a small surface mount component inside labelled "ANT1", reading a resistance of practically nil and ditto for capacitance. I'm assuming it to be the antenna. Anybody know of a way I could stick a transistor on it or something to boost the range (I'm not all too experienced with radio I'm afraid so that might sound stupid) - or just peel it off and replace it with a few peices of wire or something.

Sorry for sounding stupid and thanks in advance,

Josh

2441. Re: the antennas is formed by the tree itself

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 23:40:38 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <421287d6.5231081@news.crosslink.net>
Source record: 81977

On Wed, 16 Feb 2005 00:43:42 +0800, Dan Jacobson <jidanni@jidanni.org>
wrote:

>I was going to ask if it would be OK to perch my 2 meter vertical
>antenna in the branches of a tree, or will nearby limbs detract from
>the signal, but I see http://www.preservedpalm.net/gsm.shtml "The
>product used in Palm antennas is formed by the tree itself and the
>fronds", but perhaps that only applies at those higher frequencies.

Not the way I read it.

It appears to be nothing but a clever camoflage of the actual GSM
antenna. The preserved tree and fronds just happen to make an adequate
support system and do not significatnly degrade the actual GSM
antennas while hiding them from view.

However, if they can do it, you should be able to as well.
Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

2442. Re: mountains reflect signal anyway?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 23:57:36 UTC
From: dplatt@radagast.org
Message-ID: <111533gvgvr79a@corp.supernews.com>
Source record: 81981

In article <87k6p9ftxp.fsf@jidanni.org>,
Dan Jacobson <jidanni@jidanni.org> wrote:
>D> It might well be worth your while to experiment with a simple
>D> somewhat-directional antenna. A single reflector, located perhaps
>D> .1 to .2 wavelengths on the mountainside side (sorry :-) of your
>D> current vertical, cut to perhaps 5% longer than a half-wavelength,
>D> could be used to shape your antenna's pattern into something
>D> vaguely cardioid.

>Yes! Say, can one just cut the reflector 5% longer than the antenna?
>The antenna is some complex double 5/8 wavelength job.
>If the reflector is shorter than the antenna, it becomes a director?
>What if the reflector is just a pole jabbed into the ground, thus
>grounded and longer downwards than the 5%? What if the pole is "very
>much longer than the antenna in both directions"?
>How about the thickness of the reflector? Only as thick as the antenna
>itself (but wait, the antenna has two thicknesses, top thin, bottom
>thick), or just grab any iron pipe (wait, metal type and shape
>important?)

Well, I think you'd probably need to do a bunch of modelling in NEC2
or similar to get a really solid analysis, for any given antenna and
reflector.

The "5% longer" rule of thumb applies to antennas which use halfwave
radiators - it works with Yagis, and Cebik has an analysis which
indicates that it works with Yagi-like beams based on vertical J-poles.

I suspect that the issue is rather more complicated for antennas which
use 5/8-wave or stacked/collinear radiators. The phase relationships
between driven and parasitic elements in such antennas are probably
different enough that this simple rule might not apply.

I believe that you could probably get a fairly effective
pattern-warping by using a non-tuned reflector which is significantly
longer than your collinear radiator. Try cutting a piece of EMT or
other conduit (or aluminum pole, or whatever) so that it's a few feet
longer than your antenna, and then install it 6" to a foot on the
undesired side of the radiator... have one end of it sticking up at
least a foot above the top of the radiator and the other extending
down below the bottom of the radiator.

Some commercial multi-bay stacked dipole antennas use the mast or
tower in just this fashion, to convert a circular omni pattern into a
cardioid or off-center near-circular pattern. Varying the antenna-to-
mast/tower spacing changes the shape of the pattern.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2443. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-15 23:58:56 UTC
From: flashback <ndcoder@srt.com>
Message-ID: <11153658usd5id5@corp.supernews.com>
Source record: 81982

The really bad news for all us humans is that there has been no comprehensive understanding of electromagnetic radiation. We do not truly know what it is. This may not happen until there is a unified theory of how everything works, including gravity.

We know very well how to generator, transform, and receive electromagnetic waves but we just don't understand what they are.

Anyone who says they understand the complete physics of electromagentic energy is either full of BS or our next Einstein.

Sigh

2444. Re: the antennas is formed by the tree itself

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 00:01:12 UTC
From: flashback <ndcoder@srt.com>
Message-ID: <11153abl44m137@corp.supernews.com>
Source record: 81983

The more water in the fronds and limbs the more energy that will be
dissipated as heat instead of radiating to the intended target.

"Dan Jacobson" <jidanni@jidanni.org> wrote in message
news:87is4thiyp.fsf@jidanni.org...
>I was going to ask if it would be OK to perch my 2 meter vertical
> antenna in the branches of a tree, or will nearby limbs detract from
> the signal, but I see http://www.preservedpalm.net/gsm.shtml "The
> product used in Palm antennas is formed by the tree itself and the
> fronds", but perhaps that only applies at those higher frequencies.

2445. Re: Building a cheap easy cb antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 00:02:29 UTC
From: flashback <ndcoder@srt.com>
Message-ID: <11153cnnl7lc775@corp.supernews.com>
Source record: 81984

You can but you will need 1/4 ground rods at right angles to the vertical
radiator. Four is prefered.
<stryped@hotmail.com> wrote in message
news:1108475773.567070.263850@g14g2000cwa.googlegroups.com...
> How would I go about making a cheap, easy cb antenna for a base station
> at my house? How far would it need to be from my 2 meter antenna?
>
> Could I make a whip by cutting an aluminum 3/8 rod to a 1/4 wave and
> thread the end to go into one of those 3/8-24 so239 mounts?
>

2446. Re: trees are nature's towers and antenna combined

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 00:21:44 UTC
From: dplatt@radagast.org
Message-ID: <11154go907lv056@corp.supernews.com>
Source record: 81985

In article <871xbhiilw.fsf@jidanni.org>,
Dan Jacobson <jidanni@jidanni.org> wrote:

>Hmmm, don't see much these days on this 100 year old concept:
>http://www.rexresearch.com/squier/squier.htm "trees --- all trees, of
>all kinds and all heights, growing anywhere --- are nature's own
>wireless towers and antenna combined."
>
>Perhaps wire is cheap these days so there is little practicality left
>to his idea?

His arrangment sounds a bit like a shunt-fed antenna tower. Perhaps
the "brushy" nature of the top of a tree makes it behave a bit like a
"fat" dipole, with the broad bandwidth the page speaks of?

One limitation of these is clear from the article - they're seasonal.
When winter comes and the sap is gone down into the roots, the
antenna's performance degrades quite badly.

Hmmm... I wonder... would QRO operation on a sugar maple in April
leave you with a bucket full of maple-flavored Fizzies?

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2447. Re: Automatic vs. Manual Tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 00:27:57 UTC
From: streamliner@aol.com
Message-ID: <42128ae9.121446170@usenet.magma.ca>
Source record: 81986

On Tue, 15 Feb 2005 13:01:34 -0600, "TomS" <nobody@home.com> wrote:

Did not see original post so adding on here.
I have a MFJ-993 auto tuner rated for 300 watts. The MFJ-994
autotuner is rated at 600 watts. If you compare them they are almost
identical. The 994 has slightly larger toroid inductors but the same
16 amp latching relays and cap ratings. The 993 has a few extras such
as small built in balun, LCD display, and dual antenna ports thus 1
extra relay, yet it is less expensive. I run my 993 into a 200 foot
flat top antenna fed with 50 feet ladder line to an external 4:1 balun
fed by 20 feet of 72 ohm co-ax from the tuner. It has a very wide
inductance and capacitance range so it tunes all bands 160 thru 10
meters extremely well. Thats an important feature to look at when
comparing tuners as some models have quite a limited range. Once a
full auto tune has been done on a particular frequency the next time
that frequency or one close to it is used it just snaps in the correct
relay settings in about 1/2 second for a match. It has many other
usefull features that I wont bore you with. The best part is it will
handle my 600 watt amp on SSB with no problem as I thought it would
after comparing it with the 994 but if you run a kilowatt or so its
not the one for you. Its wonderful when hopping around, no more
cranking and twiddling and QRMing the bands. And no it doesnt get hot
or even slightly warm so efficiency is well up there. My manual L
network tuner now sits in the corner. I dont suggest everyone over
power one as it may fail especially if you have a difficult load, but
it is conservatively rated and works well on my antenna.
Nigel VE3ELQ
>
>"Bill Brannick" <wmlb@sbcglobal.net> wrote in message
>news:5u3211pd6q94pm6djl2ce164qp4a218um5@4ax.com...
>> I was wondering, aside from the obvious , what the trade-offs might be
>> between a moderately priced manual tuner (example: Palstar AT1KM) and
>> a auto tuner such as the LDG AT-100 Pro or the soon to be released
>> AT-200 Pro
>>
>> I guess it is obvious that you have more control with the manual tuner
>> and are more likely to achieve a match with minimal inductance..(or
>> losses)
>>
>> Not famliar enough with these auto tuners to know if that try to
>> replicate a low-loss match that you can genarally achieve with a
>> manual tuner or not.....
>>
>> Would appreciate any helpful comments

>>
>>
>
>

2448. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 00:43:18 UTC
From: "aunwin@insightbb.com"
Message-ID: <GGwQd.7750$4q6.803@attbi_s01>
Source record: 81987

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cujmve$p44$1@hercules.btinternet.com...
>
> "Reg Edwards" wrote
>> The elevation angle of a radio wave is not related to antenna
> construction.
>>
>> It is calculated by trigonometry and is geometrically related to the
>> distance between two points on the Earth's surface, the height of the
>> ionospheric reflecting layers involved, and the number of hops.
>>
>> If a radio wave leaves the Earth at one end of the path and returns to
> Earth
>> at the other end, then the elevation angles of the path taken are the
>> same
>> at both ends. And the same in the other direction. (To forestall
>> nitpickers let it be said things can vary around averages.)
>

Reg.
You asre concentrating on things that you can do nothing about
i.e.the ionisphere and trivialising the things that you CAN do something
about
which is TOA, the subject of this thread.

If the transmitting station TOA is low enough to make the QSO in one hop
and the receiving station antenna has a higher take off angle that requires
exactly two hops to reply then the paths are NOT the same.
I would also doubt that the paths taken when being bent by the reflecting
layers
would be the same as the density is subject to change
. The real discussion regarding TOA is to achieve a QSO
with one hop instead of two so as to cut down on travel losses and that is
where
the importance of TOA and associated angles that follow the +/- 3 db takes
place.
Regardless of the physical position of the antenna the elevation angle of
the radio wave
IS related to antenna construction.
Just a different view point Reg, the antenna I CAN do something about.
Natures actions
I can do NOTHING about except to have the correct equipment when good
conditions occur
and that is where TOA gains it importance.
In my designs I try to have the lowest contour of the bottom lobe even tho

it may mean
a loss of a db in gain at the actual TOA.and I do not concern myself with
the technical data
that your posting revolves about, which tho it may be interesting to some,
as I cannot change it
Nothing personal nor am I nitpicking
Cheers
Art

>
>> The optimum angle at which to point a radio antenna, either for transmit
> or
>> receive, is obviously the same as the elevation angle of the radio path.
>>
>> BUT NO AMOUNT OF WAVING THE ANTENNA ABOUT WILL AFFECT THE ELEVATION ANGLE
> OF
>> THE RADIO PATH.
>>
>> For given points on the Earth's surface, height of reflecting layer, and
>> number of hops, the angle of elevation of the radio path is fixed.
>>
>> The angle at which the radiation from an antenna is a maximum is an
> entirely
>> different matter.
>>
>> Calculation of a path elevation angle on a curved Earth not very
>> difficult
>> but is a little too complicated to be written here.
>>
>> Up to 1500 groundpath miles the Earth can be considered to be flat. Trig
>> calculation is then schoolkids stuff.
>>
>> Full formulae can be found in maths books under "Spherical Trigonometry"
> or
>> in practical radio engineering books.
>>
>> Calculations can be interesting but are invariably roughly approximate
>> because layer height involves guesswork. And by the time you've finished
>> a
>> calculation the height has shifted. Or the number of hops has changed
>> from
> 2
>> to 3. The only things which remain static are your own latitude and
>> longitude.
>>
>> To calculate propagation statistics of one and two hop radio paths,
>> including elevation angles, download simple program TWOHOPS in a few
> seconds
>> from website below and run immediately.
>> ----

>> ....
>> Regards from Reg, G4FGQ
>> For Free Radio Design Software go to
>> http://www.btinternet.com/~g4fgq.regp
>> ....
>>
> ==
>
> Why should my answer to the question be altogether different to everybody
> else's? Especially as I'm right.
> ---
> Reg.
>
>

2449. Re: The HIGHER the BETTER

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 01:07:24 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <42129ca4.18135383@news.iol.ie>
Source record: 81988
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"Glenn" <aa5pk@hotmail.com> wrote:

: "Charlie" <charlie@earthlink.com> wrote in message
news:110vrhc5msu0l4e@news.supernews.com...
: > The HIGHER the BETTER !!!!
:
: That's always been the rule on VHF/UHF.

yes..but its a bummer when the FAA/NASA call around :-)

2450. Re: trees are nature's towers and antenna combined

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 02:29:43 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <eayQd.634$II2.501@bignews5.bellsouth.net>
Source record: 81989

"Dan Jacobson" <jidanni@jidanni.org> wrote in message
news:871xbhiilw.fsf@jidanni.org...
> Hmmm, don't see much these days on this 100 year old concept:
> http://www.rexresearch.com/squier/squier.htm "trees --- all trees, of
> all kinds and all heights, growing anywhere --- are nature's own
> wireless towers and antenna combined."
>
> Perhaps wire is cheap these days so there is little practicality left
> to his idea?

I think my dad's old Swan 500 could load up into a rusty nail in a pine
tree.

2451. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 02:38:41 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <ZhyQd.1642$mZ5.1358@bignews1.bellsouth.net>
Source record: 81990

The answer is in 2 little words:
F M
(the M stands for Magic)

2452. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 03:18:12 UTC
From: Tom Ring <news0001@taring.org>
Message-ID: <4212bb42$0$38732$39cecf19@news.twtelecom.net>
Source record: 81991

Richard Clark wrote:

> 73's
> Richard Clark, KB7QHC

Nice analogies, Richard.

tom
K0TAR

2453. Re: PART 15 AM antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 03:26:30 UTC
From: BKR <REMOVESPAMrchvid7@lycos.comFilter>
Message-ID: <1115fb75t73r547@corp.supernews.com>
Source record: 81992

A hint: Make the loading coil part of the transmitter rather than part
of the antenna.
If every thing is built inside of a single metal box it should be OK.
Put this thing on top of a metal surfaced roof and ground your box to
the surface directly.
The 3 meter pipe should be very close to the box. Like 1 or 2 inches
and you have to subtract any lead length from the antenna size.

Randall J wrote:
> I operate a Part 15 station for my neighborhood (FM) and have acquired
> an AM transmitter. I've seen plans for vertical antennas but would
> rather make my own from the few parts I have. I have 8ft of aluminum
> tubing and would like to make a loading coil using 3 inch diameter PVC
> pipe. Given the frequency I operate on (1610khz), 8 ft of tubing, and a
> 3.5 inch coil form, how many turns of 22AWG insulated wire would I need
> to wrap? (Oh the tubing is in two pieces and I can slide the top piece
> up and down).
>
> Is there a program I can download to find this out?
>
> Randall

2454. OPEN WIRE LINE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 03:44:34 UTC
From: me <nospam@nospam.com>
Message-ID: <hnf511559551ke2c6g7gf44ddv886vjhlv@4ax.com>
Source record: 81993

After many years of experimenting with coax fed wire antennas I am taking my first plunge at open wire line.

To get into shack, I need to go through exterior steel siding, exterior wood siding & plywood, a layer of insulation, then interior sheetrock and wood paneling. Assume I need about 4-6" of safe feedthrough so that standoffs can be mounted on the walls oustide and inside the shack.

I generally run 100 to 1500W output...at full legal limit probably 3KV on the feedline...am not crazy about the idea of setting my house on fire due to HV arc over.

Am looking for the old style porcelain feedthrough isnulators, but so far have not found same.

Local Home Depot has thin PVC tubing (as in sink/toilet stems), vinyl tubing, welding rod tubes, etc. What are the dielectric properties of these, and the high voltage breakdown voltage...???

Seems like glass, porcelain, or ceramic tubing would be best feedthrough insulator, but where to find?

Are any modern day materials found in Lowes or Home Depot safe from arcing and also efficient for RF?

Thanks in davance & 73,

Dan (K0DAN)

2455. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 03:55:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1115h1q4fg15m64@corp.supernews.com>
Source record: 81994

One thing I didn't see explicitly stated in the answers is that the progation of radio waves doesn't require electrons. It propagates just fine in space, or even an empty vacuum. Radio waves are of course the same sort of stuff (electromagnetic waves) as light, just a different frequency. So if electrons were required for propagation, the light from the Sun would never make it here.

Roy Lewallen, W7EL

2456. Re: OPEN WIRE LINE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 04:31:15 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <4212caf9.22418425@news.crosslink.net>
Source record: 81995

On Tue, 15 Feb 2005 21:44:34 -0600, me <nospam@nospam.com> wrote:

>After many years of experimenting with coax fed wire antennas I am
>taking my first plunge at open wire line.
>
>To get into shack, I need to go through exterior steel siding,
>exterior wood siding & plywood, a layer of insulation, then interior
>sheetrock and wood paneling. Assume I need about 4-6" of safe
>feedthrough so that standoffs can be mounted on the walls oustide
>and inside the shack.
>
>I generally run 100 to 1500W output...at full legal limit probably
>3KV on the feedline...am not crazy about the idea of setting my house
>on fire due to HV arc over.
>
>Am looking for the old style porcelain feedthrough isnulators, but so
>far have not found same.
>
>Local Home Depot has thin PVC tubing (as in sink/toilet stems), vinyl
>tubing, welding rod tubes, etc. What are the dielectric properties of
>these, and the high voltage breakdown voltage...???
>
>Seems like glass, porcelain, or ceramic tubing would be best
>feedthrough insulator, but where to find?
>
>Are any modern day materials found in Lowes or Home Depot safe from
>arcing and also efficient for RF?

Dear Dan,

It seems that many take the approach of using a pair of coax lines hooked up as a balanced coax pair as the answer to that problem. If you are worried about the impedance discontinuity, it's a short section and will not be a problem. If you are worried about whether or not the coax can handle it, RG-8 is good enough and RG-17 is better. If you want to combine a little bit of protection against near strikes while you're at it, run through the wall low to the ground and close to the biggest, best earthing system you can put together, and then connect the shields of the coax to a short hunk of heavy wire to that earthing system.

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

2457. Re: OPEN WIRE LINE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 05:06:29 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cuukclblb1@sparta.btinternet.com>
Source record: 81996

There must be NO metal and NO low-grade insulating material BETWEEN the pair
of wires as they come into the shack.

Bring the wires close together for a short distance through a relatively
small hole in the wall. At HF, the small lumped increase in capacitance
between the wires will have a neglible effect on system operation.
Equivalent to an unoticeable minor shift in tuner settings. No additional
line loss will be incurred.

Insulate the pair of wires from each other by using the inner conductors of
coax cable plus the polyethylene. Discard the outer conductor braid. To
minimise size of hole through the wall allow the polyethylene coverings to
touch each other if you like.

The main problem will be rain and weather-proofing.

For a short, indoors, distance to the transmitter or tuner, the twin
polyethylene insulated wires can be retained and allowed to separate if
convenient.

Reg, G4FGQ

==========

"me" wrote -
> After many years of experimenting with coax fed wire antennas I am
> taking my first plunge at open wire line.
>
> To get into shack, I need to go through exterior steel siding,
> exterior wood siding & plywood, a layer of insulation, then interior
> sheetrock and wood paneling. Assume I need about 4-6" of safe
> feedthrough so that standoffs can be mounted on the walls oustide
> and inside the shack.
>
> I generally run 100 to 1500W output...at full legal limit probably
> 3KV on the feedline...am not crazy about the idea of setting my house
> on fire due to HV arc over.
>
> Am looking for the old style porcelain feedthrough isnulators, but so
> far have not found same.
>
> Local Home Depot has thin PVC tubing (as in sink/toilet stems), vinyl
> tubing, welding rod tubes, etc. What are the dielectric properties of
> these, and the high voltage breakdown voltage...???
>
> Seems like glass, porcelain, or ceramic tubing would be best

> feedthrough insulator, but where to find?
>
> Are any modern day materials found in Lowes or Home Depot safe from
> arcing and also efficient for RF?
>
> Thanks in davance & 73,
>
> Dan (K0DAN)

2458. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 05:24:15 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4212d9b9$1_2@127.0.0.1>
Source record: 81997

Jedi Knight wrote:
> Here's my question. When a radio tower, or whatever, sends out a wave
> it has to propagate somehow. I figure this works by making electrons
> do their thing, vibrate or whatever those crazy nothings do. If a
> group of electrons is creating a field or sending a wave it has to be
> at a specific frequency, but what I don't understand is how can there
> be the plethora of frequencies all at the same time in the same place?

Free electrons are free (pun intended) to emit photons of any
frequency. Electrons that are not free are not free to emit photons
of any frequency. Superposition of EM waves is what makes it possible
for "the plethora of frequencies" to exist all at the same time in
the same place. The energy in an independent wave is, well,
independent of the energy in the other waves. A lot of hams don't
understand that the energy in the forward wave is independent of
the energy in the reflected wave and vice versa.

> Can't an electron only vibrate at one frequency at a time? In simple
> terms: how can my radio have the potential to tune into all the
> stations; how do the waves not interfere with each other?

Free electrons have the freedom to emit and absorb photons of any
and every frequency. Free electrons exist in conductors and can
travel from atom to atom or molecule to molecule as needed. The
electrons are the carriers of the EM waves, but not the EM waves,
much as water molecules are the carriers of ocean waves but are
not the waves.
--
73, Cecil http://www.qsl.net/w5dxp

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2459. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 05:30:06 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4212db18$1_1@127.0.0.1>
Source record: 81998

Richard Clark wrote:
> You see your friend come in, you wave. Your
> friend sees you, and waves back.
>
> Now, a message has propagated and no power was transferred.

Beg to differ. A certain amount of irradiance was decoded by
the retina of the receiver. Irradiance *is* power. Energy was
transferred and energy transfer is power, by definition. For
your statement to be correct, the event must be done in total
darkness.
--
73, Cecil http://www.qsl.net/w5dxp

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2460. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 05:31:44 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_4212dae8@fidonet.org>
Source record: 81942

"flashback" bravely wrote to "All" (15 Feb 05 17:58:56)
--- on the heady topic of "Re: How do radio waves work?"

fl> From: "flashback" <ndcoder@srt.com>
fl> Xref: aeinews rec.radio.amateur.antenna:5199

fl> The really bad news for all us humans is that there has been no
fl> comprehensive understanding of electromagnetic radiation. We do not
fl> truly know what it is. This may not happen until there is a unified
fl> theory of how everything works, including gravity.

fl> We know very well how to generator, transform, and receive
fl> electromagnetic waves but we just don't understand what they are.

fl> Anyone who says they understand the complete physics of
fl> electromagentic energy is either full of BS or our next Einstein.

fl> Sigh

I think I have an insight and I really don't think I'm very bright.
Basically light is the transfer of EM energy and information across a
distance. Energy is carried by the photon or quanta. Radio
transmissions are like light only at much lower frequencies. At radio
frequencies a very different method must be used to generate the
photons. Basically electrons are agitated the length of a wire at
its natural resonnance and the photons are shaken off as an
electromagnetic disturbance or field, then it propagates into free
space. Whatever modulation is impressed on the wavetrain is the
information being transmitted. What's so special about that? It may be
too simplistic but that's the way I picture it. How would you describe
it?

A*s*i*m*o*v

... My other vehicle is a Galaxy Class golfball washer...

2461. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 05:38:03 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cuum7r$o0j$1@titan.btinternet.com>
Source record: 82000

There is an alternating current in the antenna conductor which sets up magnetic and electric fields.

The field spreads out in space at the velocity of light. It can't help itself.

As the current in the antenna changes and alternates, the field more remote from the antenna becomes left behind in time and so becomes detached from the vicinity.

The detached field, pushed outwards from inside by newly generated alternating waves from the antenna, continues to expand into space at the velocity of light for ever more.

The keywords are Time, Velocity and Distance (or Wavelength).

And so you have it. It's really all very simple.

Reg, G4FGQ

2462. Re: mountains reflect signal anyway?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 05:38:30 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4212dd10$1_1@127.0.0.1>
Source record: 81999

Dan Jacobson wrote:
> Yes! Say, can one just cut the reflector 5% longer than the antenna?
> The antenna is some complex double 5/8 wavelength job.
> If the reflector is shorter than the antenna, it becomes a director?

Nope, the reflector needs to be 5% longer than 1/2WL.
A 5/8WL antenna is NOT resonant. Passive elements must
be close to and referenced to resonance.

I had a vertical loop resonant on 17m. I installed a
reflector 1.05 x (1/2WL of 20m). It became a beam on 20m.
--
73, Cecil http://www.qsl.net/w5dxp

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2463. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 05:41:13 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4212ddb3$1_1@127.0.0.1>
Source record: 82001

Richard Harrison wrote:
> However, radio waves traveling in
> opposite directions rarely affect each other`s progress, and they pass
> through each other as if the other never existed.

And that is true for forward and reflected waves in
a transmission line. They only affect each other at
an impedance discontinuity which causes reflections.
--
73, Cecil http://www.qsl.net/w5dxp

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2464. Re: mountains reflect signal anyway?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 05:44:47 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4212de89$1_1@127.0.0.1>
Source record: 82002

Dave Platt wrote:
> I believe that you could probably get a fairly effective
> pattern-warping by using a non-tuned reflector which is significantly
> longer than your collinear radiator.

Passive non-resonant elements have very little effect.
That's what allows a lot of multi-band beams to work.
--
73, Cecil http://www.qsl.net/w5dxp

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2465. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 05:55:01 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4212e0ef$1_1@127.0.0.1>
Source record: 82003

flashback wrote:
> Anyone who says they understand the complete physics of electromagentic
> energy is either full of BS or our next Einstein.

That's true, but we do understand the emission and
absorption of photons by free electrons. As Feynman
says: "A photon goes from place to place. An electron
goes from place to place. An electron emits or absorbs
a photon." This basically describes everything that
happens in a ham radio antenna system.
--
73, Cecil http://www.qsl.net/w5dxp

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2466. Re: Building a cheap easy cb antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 05:56:32 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4212e14a$1_1@127.0.0.1>
Source record: 82004

flashback wrote:
> You can but you will need 1/4 ground rods at right angles to the vertical
> radiator.

Or, for 27 MHz, just use a 1/2WL center-fed dipole with
no radials.
--
73, Cecil http://www.qsl.net/w5dxp

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2467. Re: OPEN WIRE LINE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 06:01:08 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4212e25f$1_1@127.0.0.1>
Source record: 82005

me wrote:
> Are any modern day materials found in Lowes or Home Depot safe from
> arcing and also efficient for RF?

For that 6" run, just use two pieces of parallel
coax. The inside conductors are your balanced
conductors and the braids are grounded. Be sure
not to exceed the voltage rating of whatever coax
you choose to install.
--
73, Cecil http://www.qsl.net/w5dxp

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2468. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 06:08:54 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4212e42f$1_1@127.0.0.1>
Source record: 82006

Roy Lewallen wrote:
> One thing I didn't see explicitly stated in the answers is that the
> progation of radio waves doesn't require electrons. It propagates just
> fine in space, or even an empty vacuum. Radio waves are of course the
> same sort of stuff (electromagnetic waves) as light, just a different
> frequency. So if electrons were required for propagation, the light from
> the Sun would never make it here.

The free electrons in a conductor (aluminum or copper) are
required for the emission of photons (EM waves) from ham
antennas during transmit. They are required for the absorption
of photons during receive. Free electrons are the carriers for
all of our localized ham RF activities. Once the photons have
been generated, they can travel through the "aether" without
having electrons present.
--
73, Cecil http://www.qsl.net/w5dxp

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2469. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 06:14:18 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4212e574$1_1@127.0.0.1>
Source record: 82007

Reg Edwards wrote:
> The field spreads out in space at the velocity of light. It can't help
> itself.

Reg, if fields possess a self, do they also possess self-
awareness? Inquiring minds want to know. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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2470. Re: Installed M2 Horizontal Loop today - PHOTOS

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 06:15:02 UTC
From: David 01 <ifiwantspam@illask.org>
Message-ID: <1115p7dheu0ai31@corp.supernews.com>
Source record: 82008
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

No offense, but where I live live the guys joke that they use the ringo ranger II as a fishing pole or dummy load. We haven't experienced a good one here. Anything else is far better in our experience and I know of no one actually using one now, but they say there's a stack of them avsailable for free behind a certain store.

"Charlie" <charlie@earthlink.com> wrote in message news:1108njbbertjqcc@news.supernews.com...
> 1. http://www.ad5th.com/VHF.html
>
> Also shown my Ringo Ranger II - ARX-2B. Links to technical data for each
> antenna also.
>
> --
>
> Charlie
> Ham Radio - AD5TH
> www.ad5th.com
> Live Blues Music
> www.492acousticblues.com
>
>
>
>
>

2471. Re: A bit off topic but...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 06:26:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1115ptqf5pe06bd@corp.supernews.com>
Source record: 82009

No, there's nothing simple that someone not very experienced can do to extend the range. Your best bet is to try a physically bigger dongle that's likely to have a better antenna.

Roy Lewallen, W7EL

Joshua Leahy wrote:
> Hey all,
>
> I'd have posted this somewhere else but couldn't find a group more suited.
> I've just got run-of-the-mill 2.45ghz bluetooth dongle and frustrated with
> its range ripped off its cover to find a wonderfully custom pcb inside.
> Anyways, theres a small surface mount component inside labelled "ANT1",
> reading a resistance of practically nil and ditto for capacitance. I'm
> assuming it to be the antenna. Anybody know of a way I could stick a
> transistor on it or something to boost the range (I'm not all too
> experienced with radio I'm afraid so that might sound stupid) - or just peel
> it off and replace it with a few peices of wire or something.
>
> Sorry for sounding stupid and thanks in advance,
>
> Josh
>
>

2472. One Way Propagation ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 07:19:31 UTC
From: Gary
Message-ID: <85s511lk17u58hn7m09c121citf2332ilh@4ax.com>
Source record: 82010

First off I don't really believe in one way propagaiton unless someone can convince me otherwise ? However, I am curious about a phenomenon I've experienced with a number or radios and antennas over the years. I've had eveything from a 4 element Yagi at 55 feet to the dipoles I'm using now and lots of new transcievers. I work all CW and on occasion I'll get a 599 signal report from the other station yet he's barely copyable from my end. They all seem to be running the same 100 watts or more that I'm using now and are using a dipole cut for the frequency in use like I am or a G5RV etc. I wonder if anyone else has observed this and/or has an explanation ? This has occured on new transceivers too numerous to name over the years. So I know its not a problem with a particular radio.

73 and Thanks in Advance

Gary K8IQ

2473. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 07:27:33 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cuusl5$pi4$1@hercules.btinternet.com>
Source record: 82011

Aunwin, we are talking about two different things.

If I want to communicate (optimally) with another station it is important that I know the direction and elevation angle at which to point my antenna such that the radio beam preferentially returns to Earth in the vicinity of the other station.

Direction is found from a map of the Earth's surface plus a magnetic compass.

The ONLY way to find the elevation angle is to CALCULATE it from the ground path distance between the two stations, the height of the reflecting layer, and the number of hops along the path.

It's purely a matter of Spherical Geometry. It has nothing to do with where your antenna happens to be pointing. Or even whether or not you have an antenna.

All good radio engineers do it that way. Caculating formulae can be found in practical radio engineering books. Eznec won't tell you.

Use simple program TWOHOPS to do common calculations. Results are as accurate as the inevitably uncertain input data.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

2474. Re: Installed M2 Horizontal Loop today - PHOTOS

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 07:31:37 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <1115tnc7gdntp00@news.supernews.com>
Source record: 82012
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

No offense taken....
Where I live we use bamboo for fishing and Ringo Ranger II's for distant vhf communications. Perhaps you have it mixed up where you live. Take the coax off the bamboo and hook it back to the Ringo....

73 / DX

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"David 01" <ifiwantspam@illask.org> wrote in message
news:1115p7dheu0ai31@corp.supernews.com...
> No offense, but where I live live the guys joke that they use the ringo
> ranger II as a fishing pole or dummy load. We haven't experienced a good
> one
> here. Anything else is far better in our experience and I know of no one
> actually using one now, but they say there's a stack of them avsailable
> for
> free behind a certain store.
>
> "Charlie" <charlie@earthlink.com> wrote in message
> news:1108njbbertjqcc@news.supernews.com...
>> 1. http://www.ad5th.com/VHF.html
>>
>> Also shown my Ringo Ranger II - ARX-2B. Links to technical data for each
>> antenna also.
>>
>> --
>>
>> Charlie
>> Ham Radio - AD5TH
>> www.ad5th.com
>> Live Blues Music
>> www.492acousticblues.com
>>
>>
>>
>>
>>

>
>

2475. Re: IP3 calculation and estimation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 07:53:03 UTC
From: Jason <cheanglong@gmail.com>
Message-ID: <1108540383.705656.325270@z14g2000cwz.googlegroups.com>
Source record: 82013

Hi George

Thank you for sharing with me your experience.
I will keep that in mind .
Currently I am still reading some related materials in order to
understand more of the basics
:)
Will messsage to the board again soon

rgds and thanks
Jason

2476. Re: Building a cheap easy cb antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 11:26:47 UTC
From: grasshouse@hotmail.com
Message-ID: <cuvanj$1s0$1@newsg1.svr.pol.co.uk>
Source record: 82014

you've no right to be using a 2 metre radio, if you don't know the
fundamentals of building a simple antenna.
seems amateur licences really do come from Macky,deeeee's these days.

2477. Re: OPEN WIRE LINE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 11:55:11 UTC
From: "Edward A. Feustel" <efeustel@direcway.com>
Message-ID: <42133544$1_1@127.0.0.1>
Source record: 82015

"me" <nospam@nospam.com> wrote in message
news:hnf511559551ke2c6g7gf44ddv886vjhlv@4ax.com...
> After many years of experimenting with coax fed wire antennas I am
> taking my first plunge at open wire line.
>
> To get into shack, I need to go through exterior steel siding,
> exterior wood siding & plywood, a layer of insulation, then interior
> sheetrock and wood paneling. Assume I need about 4-6" of safe
> feedthrough so that standoffs can be mounted on the walls oustide
> and inside the shack.
>
> I generally run 100 to 1500W output...at full legal limit probably
> 3KV on the feedline...am not crazy about the idea of setting my house
> on fire due to HV arc over.
>
> Am looking for the old style porcelain feedthrough isnulators, but so
> far have not found same.
>
> Local Home Depot has thin PVC tubing (as in sink/toilet stems), vinyl
> tubing, welding rod tubes, etc. What are the dielectric properties of
> these, and the high voltage breakdown voltage...???
>
> Seems like glass, porcelain, or ceramic tubing would be best
> feedthrough insulator, but where to find?
>
> Are any modern day materials found in Lowes or Home Depot safe from
> arcing and also efficient for RF?
>
> Thanks in davance & 73,
>
> Dan (K0DAN)
>
You don't by any chance have a window close at hand that you could run the
feeders through?
This really simplifies the situation. That is the way I get my feeder in and
out of the house.
Ed, N5EI

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2478. Re: G5RV with end bits

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 13:00:02 UTC
From: grasshouse@hotmail.com
Message-ID: <cuvg4s$fu7$1@newsg4.svr.pol.co.uk>
Source record: 82016

cheers never seen this site before very helpful thanks a lot!

2479. Re: Building a cheap easy cb antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 13:30:48 UTC
From: stryped@hotmail.com
Message-ID: <1108560648.747153.18110@l41g2000cwc.googlegroups.com>
Source record: 82017

Why are the ones you buy dont have ground radials. Like the "sticks"
they use on trucks?

I am guessing they are 5/8 wavelength and have some sort of coil inside
them I cant see.

I am not wanting "super performance" But something that is decent.

2480. Re: trees are nature's towers and antenna combined

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 14:16:08 UTC
From: Michael Coslo <mjc5@enoughalready.psu.edu>
Message-ID: <cuvkj8$tr4$1@f04n12.cac.psu.edu>
Source record: 82018

Dave Platt wrote:
> In article <871xbhiilw.fsf@jidanni.org>,
> Dan Jacobson <jidanni@jidanni.org> wrote:
>
>
>>Hmmm, don't see much these days on this 100 year old concept:
>>http://www.rexresearch.com/squier/squier.htm "trees --- all trees, of
>>all kinds and all heights, growing anywhere --- are nature's own
>>wireless towers and antenna combined."
>>
>>Perhaps wire is cheap these days so there is little practicality left
>>to his idea?
>
>
> His arrangment sounds a bit like a shunt-fed antenna tower. Perhaps
> the "brushy" nature of the top of a tree makes it behave a bit like a
> "fat" dipole, with the broad bandwidth the page speaks of?
>
> One limitation of these is clear from the article - they're seasonal.
> When winter comes and the sap is gone down into the roots, the
> antenna's performance degrades quite badly.
>
> Hmmm... I wonder... would QRO operation on a sugar maple in April
> leave you with a bucket full of maple-flavored Fizzies?

I also wonder what all this would do to the tree. While it wouldn't be
such a big deal in the woods, I wouldn't want to kill the trees in my yard.

- Mike KB3EIA -

2481. Re: mountains reflect signal anyway?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 14:27:21 UTC
From: Buck <iam@this.site>
Message-ID: <tfl6111hljt6pksg4tkhtqt0apaplg2g62@4ax.com>
Source record: 82019

On Wed, 16 Feb 2005 04:29:38 +0800, Dan Jacobson <jidanni@jidanni.org>
wrote:

>D> It might well be worth your while to experiment with a simple
>D> somewhat-directional antenna. A single reflector, located perhaps
>D> .1 to .2 wavelengths on the mountainside side (sorry :-) of your
>D> current vertical, cut to perhaps 5% longer than a half-wavelength,
>D> could be used to shape your antenna's pattern into something
>D> vaguely cardioid.
>
>Yes! Say, can one just cut the reflector 5% longer than the antenna?
>The antenna is some complex double 5/8 wavelength job.
>If the reflector is shorter than the antenna, it becomes a director?
>What if the reflector is just a pole jabbed into the ground, thus
>grounded and longer downwards than the 5%? What if the pole is "very
>much longer than the antenna in both directions"?
>How about the thickness of the reflector? Only as thick as the antenna
>itself (but wait, the antenna has two thicknesses, top thin, bottom
>thick), or just grab any iron pipe (wait, metal type and shape
>important?)

I am going to take a stab at this.
I would think that the 5% greater than the 1/2 wave will be a better
reflector than the 5% greater than 5/8 wave. I am thinking that the
wavelength of the signal is what we are dealing with more than the
size of the transmission element.

I did a very non-scientific experiments with rubber duck antennas and
beam elements many years ago. One of the tricks I used was to put a
rubber duck between the reflector and driven elements of a small beam.
The signal improved radically. I also tried it with three rubber duck
antennas. The reflector duck had an extension to make it a little
longer. The change in the signal strength was, as expected, a little
improved, but not greatly.

I also placed a 5/8 wave j-pole between the reflector and director.
It produced a better signal than the rubber duck did, but not as much
as I had expected. I didn't go any farther with the experiment. I
didn't keep a log or use calibrated equipment or anything. Like I
said, I was just playing around with it a few minutes.

--
73 for now
Buck
N4PGW

2482. Re: Building a cheap easy cb antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 14:29:32 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42135987$1_2@127.0.0.1>
Source record: 82020

stryped@hotmail.com wrote:
> Why are the ones you buy dont have ground radials. Like the "sticks"
> they use on trucks?

The metal truck is the "ground plane". If you had
a copper roof, you wouldn't need radials.
--
73, Cecil http://www.qsl.net/w5dxp

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2483. Re: OPEN WIRE LINE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 14:36:17 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <e6m611hn2tkct93ic6hf23r0408smakppu@4ax.com>
Source record: 82021

On Tue, 15 Feb 2005 21:44:34 -0600, me <nospam@nospam.com> wrote:

>After many years of experimenting with coax fed wire antennas I am
>taking my first plunge at open wire line.
>
>To get into shack, I need to go through exterior steel siding,
>exterior wood siding & plywood, a layer of insulation, then interior
>sheetrock and wood paneling. Assume I need about 4-6" of safe
>feedthrough so that standoffs can be mounted on the walls oustide
>and inside the shack.
>
>I generally run 100 to 1500W output...at full legal limit probably
>3KV on the feedline...am not crazy about the idea of setting my house
>on fire due to HV arc over.
>
>Am looking for the old style porcelain feedthrough isnulators, but so
>far have not found same.
>
>Local Home Depot has thin PVC tubing (as in sink/toilet stems), vinyl
>tubing, welding rod tubes, etc. What are the dielectric properties of
>these, and the high voltage breakdown voltage...???
>
>Seems like glass, porcelain, or ceramic tubing would be best
>feedthrough insulator, but where to find?

I use ceramic feedthrough insulators on a piece of board in the bottom
of my window to bring 450-ohm line indoors. I got the insulators from
Surplus Sales of Nebraska -- you can check their web site for info;
they have a pretty good selection of NOS in all sizes, tho' they ain't
cheap.

You may do just as well rigging something else, as per some of the
other suggestions here...

bob
k5qwg

>
>Are any modern day materials found in Lowes or Home Depot safe from
>arcing and also efficient for RF?
>
>Thanks in davance & 73,
>
>Dan (K0DAN)

2484. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 15:15:31 UTC
From: Buck <iam@this.site>
Message-ID: <aqo611pv2klajo5trn1bu03g3hu1n0rdaf@4ax.com>
Source record: 81922

On Tue, 15 Feb 2005 10:34:05 -0800, "Caveat Lector" <CL@barahmas.com>
wrote:

>Suspect this will get the flames (;-(

LOL,
You'll need them to stay warm at night.

--
73 for now
Buck
N4PGW

2485. Re: OPEN WIRE LINE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 15:31:54 UTC
From: me <nospam@nospam.com>
Message-ID: <qnp6111r3llm643voosghld08lcc1jh1i2@4ax.com>
Source record: 81923

Excellent idea...I can envision a couple N or UHF connectors on either
side of the wall, and the entry point is indeed near the ground system
so that too is feasible. Thanks for the tip...there are others coming
in but this sounds very feasible and relatively easy!
73
Dan
K0DAN

On Wed, 16 Feb 2005 04:31:15 GMT, W9DMK<nobody@crosslink.net> (Robert
Lay) wrote:

>On Tue, 15 Feb 2005 21:44:34 -0600, me <nospam@nospam.com> wrote:
>
>>After many years of experimenting with coax fed wire antennas I am
>>taking my first plunge at open wire line.
>>
>>To get into shack, I need to go through exterior steel siding,
>>exterior wood siding & plywood, a layer of insulation, then interior
>>sheetrock and wood paneling. Assume I need about 4-6" of safe
>>feedthrough so that standoffs can be mounted on the walls oustide
>>and inside the shack.
>>
>>I generally run 100 to 1500W output...at full legal limit probably
>>3KV on the feedline...am not crazy about the idea of setting my house
>>on fire due to HV arc over.
>>
>>Am looking for the old style porcelain feedthrough isnulators, but so
>>far have not found same.
>>
>>Local Home Depot has thin PVC tubing (as in sink/toilet stems), vinyl
>>tubing, welding rod tubes, etc. What are the dielectric properties of
>>these, and the high voltage breakdown voltage...???
>>
>>Seems like glass, porcelain, or ceramic tubing would be best
>>feedthrough insulator, but where to find?
>>
>>Are any modern day materials found in Lowes or Home Depot safe from
>>arcing and also efficient for RF?
>
>Dear Dan,
>
>It seems that many take the approach of using a pair of coax lines
>hooked up as a balanced coax pair as the answer to that problem. If
>you are worried about the impedance discontinuity, it's a short
>section and will not be a problem. If you are worried about whether or

>not the coax can handle it, RG-8 is good enough and RG-17 is better.
>If you want to combine a little bit of protection against near strikes
>while you're at it, run through the wall low to the ground and close
>to the biggest, best earthing system you can put together, and then
>connect the shields of the coax to a short hunk of heavy wire to that
>earthing system.
>
>Bob, W9DMK, Dahlgren, VA
>Replace "nobody" with my callsign for e-mail
>http://www.qsl.net/w9dmk
>http://zaffora/f2o.org/W9DMK/W9dmk.html

2486. Re: OPEN WIRE LINE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 15:38:45 UTC
From: me <nospam@nospam.com>
Message-ID: <l5q6119s65i8ocqr5mbvjv7sejvd0qmnsb@4ax.com>
Source record: 81924

Thanks for the tip Reg...yours is vote #2 for some sort of coax
transition, and I like this approach as it sounds feasible and easy
(and inexpensive). Am looking forward to a a couple more days of good
WX to complete the antenna project! Many thanks and 73
Dan (K0DAN)

On Wed, 16 Feb 2005 05:06:29 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>There must be NO metal and NO low-grade insulating material BETWEEN the pair
>of wires as they come into the shack.
>
>Bring the wires close together for a short distance through a relatively
>small hole in the wall. At HF, the small lumped increase in capacitance
>between the wires will have a neglible effect on system operation.
>Equivalent to an unoticeable minor shift in tuner settings. No additional
>line loss will be incurred.
>
>Insulate the pair of wires from each other by using the inner conductors of
>coax cable plus the polyethylene. Discard the outer conductor braid. To
>minimise size of hole through the wall allow the polyethylene coverings to
>touch each other if you like.
>
>The main problem will be rain and weather-proofing.
>
>For a short, indoors, distance to the transmitter or tuner, the twin
>polyethylene insulated wires can be retained and allowed to separate if
>convenient.
>---
>Reg, G4FGQ
>
>==================================
>
>"me" wrote -
>> After many years of experimenting with coax fed wire antennas I am
>> taking my first plunge at open wire line.
>>
>> To get into shack, I need to go through exterior steel siding,
>> exterior wood siding & plywood, a layer of insulation, then interior
>> sheetrock and wood paneling. Assume I need about 4-6" of safe
>> feedthrough so that standoffs can be mounted on the walls oustide
>> and inside the shack.
>>
>> I generally run 100 to 1500W output...at full legal limit probably
>> 3KV on the feedline...am not crazy about the idea of setting my house

>> on fire due to HV arc over.
>>
>> Am looking for the old style porcelain feedthrough isnulators, but so
>> far have not found same.
>>
>> Local Home Depot has thin PVC tubing (as in sink/toilet stems), vinyl
>> tubing, welding rod tubes, etc. What are the dielectric properties of
>> these, and the high voltage breakdown voltage...???
>>
>> Seems like glass, porcelain, or ceramic tubing would be best
>> feedthrough insulator, but where to find?
>>
>> Are any modern day materials found in Lowes or Home Depot safe from
>> arcing and also efficient for RF?
>>
>> Thanks in davance & 73,
>>
>> Dan (K0DAN)
>

2487. Re: OPEN WIRE LINE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 15:40:42 UTC
From: me <nospam@nospam.com>
Message-ID: <79q611h0c8as3jdr1j10vqquddla7qb4j5@4ax.com>
Source record: 81925

Hi Cecil...

Vote #3 for the coax feedthrough...sounds like this trick is well
known and escaped all my reading.

Thanks and 73
Dan (K0DAN)

On Wed, 16 Feb 2005 00:01:08 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

>me wrote:
>> Are any modern day materials found in Lowes or Home Depot safe from
>> arcing and also efficient for RF?
>
>For that 6" run, just use two pieces of parallel
>coax. The inside conductors are your balanced
>conductors and the braids are grounded. Be sure
>not to exceed the voltage rating of whatever coax
>you choose to install.

2488. Re: Installed M2 Horizontal Loop today - PHOTOS

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 15:43:19 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <rSJQd.527$DC6.346@newssvr14.news.prodigy.com>
Source record: 81926
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

You both might be interested in knowing that you are compairing apples
and oranges-- as the Ringo is VERTICAL polarized, while the M2 is
HORIZONTAL polarized-- makeing a 20 dB difference at the recieved
end - the advantage of either one depending on the polarization of the
recieveing antenna! -- Verticals for FM, Horizontals for C.W /S.S.B.
Jim NN7K

David 01 wrote:
> No offense, but where I live live the guys joke that they use the ringo
> ranger II as a fishing pole or dummy load. We haven't experienced a good one
> here. Anything else is far better in our experience and I know of no one
> actually using one now, but they say there's a stack of them avsailable for
> free behind a certain store.
>
> "Charlie" <charlie@earthlink.com> wrote in message
> news:1108njbbertjqcc@news.supernews.com...
>
>>1. http://www.ad5th.com/VHF.html
>>
>>Also shown my Ringo Ranger II - ARX-2B. Links to technical data for each
>>antenna also.
>>
>>--
>>
>>Charlie
>>Ham Radio - AD5TH
>>www.ad5th.com
>>Live Blues Music
>>www.492acousticblues.com
>>
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>>
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>
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>

2489. Re: OPEN WIRE LINE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 15:43:56 UTC
From: me <nospam@nospam.com>
Message-ID: <dcq6111n4slfr6trm6le3o1kn8lj31e8j2@4ax.com>
Source record: 81927

Ed...

Nope, the window is not feasible. There is an awning type window with
metal frame but its location and installation make it unfeasible.
Penetrating the wall nearby, however, is feasible, and the recent tips
to use coax as the feedthrough medium sound really good.
Thanks for your reply, this antenna should be operational soon!
73
Dan
K0DAN

On Wed, 16 Feb 2005 06:55:11 -0500, "Edward A. Feustel"
<efeustel@direcway.com> wrote:

>
>"me" <nospam@nospam.com> wrote in message
>news:hnf511559551ke2c6g7gf44ddv886vjhlv@4ax.com...
>> After many years of experimenting with coax fed wire antennas I am
>> taking my first plunge at open wire line.
>>
>> To get into shack, I need to go through exterior steel siding,
>> exterior wood siding & plywood, a layer of insulation, then interior
>> sheetrock and wood paneling. Assume I need about 4-6" of safe
>> feedthrough so that standoffs can be mounted on the walls oustide
>> and inside the shack.
>>
>> I generally run 100 to 1500W output...at full legal limit probably
>> 3KV on the feedline...am not crazy about the idea of setting my house
>> on fire due to HV arc over.
>>
>> Am looking for the old style porcelain feedthrough isnulators, but so
>> far have not found same.
>>
>> Local Home Depot has thin PVC tubing (as in sink/toilet stems), vinyl
>> tubing, welding rod tubes, etc. What are the dielectric properties of
>> these, and the high voltage breakdown voltage...???
>>
>> Seems like glass, porcelain, or ceramic tubing would be best
>> feedthrough insulator, but where to find?
>>
>> Are any modern day materials found in Lowes or Home Depot safe from
>> arcing and also efficient for RF?
>>
>> Thanks in davance & 73,
>>

>> Dan (K0DAN)
>>
>You don't by any chance have a window close at hand that you could run the
>feeders through?
>This really simplifies the situation. That is the way I get my feeder in and
>out of the house.
>Ed, N5EI
>
>
>
>
>----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
>http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
>---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2490. Re: OPEN WIRE LINE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 15:46:25 UTC
From: me <nospam@nospam.com>
Message-ID: <viq61156hrpmqcal6q1k1j15rcgaovru68@4ax.com>
Source record: 81928

Thanks for your reply, Bob...

Unfortunately, the window is not feasible, but the coax approach
should work. MOunting to a small board or knockout might be a good
idea, so I could save the cut-out materials and be able to un-do the
hatchet work if that was ever necessary.

Thanks for your reply.
73
Dan (K0DAN)

On Wed, 16 Feb 2005 14:36:17 GMT, Bob Miller <NOSPAM@neosoft.com>
wrote:

>On Tue, 15 Feb 2005 21:44:34 -0600, me <nospam@nospam.com> wrote:
>
>>After many years of experimenting with coax fed wire antennas I am
>>taking my first plunge at open wire line.
>>
>>To get into shack, I need to go through exterior steel siding,
>>exterior wood siding & plywood, a layer of insulation, then interior
>>sheetrock and wood paneling. Assume I need about 4-6" of safe
>>feedthrough so that standoffs can be mounted on the walls oustide
>>and inside the shack.
>>
>>I generally run 100 to 1500W output...at full legal limit probably
>>3KV on the feedline...am not crazy about the idea of setting my house
>>on fire due to HV arc over.
>>
>>Am looking for the old style porcelain feedthrough isnulators, but so
>>far have not found same.
>>
>>Local Home Depot has thin PVC tubing (as in sink/toilet stems), vinyl
>>tubing, welding rod tubes, etc. What are the dielectric properties of
>>these, and the high voltage breakdown voltage...???
>>
>>Seems like glass, porcelain, or ceramic tubing would be best
>>feedthrough insulator, but where to find?
>
>I use ceramic feedthrough insulators on a piece of board in the bottom
>of my window to bring 450-ohm line indoors. I got the insulators from
>Surplus Sales of Nebraska -- you can check their web site for info;
>they have a pretty good selection of NOS in all sizes, tho' they ain't
>cheap.
>

>You may do just as well rigging something else, as per some of the
>other suggestions here...
>
>bob
>k5qwg
>
>>
>>Are any modern day materials found in Lowes or Home Depot safe from
>>arcing and also efficient for RF?
>>
>>Thanks in davance & 73,
>>
>>Dan (K0DAN)

2491. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 15:51:34 UTC
From: Buck <iam@this.site>
Message-ID: <fbp611tirb6jafka32eusnknn2qgubkvjb@4ax.com>
Source record: 81930

I have read the other responses, but let me take a stab at it.

I'll try to simplify this for you.

First of all, radio propagates by way of electro-magnetic fields. Since they are invisible, water is used to create a picture so you can get an idea of how they work, but they don't work exactly like water. Secondly, electrons are used to create the wave, but they aren't the waves.

You have seen how magnets attract and repel. You have seen an electro-magnet that attracts iron when it is energized and ignores it when turned off. Also, you have seen in a generator how a magnet passes nearby a coil of wire without actually touching it. Keep these in mind for now.

A transmitter causes electrons to move around in a particular fashion so they can convert information into radio energy, or an electro-magnetic wave. The circuitry manipulates and filters the energy so it has exactly the effect necessary to transmit on some desired frequency. The electrons are then sent through a transmission line to an antenna. The movement of the electrons in the antenna is like the electro-magnet producing an electro-magnetic wave. This electro-magnetic wave is then propagated into the atmosphere where it is effected by the conditions of the earth, the weather and the ionosphere. This is how the waves are created.

On the other side, the receiver is designed to convert those electro-magnetic waves into the electronic movement required to interpret or understand the information transmitted. Just like the electric generator, the magnetic field (waves) striking the antenna move electrons which are sent to the receiver, manipulated filtered and amplified and eventually converted back to a form in which the original information can be understood.

As far as the waves cancelling each other out, I have been told throughout my life that speakers need to be wired in a common manor, i.e. positive and negative appropriately, so they don't 'cancel each other out.' You may even have a speaker and/or stereo where the wire locations are color coded. I have NEVER heard one sound cancel another. It just doesn't happen. However, in radio, if you can get a perfect match on the phase of a signal, it can null itself out. However, that happening accidentally in the atmosphere is such a small possibility that you don't need to worry about it.

I hope this helps. If nothing else, maybe it can generate a thread of thinking in which you have new questions that lead you to the answer you can best understand.

Take care for now.
Buck
N4PGW

--
73 for now
Buck
N4PGW

2492. Re: trees are nature's towers and antenna combined

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 15:52:47 UTC
From: Buck <iam@this.site>
Message-ID: <02r611l2l5ond2ptq2udk14eb901pna64d@4ax.com>
Source record: 81929

On Wed, 16 Feb 2005 00:21:44 -0000, dplatt@radagast.org (Dave Platt)
wrote:

>Hmmm... I wonder... would QRO operation on a sugar maple in April
>leave you with a bucket full of maple-flavored Fizzies?

Nah, just sticky static.

--
73 for now
Buck
N4PGW

2493. Re: OPEN WIRE LINE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 15:56:28 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <M2KQd.31102$by5.8291@newssvr19.news.prodigy.com>
Source record: 81931

Dan,
Have a window fairly close to your transmitter/tuner? Replace
the glass with plexiglass, or drill a couple of holes in the glass,
or make a 'spacer' to fit in the window opening.
How about through the eaves, to attic, through ceiling?
'Doc

2494. Re: One Way Propagation ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 16:15:28 UTC
From: Buck <iam@this.site>
Message-ID: <q6r6115eto2cu1qjas55k6rq8kt2cfh4q6@4ax.com>
Source record: 81932

On Wed, 16 Feb 2005 02:19:31 -0500, Gary <gdn50@@@@usol.com> wrote:

>First off I don't really believe in one way propagaiton unless someone
>can convince me otherwise ? However, I am curious about a phenomenon
>I've experienced with a number or radios and antennas over the years.
>I've had eveything from a 4 element Yagi at 55 feet to the dipoles I'm
>using now and lots of new transcievers. I work all CW and on occasion
>I'll get a 599 signal report from the other station yet he's barely
>copyable from my end. They all seem to be running the same 100 watts
>or more that I'm using now and are using a dipole cut for the
>frequency in use like I am or a G5RV etc. I wonder if anyone else has
>observed this and/or has an explanation ? This has occured on new
>transceivers too numerous to name over the years. So I know its not a
>problem with a particular radio.
>
>73 and Thanks in Advance
>
>Gary K8IQ

I have been thinking about that same thing. I hunt counties and therefore talk to lots of mobiles. Many times I talk to the same mobile in different locations. There are times I am received 59 and hear 22. Other times I hear 59 and get a 22. Since there are many mobiles throughout the country, I think I get a better picture of what propagation looks like than I would if I were just making random contacts. I live in the southeast and use a dipole, so for the most part, communications are in the same direction.

Here is my theory, as unsound as it may be. Think of a station with 100 watts using a TV dish style antenna talking to a person using just a dipole with 100 watts. The dipole user will hear a much stronger signal. However, on HF, we don't use dishes. Or maybe we do...

We know the ionosphere affects propagation. It is assumed that signals take the same path and therefore should have the same strength, but I don't think so. If the ionosphere is dense (relative to my frequency) behind and over my station, I may be using it as a 'dish' reflector. However, at your location, you may have a porous ionosphere so rather than your signal being reflected, it is being absorbed. The result is that I have an ERP of 200 watts and you reply to me with an ERP of 20.

This is just my theory I have in my mind and it may be that it is more full of holes than the ionosphere I put over your station in the example.

But, for what it's worth....
73 for now.

Buck
N4PGW

--
73 for now
Buck
N4PGW

2495. Re: OPEN WIRE LINE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 16:34:45 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <421374f2.2906519@news.crosslink.net>
Source record: 81933

On Wed, 16 Feb 2005 09:31:54 -0600, me <nospam@nospam.com> wrote:

>Excellent idea...I can envision a couple N or UHF connectors on either
>side of the wall, and the entry point is indeed near the ground system
>so that too is feasible. Thanks for the tip...there are others coming
>in but this sounds very feasible and relatively easy!

No, sorry, that is not what I had in mind and should have cleared that up right at the outset.

I never use coax connectors in this situation, although I suppose you could. I simply connect balanced line to the innter conductors of the coax's on each side of the balanced coax segment. If you want a quick disconnect, I use a pair of the General Radio type Banana plugs just inside the shack. They are convenient for several reasons.
1) they seem to be able to stand the power level.

2) the spacing on the wire connectors is exactly right for 450 ohm window line, and

3)they are hermaphroditic - i.e., they plug into one another either way.

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

2496. Re: Installed M2 Horizontal Loop today - PHOTOS

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 16:55:02 UTC
From: David 01 <ifiwantspam@illask.org>
Message-ID: <1116un9ic7p9ge1@corp.supernews.com>
Source record: 81934
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

We wouldn't want to disconnect the bamboo. That's the only effective antenna between it and the Ringo Ranger II.

Seriously, the Ringo Ranger II was my first anteena back in 1990 and I didn't know how poorly it performed until I changed to something else. To this day I've never had anything else perform that poorly. Everyone that I've talked to that has tried one has had the same expeerience. One guy tried two of them. He bought the first one used and thought that he had just gotten a defective one and ordered a brand new one with the same result.

73

"Charlie" <charlie@earthlink.com> wrote in message
news:1115tnc7gdntp00@news.supernews.com...
> No offense taken....
> Where I live we use bamboo for fishing and Ringo Ranger II's for distant
vhf
> communications. Perhaps you have it mixed up where you live. Take the
coax
> off the bamboo and hook it back to the Ringo....
>
> 73 / DX
>
> --
>
> Charlie
> Ham Radio - AD5TH
> www.ad5th.com
> Live Blues Music
> www.492acousticblues.com
>
>
>
>
> "David 01" <ifiwantspam@illask.org> wrote in message
> news:1115p7dheu0ai31@corp.supernews.com...
> > No offense, but where I live live the guys joke that they use the ringo
> > ranger II as a fishing pole or dummy load. We haven't experienced a good
> > one
> > here. Anything else is far better in our experience and I know of no one
> > actually using one now, but they say there's a stack of them avsailable
> > for
> > free behind a certain store.
> >

> > "Charlie" <charlie@earthlink.com> wrote in message
> > news:1108njbbertjqcc@news.supernews.com...
> >> 1. http://www.ad5th.com/VHF.html
> >>
> >> Also shown my Ringo Ranger II - ARX-2B. Links to technical data for
each
> >> antenna also.
> >>
> >> --
> >>
> >> Charlie
> >> Ham Radio - AD5TH
> >> www.ad5th.com
> >> Live Blues Music
> >> www.492acousticblues.com
> >>
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>
>

2497. Re: Installed M2 Horizontal Loop today - PHOTOS

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 16:58:57 UTC
From: David 01 <ifiwantspam@illask.org>
Message-ID: <1116uumjvnjv9c2@corp.supernews.com>
Source record: 81935
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

You know, to be confused, you gave a pretty good review, BUT, if you'll reread our posts you'll see that we were not comparing the two antennas that Charlie was talking about. I was simply commenting on the Ringo Ranger II.

73

"Jim - NN7K" <nn7kexk7zfg@NOSPAMsbcglobal.net> wrote in message news:rSJQd.527$DC6.346@newssvr14.news.prodigy.com...
> You both might be interested in knowing that you are compairing apples
> and oranges-- as the Ringo is VERTICAL polarized, while the M2 is
> HORIZONTAL polarized-- makeing a 20 dB difference at the recieved
> end - the advantage of either one depending on the polarization of the
> recieveing antenna! -- Verticals for FM, Horizontals for C.W /S.S.B.
> Jim NN7K
>
> David 01 wrote:
> > No offense, but where I live live the guys joke that they use the ringo
> > ranger II as a fishing pole or dummy load. We haven't experienced a good one
> > here. Anything else is far better in our experience and I know of no one
> > actually using one now, but they say there's a stack of them avsailable for
> > free behind a certain store.
> >
> > "Charlie" <charlie@earthlink.com> wrote in message
> > news:1108njbbertjqcc@news.supernews.com...
> >
> >>1. http://www.ad5th.com/VHF.html
> >>
> >>Also shown my Ringo Ranger II - ARX-2B. Links to technical data for each
> >>antenna also.
> >>
> >>--
> >>
> >>Charlie
> >>Ham Radio - AD5TH
> >>www.ad5th.com
> >>Live Blues Music
> >>www.492acousticblues.com
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2498. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 17:02:39 UTC
From: "aunwin@insightbb.com"
Message-ID: <P0LQd.7664$tl3.7140@attbi_s02>
Source record: 81936

Reg, when I penned the thread beginnings I was trying to evoke
fresh thinking about the subject so as to challenge ideas that are spread by
plagurism in a similar way that the ballon is shown to demonstrate how
directivity /gain occurs.
Ham radio operators are lead to believe that the height above ground of
a beam's feed point determines the take off angle. It is true that it does
have an effect on the TOA, say 75 percent, when other actions are taken
to change the angle and 95 percent or so if no other actions are taken.
Thus if actions are taken to lower the TOA one can take advantage of
physical hops that were not available for a similar feed point height.
This is why I returned to the thread to dispute the statement that you
made regarding no amount of antenna waving can change the facts.
Regards from another indentured apporentice from the school of
Engineering and Navigation along side of the East India Docks
which was attended by many from the cable company further
down the river
Art

Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cujmve$p44$1@hercules.btinternet.com...
>
> "Reg Edwards" wrote
>> The elevation angle of a radio wave is not related to antenna
> construction.

snip
>
>> BUT NO AMOUNT OF WAVING THE ANTENNA ABOUT WILL AFFECT THE ELEVATION ANGLE
> OF
>> THE RADIO PATH.
>>
snip.
>> ----
>> .....
>> Regards from Reg, G4FGQ
>> For Free Radio Design Software go to
>> http://www.btinternet.com/~g4fgq.regp
>> .....
>>
> ==
>
> Why should my answer to the question be altogether different to everybody
> else's? Especially as I'm right.
\
Possibly because you were addressing a different question

> ---
> Reg.
>
>

2499. Re: Installed M2 Horizontal Loop today - PHOTOS

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 17:09:22 UTC
From: "Guy P. Distaffen" <guypd@frontiernet.net>
Message-ID: <67LQd.6967$6p7.5859@news01.roc.ny>
Source record: 81937
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

My brother runs the Ringo Ranger and is very happy with it. It performs very well and increased his range tremendously. I was even looking into getting one for myself this summer. This is the first time that I had heard any bad reviews of the antenna. I will have to check into it some more.

Guy P. Distaffen

KB0SWS

"David 01" <ifiwantspam@illask.org> wrote in message
news:1116un9ic7p9ge1@corp.supernews.com...
> We wouldn't want to disconnect the bamboo. That's the only effective
> antenna
> between it and the Ringo Ranger II.
>
> Seriously, the Ringo Ranger II was my first anteena back in 1990 and I
> didn't know how poorly it performed until I changed to something else. To
> this day I've never had anything else perform that poorly. Everyone that
> I've talked to that has tried one has had the same expeerience. One guy
> tried two of them. He bought the first one used and thought that he had
> just
> gotten a defective one and ordered a brand new one with the same result.
>
> 73
>
> "Charlie" <charlie@earthlink.com> wrote in message
> news:1115tnc7gdntp00@news.supernews.com...
>> No offense taken....
>> Where I live we use bamboo for fishing and Ringo Ranger II's for distant
> vhf
>> communications. Perhaps you have it mixed up where you live. Take the
> coax
>> off the bamboo and hook it back to the Ringo....
>>
>> 73 / DX
>>
>> --
>>
>> Charlie
>> Ham Radio - AD5TH
>> www.ad5th.com
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>> www.492acousticblues.com
>>

>>
>>
>>
>> "David 01" <ifiwantspam@illask.org> wrote in message
>> news:1115p7dheu0ai31@corp.supernews.com...
>> > No offense, but where I live live the guys joke that they use the ringo
>> > ranger II as a fishing pole or dummy load. We haven't experienced a
>> > good
>> > one
>> > here. Anything else is far better in our experience and I know of no
>> > one
>> > actually using one now, but they say there's a stack of them avsailable
>> > for
>> > free behind a certain store.
>> >
>> > "Charlie" <charlie@earthlink.com> wrote in message
>> > news:1108njbbertjqcc@news.supernews.com...
>> >> 1. http://www.ad5th.com/VHF.html
>> >>
>> >> Also shown my Ringo Ranger II - ARX-2B. Links to technical data for
> each
>> >> antenna also.
>> >>
>> >> --
>> >>
>> >> Charlie
>> >> Ham Radio - AD5TH
>> >> www.ad5th.com
>> >> Live Blues Music
>> >> www.492acousticblues.com
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>

2500. Re: Ham Radio Forums, Picture Galleries, Photo Classifieds

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 17:28:33 UTC
From: J Tabor <denews@taborsoft.com>
Message-ID: <RI2dnQ55Ze9RH47fRVn-sA@amaonline.com>
Source record: 81938

Not Found
The requested URL / was not found on this server.

Additionally, a 404 Not Found error was encountered while trying to use an
ErrorDocument to handle the request.

Apache/1.3.33 Server at www.hamradioforums.com Port 80

--
email sent to: denews@taborsoft.com
is discarded without being seen.
Sorry for any inconvenience.
"Eric" <k4sci@hamradioforums.com> wrote in message
news:1108330261.753908.324450@l41g2000cwc.googlegroups.com...
> Hello fellow Hams,
>
> I just started a new website, http://www.hamradioforums.com with Radio
> Forums, !0 megs of picture gallery space per user, and photo
> classifieds. It's all free, and I invite you to visit, and join.
>
> Running vBulletin 3.0.6, Photopost 4.86, and Photo Classifieds 2.1 on a
> dedicated server with redundant internet connections. It's FAST! Give
> it a look, you need not join to post in the forums, but a quick one
> minute sigh up is required to use the classifieds. Give it a try!
>
> http://www.hamradioforums.com - k4sci
>

2501. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 17:30:55 UTC
From: Jedi Knight <azdjedi@hotmail.com>
Message-ID: <1108575055.953610.99190@c13g2000cwb.googlegroups.com>
Source record: 81939

thx Buck & Clark, and all, for your *attempts* ;).

I'm a little less confused and a little more confused. I think the most certainty I have is this: no, they don't have self-awareness cause if they did, they'd have seen my question and responded themselves, lol.

I'm glad nobody but Einstein2 understands EM, cuz that was my next question. I can picture something (electrons), but I can't picture nothing (waves of energy).

So let me see if i get this concept right.

First I create a carrier wave, then I modulate it with my message, then I send that from the antenna, which will converet it from electron "stuff" to an EM wave. So far so good? I don't quite understand how a carrier wave can both carry a message and itself not be a message, but whatever. (this part I can at least pretend to accept, even tho i don't understand the physics of it completely)

Next the wave travels through space in a way that totally dumb founds me, and is picked up by a receiving antenna, which does the whole thing backward. It's this part that really mucks things up (yes, that's the technical term for it) for me. I really don't see how there can be more than one thing occuping the same space (the whole "Back to the Future" phenomenon, lol) at the same time. Something is missing for me. I'm way more of a visual learner, so if anybody has pictures....SWEET. I can make the leap of faith because I know that color is frequency and a prism splits it up, but I don't understand how that works either. Back to Optiks for me ;).

thx again,
Bodi

2502. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 17:49:09 UTC
From: richardharrison@webtv.net
Message-ID: <11821-42138795-209@storefull-3257.bay.webtv.net>
Source record: 81940

Reg, G4FGQ wrote:
"It`s purely a matter of Spherical Geometry>"

Edmund A. Laport agrees with Reg in his book "Radio Antenna Engineering". On page 227 Ed writes:
"If, for example, the computed vertical beam angle for a one-hop circuit uses 6 degrees at an azimuth of 332 degrees and the horizon in this direction consisted of a mountain range with a height of 8 degrees, the performance of the circuit would be greatly compromised by the obstruction of the mountains. In such a case it might be better to work this circuit with two hops. Then a vertical beam angle of 20 degrees can be used instead, with adequate horizon clearance for the wave path. Or if the circuit required 6 degrees for a two-hop circuit 5400 kilometers long, with the same obstruction cited, one could change to a three-hop circuit which for the same layer height would permit the use of a beam at 14 degrees."

Best regards, Richard Harrison, KB5WZI

2503. Re: Building a cheap easy cb antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 18:01:45 UTC
From: cl <clfurent@Yahoo.Com>
Message-ID: <2VLQd.44533$NC6.30534@newsread1.mlpsca01.us.to.verio.net>
Source record: 81941

<grasshouse@hotmail.com> wrote in message
news:cuvanj$1s0$1@newsg1.svr.pol.co.uk...
> you've no right to be using a 2 metre radio, if you don't know the
> fundamentals of building a simple antenna.
> seems amateur licences really do come from Macky,deeeee's these days.
>
>

Used to be, exams weren't made "public". The FCC would give you a hint as to what "may" be asked, but not a list of questions with answers. I still have a copy of one of their "study guides". A single sheet front and back usually. Unless you knew electronics, you rarely passed. Then along came some wizard who thought the tests should be dumbed down. Now you have the books with all questions and answers. That sort of test taking does NOT prepare someone for the field. Any idiot can remember a bunch of answers after a couple hours of going through the book. It does NOT "teach" anything. I know some "hams" who don't even know what the hell a fuse is for. Imagine that!

It isn't the person's fault, their acquiring the license via the current system is just the way it is. But, that should not preclude them from picking up some books to "READ" about such things as antenna theory, building basics, etc. Without looking at some books, they'll be forever asking questions and not understanding. The Internet is a wonderful source of help, but there is only so much you can do. You need "reference" materials to get you going. READ BOOKS - THEN if you still have questions - ask..... The questions asked, should be the fillers - not the main content.

cl

2504. Re: One Way Propagation ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 18:35:32 UTC
From: Wes Stewart <*n7ws*@yahoo.com>
Message-ID: <rh47111ns2qj6t53gi1sl96ikojkr61v8t@4ax.com>
Source record: 81943

On Wed, 16 Feb 2005 02:19:31 -0500, Gary <gdn50@@@@usol.com> wrote:

|First off I don't really believe in one way propagaiton unless someone
|can convince me otherwise ? However, I am curious about a phenomenon
|I've experienced with a number or radios and antennas over the years.
|I've had eveything from a 4 element Yagi at 55 feet to the dipoles I'm
|using now and lots of new transcievers. I work all CW and on occasion
|I'll get a 599 signal report from the other station yet he's barely
|copyable from my end. They all seem to be running the same 100 watts
|or more that I'm using now and are using a dipole cut for the
|frequency in use like I am or a G5RV etc. I wonder if anyone else has
|observed this and/or has an explanation ? This has occured on new
|transceivers too numerous to name over the years. So I know its not a
|problem with a particular radio.

It's just that big circulator in the sky.

2505. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 18:36:01 UTC
From: Jim Kelley <jwkelley@nospam.edu>
Message-ID: <cv040q$pg8$1@news.service.uci.edu>
Source record: 81944

Cecil Moore wrote:
> Free electrons have the freedom to emit and absorb photons of any
> and every frequency. Free electrons exist in conductors and can
> travel from atom to atom or molecule to molecule as needed. The
> electrons are the carriers of the EM waves, but not the EM waves,
> much as water molecules are the carriers of ocean waves but are
> not the waves.

Aren't electrons and water molecules more like 'riders' of the waves?

ac6xg

2506. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 19:12:05 UTC
From: "aunwin@insightbb.com"
Message-ID: <9WMQd.5098$4D6.4856@attbi_s51>
Source record: 81945

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:11821-42138795-209@storefull-3257.bay.webtv.net...
> Reg, G4FGQ wrote:
> "It`s purely a matter of Spherical Geometry>"
>
> Edmund A. Laport agrees with Reg in his book "Radio Antenna
> Engineering". On page 227 Ed writes:
> "If, for example, the computed vertical beam angle for a one-hop circuit
> uses 6 degrees at an azimuth of 332 degrees and the horizon in this
> direction consisted of a mountain range with a height of 8 degrees, the
> performance of the circuit would be greatly compromised by the
> obstruction of the mountains. In such a case it might be better to work
> this circuit with two hops. Then a vertical beam angle of 20 degrees can
> be used instead, with adequate horizon clearance for the wave path. Or
> if the circuit required 6 degrees for a two-hop circuit 5400 kilometers
> long, with the same obstruction cited, one could change to a three-hop
> circuit which for the same layer height would permit the use of a beam
> at 14 degrees."
>
> Best regards, Richard Harrison, KB5WZI

OR ..... you take advantage of diffraction abilities of physical parts
such as
mountain edges or other physical parts that can deflect the rays AFTER it
leaves
the FEED POINT which does NOT exclude an antenna array of which the feed
point
is part. The point of confusion emanates from.calculating hop distance on
the
basis of a :"standard:". TOA The "magic" of a stacked antenna exposes
the difference
:that occurs with a different TOA.
I suppose you could use Reg's program so that when the ideal conditions do
occur
maybe after several hours of waiting , when one can say that the upper
layers are now
exactly such or such a height and the assumption used in formulating the
program
are now correct. The fact is that ham radio is about formulating an array
that will
provide the hop distance required by the operator since that is something
he can change.
I am quite sure that LaPorte does NOT say that no amount of shaking an
antenna can

change the hop distance which is what TOA is all about and the subject of this thread.
Maybe we need another thread to clarify the question that Reg and yourself are
apparently addressing.

Art

2507. Re: One Way Propagation ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 19:28:02 UTC
From: AB2RC <AB2RC@localhost.localdomain>
Message-ID: <slrnd177ou.8h4.AB2RC@localhost.localdomain>
Source record: 81946

On 2005-02-16, Buck <iam@this.site> wrote:
>
> We know the ionosphere affects propagation. It is assumed that
> signals take the same path and therefore should have the same
> strength, but I don't think so. If the ionosphere is dense (relative
> to my frequency) behind and over my station, I may be using it as a
> 'dish' reflector. However, at your location, you may have a porous
> ionosphere so rather than your signal being reflected, it is being
> absorbed. The result is that I have an ERP of 200 watts and you reply
> to me with an ERP of 20.

takeoff angle also plays a big part in this. One station may have a lower
angle and be making only 1 hop to the other station, while the other station
may have a higher angle and be hitting the first station via 2 hops --
resulting in some signal loss.

--
Alex / AB2RC
Linux is user friendly, however it is not idiot friendly

2508. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 19:30:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5t67111fpkgccf2nig9am3tg3msuo2i2mr@4ax.com>
Source record: 81947

On 16 Feb 2005 09:30:55 -0800, "Jedi Knight" <azdjedi@hotmail.com>
wrote:

>Next the wave travels through space in a way that totally dumb founds
>me,

Hi Bodi,

That's because of relativity. Again we are speaking about inserting
an observer into the picture and gumming up the works (the proper
technical term).

>I really don't see how there can be
>more than one thing occuping the same space (the whole "Back to the
>Future" phenomenon, lol) at the same time.

This is part of Einstein's relativity, as described in Lorentz's
equations. It is found in the collapse of the space as you approach
the speed of light.

> I'm way more of a visual learner, so if anybody has
>pictures....SWEET.

Lorentzian/Einsteinian geometry predicts that at the speed of light
there is no third dimension in the direction of propagation. Hence
the sender and receiver do occupy the same space. This yields a
picture that is infinitely tall and wide (also a product of light
speed and the same prediction of geometry).

Now having said that, and offered a picture, I am sure that it means
nothing to you except as an example of metaphysical handwaving. Such
is mathematics when you divorce yourself from faith and its illusions.
On the other hand, blind faith in the illusions can bring some pretty
stupid conclusions on their own - just look at the comedy of
discussion about photons and electrons (well, maybe just skip this
advice and say you did look).

73's
Richard Clark, KB7QHC

2509. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 20:24:49 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4213accd$1_2@127.0.0.1>
Source record: 81948

Buck wrote:
> The electrons are then sent through a transmission
> line to an antenna.

Since this is RF AC, I doubt that electrons actually make
it to the antenna from the source. Consider water molecules
carrying waves. The individual molecules don't move very
much but the wave does. Same for RF. The individual electrons
don't move very much but the RF wave does move at the speed
of light. For RF, the same electron is pumped back and forth
through the source. The energy impulse (wave energy) is what
moves.

Put your ear to a board and let someone hit the other end.
What you hear is sound energy that traveled the length of
the board but the molecules in the board hardly moved at all.

Or for a visual effect, consider balls hung on a string.
The end balls can transfer their energy to each other while
the center ball hardly moves at all.

> As far as the waves cancelling each other out, ...

Only coherent waves can cancel. Coherent waves usually
originate from a single source. Coherent waves can
originate from multiple sources only if the sources
are phase-locked or otherwise interlocked. Since our
ham radio RF sources are not phase-locked, they are
not coherent, and normally cannot cancel.
--
73, Cecil http://www.qsl.net/w5dxp

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2510. Re: One Way Propagation ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 20:32:48 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4213aeab$1_2@127.0.0.1>
Source record: 81950

Buck wrote:
> Many times I talk to the same
> mobile in different locations. There are times I am received 59 and
> hear 22. Other times I hear 59 and get a 22.

Doesn't reciprocity assume similar antennas and similar
power levels? Of course, someone running the legal power
limit into a YAGI is going to be received well by almost
everyone but someone replying with QRP into a short
vertical whip is going to be at a disadvantage. Changes
in polarization in the ionosphere can easily explain the
above if one station is horizontally polarized and QSOing
with mobiles.
--
73, Cecil http://www.qsl.net/w5dxp

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2511. Re: One Way Propagation ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 20:33:46 UTC
From: "aunwin@insightbb.com"
Message-ID: <K6OQd.5845$g44.771@attbi_s54>
Source record: 81949

Alex, I believe that the problem occuring here is that many are using words
like refraction, reflection
as being interchangeable. I see a mountainside when operating close to as a
reflector though
it may well be an absorber too. Anything, both behind or in front of a
driven element is a diffractor, thus its length alone
with respect to the driver does not determine whether it reflects or not.
If one solely focusses on the typical yagi
then it is easy to talk in general terms which are not applicable to other
arrays which leads to erroneous
descriptions. It is quite easy to design an array where there are many
elements behind the driven element and many
would be of lengths both shorter and longer than the driven element but
because they are closely coupled they can represent a single, longer element
as coupled elements introduces quanlities other than simple physical
length..
Regards
Art

"AB2RC" <AB2RC@localhost.localdomain> wrote in message
news:slrnd177ou.8h4.AB2RC@localhost.localdomain...
> On 2005-02-16, Buck <iam@this.site> wrote:
>>
>> We know the ionosphere affects propagation. It is assumed that
>> signals take the same path and therefore should have the same
>> strength, but I don't think so. If the ionosphere is dense (relative
>> to my frequency) behind and over my station, I may be using it as a
>> 'dish' reflector. However, at your location, you may have a porous
>> ionosphere so rather than your signal being reflected, it is being
>> absorbed. The result is that I have an ERP of 200 watts and you reply
>> to me with an ERP of 20.
>
> takeoff angle also plays a big part in this. One station may have a lower
> angle and be making only 1 hop to the other station, while the other
> station
> may have a higher angle and be hitting the first station via 2 hops --
> resulting in some signal loss.
>
> --
> Alex / AB2RC
> Linux is user friendly, however it is not idiot friendly

2512. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 20:42:01 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4213b0d5$1_2@127.0.0.1>
Source record: 81951

Jedi Knight wrote:
> Next the wave travels through space in a way that totally dumb founds
> me, and is picked up by a receiving antenna, which does the whole thing
> backward. It's this part that really mucks things up (yes, that's the
> technical term for it) for me. I really don't see how there can be
> more than one thing occuping the same space (the whole "Back to the
> Future" phenomenon, lol) at the same time. Something is missing for
> me. I'm way more of a visual learner, so if anybody has
> pictures....SWEET.

This is the area where photons are easier to understand than EM
waves (although an understanding of superposition of waves will
explain everything). Photons emitted from any number of sources
all arrive at your antenna at the same time. Those photons are
absorbed by the free electrons in your copper antenna. Your
receiver senses those electrons giving up their energies at
different frequencies, magnitudes, and phases.
--
73, Cecil http://www.qsl.net/w5dxp

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2513. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 20:50:49 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4213b2e4$1_2@127.0.0.1>
Source record: 81952

Jim Kelley wrote:

> Cecil Moore wrote:
>> Free electrons have the freedom to emit and absorb photons of any
>> and every frequency. Free electrons exist in conductors and can
>> travel from atom to atom or molecule to molecule as needed. The
>> electrons are the carriers of the EM waves, but not the EM waves,
>> much as water molecules are the carriers of ocean waves but are
>> not the waves.
>
> Aren't electrons and water molecules more like 'riders' of the waves?

Chicken, meet egg. :-) The electrons and water molecules are
the carriers of the waves and exist before and after the wave.
I know this implies something to carry the RF waves in free
space and there indeed seems to be something there. Empty
space is NOT empty. There is a structure of some kind in
empty space - maybe the extra dimensions implied by string
theory? Feel free to call it "aether". :-)
--
73, Cecil http://www.qsl.net/w5dxp

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2514. Re: One Way Propagation ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 21:05:32 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd17dcs.ckk.bit-bucket@shell.config.com>
Source record: 81953

On Wed, 16 Feb 2005 02:19:31 -0500, Gary wrote:
> First off I don't really believe in one way propagaiton unless someone
> can convince me otherwise ? However, I am curious about a phenomenon
> I've experienced with a number or radios and antennas over the years.
> I've had eveything from a 4 element Yagi at 55 feet to the dipoles I'm
> using now and lots of new transcievers. I work all CW and on occasion
> I'll get a 599 signal report from the other station yet he's barely
> copyable from my end. They all seem to be running the same 100 watts
> or more that I'm using now and are using a dipole cut for the
> frequency in use like I am or a G5RV etc. I wonder if anyone else has
> observed this and/or has an explanation ? This has occured on new
> transceivers too numerous to name over the years. So I know its not a
> problem with a particular radio.

I run 9.5 Watts from a rare'ish grid square on 6m.
Almost everybody else is running 100W or more.
I get 5/9 reports from many, many S-3 to S-8 sigs. :-)
If I give _my_ rpt first, I nearly always get the identical or better
report from the other end.

Seriously, tho'. I've seen One-Way-Is-FAR-MORE-Favorable-Than-The-Other
propagation often -- on HF, and on 6M & 2M SSB.
I don't really believe there is _no such thing as_ one-way propagation.

73
Jones
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

2515. Re: trees are nature's towers and antenna combined

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 21:59:14 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <SmPQd.2703$9J5.2388@newsread2.news.atl.earthlink.net>
Source record: 81954

> I think my dad's old Swan 500 could load up into a rusty nail in a pine
> tree.

I think any of the older rigs with PI networks in the output circuit
could do that.

2516. Today's Free Movie (102044 viewers)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 22:42:41 UTC
From: cc12000@sbcglobal.net
Message-ID: <1108593761.887393.134420@f14g2000cwb.googlegroups.com>
Source record: 81955

Today's Free Movie (102044 viewers) >> www.movie-size.4x2.net

2517. Re: The HIGHER the BETTER

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 22:48:27 UTC
From: Dan <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <%4QQd.2747$9J5.2652@newsread2.news.atl.earthlink.net>
Source record: 81956
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"Buck" <iam@this.site> wrote in message
news:8el111trj1vusslu9digm50nej3u9fm4v7@4ax.com...
> On Mon, 14 Feb 2005 02:17:15 -0500, "David 01"
> <ifiwantspam@illask.org> wrote:
>
>
>>UNLESS you're working through repeaters and live in the valleys of a
>>mountainous area. Then you're working bounces and if you get too high
>>(high
>>off the ground, but not as high as the hilltops around you), you can get
>>up
>>out of the signal.
>>
>
>
> One can also have a problem with height if the get so high as to key
> multiple repeaters on a common frequency. While this is more commonly
> a problem with aeronautical mobile stations, it also happens around
> here for stations on hills between several repeaters or whose beams
> line up with more than one repeater.
>
> Buck
>
> Buck
> --
> For what it's worth.
>
The discussion was a M2 HORIZONTAL loop. Not normally used with a
vertically polarized repeater. Try sticking to the subject.

Dan/W4NTI

2518. Re: One Way Propagation ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 22:48:31 UTC
From: "aunwin@insightbb.com"
Message-ID: <35QQd.9987$4q6.2993@attbi_s01>
Source record: 81957

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:4213aeab$1_2@127.0.0.1...
> Buck wrote:
>> Many times I talk to the same
>> mobile in different locations. There are times I am received 59 and
>> hear 22. Other times I hear 59 and get a 22.
>
> Doesn't reciprocity assume similar antennas and similar
> power levels?

Even more important is accuracy of both "meters" and truth in reporting
Art

Of course, someone running the legal power
> limit into a YAGI is going to be received well by almost
> everyone but someone replying with QRP into a short
> vertical whip is going to be at a disadvantage. Changes
> in polarization in the ionosphere can easily explain the
> above if one station is horizontally polarized and QSOing
> with mobiles.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
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> Newsgroups
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2519. Re: The HIGHER the BETTER

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 22:49:53 UTC
From: Dan <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <l6QQd.2748$9J5.313@newsread2.news.atl.earthlink.net>
Source record: 81958
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"Charlie" <charlie@earthlink.com> wrote in message
news:110vrhc5msu0l4e@news.supernews.com...
> Raised my M2 Horizontal Loop antenna from 20ft above ground to 45ft above
> ground and picked up a full S-unit (s7 to s8) at a receiving station 70
> miles away. Mode was SSB and frequency was 144.200 mhz. Also my receiving
> ability was enhanced dramatically....
>
> The HIGHER the BETTER !!!!
>
> Photos and tech info on the M2 HO Loop antenna at the site listed
> below....
>
> --
>
> Charlie
> Ham Radio - AD5TH
> www.ad5th.com
>
>
Unless the feedline loss equals the gain of the added height.

Dan/W4NTI

2520. Re: One Way Propagation ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 23:06:18 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <KlQQd.31818$xt.15684@fed1read07>
Source record: 81959

And enter in the operator and their station

Alligator -- big mouth --- little ears

Elephant -- little mouth --- big ears

Excessive noise on one end of the circuit can be a problem also -- they simply don't hear you thru the noise on their end, you hear them fine. No contact.

--
Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message news:35QQd.9987$4q6.2993@attbi_s01...
>
> "Cecil Moore" <w5dxp@hotmail.com> wrote in message
> news:4213aeab$1_2@127.0.0.1...
>> Buck wrote:
>>> Many times I talk to the same
>>> mobile in different locations. There are times I am received 59 and
>>> hear 22. Other times I hear 59 and get a 22.
>>
>> Doesn't reciprocity assume similar antennas and similar
>> power levels?
>
> Even more important is accuracy of both "meters" and truth in reporting
> Art
>
>
>
> Of course, someone running the legal power
>> limit into a YAGI is going to be received well by almost
>> everyone but someone replying with QRP into a short
>> vertical whip is going to be at a disadvantage. Changes
>> in polarization in the ionosphere can easily explain the
>> above if one station is horizontally polarized and QSOing
>> with mobiles.
>> --
>> 73, Cecil http://www.qsl.net/w5dxp
>>
>>
>> ----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet

>> News==----
>> http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000
>> Newsgroups
>> ---= East/West-Coast Server Farms - Total Privacy via Encryption =---
>
>

2521. Re: One Way Propagation ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 23:13:35 UTC
From: dplatt@radagast.org
Message-ID: <1117ksv6b4er820@corp.supernews.com>
Source record: 81960

>Doesn't reciprocity assume similar antennas and similar
>power levels?

Not both at once, I think.

The explanation I've seen of it is that if you have two radios having identical transmitter power levels, then each radio's receiver will "see" the same input voltage from its peer's signal even if the two stations have wildly different antenna types (pattern, gain, takeoff angle, polarization, etc.).

A change in one stations antenna which (e.g.) increases its gain in the direction of the other, will increase both stations' receiver-input voltage levels by the same amount... the changed station "hears" the other station better, and also "speaks" better to the other station by the same amount.

Naturally, the two stations may report different signal qualities during the contact, depending on the sensitivities of their receivers, on the local noise-floor level, on the presence of nearby in-band RFI which desenses the receiver, on the meter calibration, on the operator's hearing, on QSB which comes and goes at about the same rate as the conversation changes directions, and so forth.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2522. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 23:15:40 UTC
From: "aunwin@insightbb.com"
Message-ID: <wuQQd.10164$4q6.2269@attbi_s01>
Source record: 81961

Cecil
Sounds like cyclic flow changes between inductance and capacitance is
instantanious
leaving free electron that do not complete safe harbour to shove photons
towards
another antenna where it meets a similar cyclic flow between the inductance
and
capacitance which operates at the given frequency.
No, I have not read this anywhere but it is as good as any theories or
predictions
offered here since it appears to comply with Newton's Laws that have
been proven time and time again.
Regards
Art

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:4213b0d5$1_2@127.0.0.1...
> Jedi Knight wrote:
>> Next the wave travels through space in a way that totally dumb founds
>> me, and is picked up by a receiving antenna, which does the whole thing
>> backward. It's this part that really mucks things up (yes, that's the
>> technical term for it) for me. I really don't see how there can be
>> more than one thing occuping the same space (the whole "Back to the
>> Future" phenomenon, lol) at the same time. Something is missing for
>> me. I'm way more of a visual learner, so if anybody has
>> pictures....SWEET.
>
> This is the area where photons are easier to understand than EM
> waves (although an understanding of superposition of waves will
> explain everything). Photons emitted from any number of sources
> all arrive at your antenna at the same time. Those photons are
> absorbed by the free electrons in your copper antenna. Your
> receiver senses those electrons giving up their energies at
> different frequencies, magnitudes, and phases.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> ----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
> News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000
> Newsgroups
> ---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2523. Re: One Way Propagation ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-16 23:39:27 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <PQQQd.31824$xt.14645@fed1read07>
Source record: 81962

I have one way propagation with my Mother In Law -- all the time
She bellows like an elephant -- neighbors three doors away can hear her
I talk and she doesn't hear a word I say. Frequently QSK's me
Oh well reciprocity disproved.

Oh I can anticipate the responses to this one.

--
Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?

2524. Re: One Way Propagation ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 00:15:20 UTC
From: ".J.S..." <mr_nobody@nowhere.com>
Message-ID: <4213e215$0$179$edfadb0f@dtext02.news.tele.dk>
Source record: 81963

"Caveat Lector" <CL@barahmas.com> skrev i en meddelelse
news:PQQQd.31824$xt.14645@fed1read07...
>I have one way propagation with my Mother In Law -- all the time
> She bellows like an elephant -- neighbors three doors away can hear her
> I talk and she doesn't hear a word I say. Frequently QSK's me
> Oh well reciprocity disproved.
>
> Oh I can anticipate the responses to this one.
>

Not a propagation problem I think :-)

Mother In Law's just don't come in full duplex , so she cant receive when
she is transmitting continuously...

2525. Re: One Way Propagation ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 00:37:01 UTC
From: ml <m@di.net>
Message-ID: <m-7EE0F7.19370216022005@news.verizon.net>
Source record: 81964

In article <85s511lk17u58hn7m09c121citf2332ilh@4ax.com>,
Gary <gdn50@@@@usol.com> wrote:

> First off I don't really believe in one way propagaiton unless someone
> can convince me otherwise ? However, I am curious about a phenomenon
> I've experienced with a number or radios and antennas over the years.
> I've had eveything from a 4 element Yagi at 55 feet to the dipoles I'm
> using now and lots of new transcievers. I work all CW and on occasion
> I'll get a 599 signal report from the other station yet he's barely
> copyable from my end. They all seem to be running the same 100 watts
> or more that I'm using now and are using a dipole cut for the
> frequency in use like I am or a G5RV etc. I wonder if anyone else has
> observed this and/or has an explanation ? This has occured on new
> transceivers too numerous to name over the years. So I know its not a
> problem with a particular radio.
>
> 73 and Thanks in Advance
>
> Gary K8IQ

<< radio waves aren't garanteed a duplex path"" radiowaves are often
unpredictable, it's possible that natural phenom can't prevent or lessen
your signal to someplace, even thou that place comes in good to you

a ton of things can cauz this , i would ask why do you assume that
just because a path opens up to you , that you presume as matter of
fact that a path from you out must be the same?? (even if we presume
your set ups are identical)

2526. Today's Free Movie (102044 viewers)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 01:11:50 UTC
From: cc12000@sbcglobal.net
Message-ID: <1108602710.746747.295820@c13g2000cwb.googlegroups.com>
Source record: 81965

Today's Free Movie (102044 viewers) >> www.movie-size.4x2.net

2527. Re: Building a cheap easy cb antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 02:33:47 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <it6dnTv8A4sTn4nfRVn-gw@comcast.com>
Source record: 81966

<stryped@hotmail.com> wrote in message
news:1108475773.567070.263850@g14g2000cwa.googlegroups.com...
> How would I go about making a cheap, easy cb antenna for a base station
> at my house? How far would it need to be from my 2 meter antenna?
>
> Could I make a whip by cutting an aluminum 3/8 rod to a 1/4 wave and
> thread the end to go into one of those 3/8-24 so239 mounts?
>

Take any good 10 meter design -- and lengthen the elements OR
a 12 meter antenna and shorten the elements.
Standard theory here, found in any Radio Handbook (ARRL, RSGB, Bill Orr)
Library has copies or can get you one from their network.

gb

2528. Today's Free Movie (102044 viewers)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 02:57:34 UTC
From: cc12000@sbcglobal.net
Message-ID: <1108609054.509529.33240@g14g2000cwa.googlegroups.com>
Source record: 81967

Today's Free Movie (102044 viewers) >> www.movie-size.4x2.net

2529. Re: OPEN WIRE LINE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 04:01:52 UTC
From: me <nospam@nospam.com>
Message-ID: <ld5811pir0ttgj23vqbsvuubfl7kd019k6@4ax.com>
Source record: 81968

Hi Doc...

There is an awning type window, however penetrating or replacing it is not feasible. In this particular part of the house, eaves & attic are not accessible and don't route to the hamshack.

However today I discovered two parallel runs of 1/2" Heliax which I installed in the late 70's and which have been abandoned and forgotten. These already exit up the hamshack wall, through the sole plate just above ground level, and route over the deck and underground to the location of a former tower. They can easily be cut off, and their center conductors used as the feed through...once cut I believe total length would be perhaps 6 to 10 feet; not ideal but would not require any new construction.

The planned open wire line will be 600 ohm type with about 5" spacing...need to figure a way to use banana plugs, gator clips or something like that to make the transition from wire to the center copper of the Heliaz...maybe solder some copper tubing over the Heliax center? A trip to the hardware store is in order.

Thanks and 73

Dan (K0DAN)

On Wed, 16 Feb 2005 15:56:28 GMT, 'Doc <w5lz@cwis.net> wrote:

>Dan,
> Have a window fairly close to your transmitter/tuner? Replace
>the glass with plexiglass, or drill a couple of holes in the glass,
>or make a 'spacer' to fit in the window opening.
> How about through the eaves, to attic, through ceiling?
> 'Doc

2530. Re: OPEN WIRE LINE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 04:14:01 UTC
From: KU6X <hurstjsj@verizon.net>
Message-ID: <1108613641.052285.156030@z14g2000cwz.googlegroups.com>
Source record: 81969

Here's my method to make a neat through the wall twin lead or OWL
feedthrough:
Materials: 3/4 inch or larger PVC pipe, 2 PVC end caps preferably with
flat ends,
2 lengths of 6-32 threaded brass rod (McMaster Carr) or True Value,
6-32 nuts and washers, RTV.
Cut the PVC pipe = the wall thickness + about 1 inch.
Drill and tap one end cap for the rods and drill 6-32 clearance holes
in the other cap. I used about 5/8 inch spacing.
Cut the rods about 2 or 3 in. longer than the pipe.
Drill a pilot hole from the inside wall through the outside with a long
masonry drill (use a stud finder to miss the studs). Use a 1 inch
spade style wood bit to bore a hole first through the inside wall and
then through the outside stucco. I was surprised at how well the wood
bit worked.
The rest of the story is pretty obvious. I'd use RTV rather than PVC
cement so that the assembly can later be pulled apart if necessary.
73, John, KU6X

2531. Cushcraft A27010S Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 04:18:28 UTC
From: Tom Tretheway <tomt3@comcast.net>
Message-ID: <kOqdnZ2oRpyOhonfRVn-sw@comcast.com>
Source record: 81970

My new Cushcraft 2meter/70cm antenna is a very poor performer; so poor that something must be wrong. The only thing that doesn't check out are the "Reddi Match" elements. Should the outside tube of the "Reddi Match" elements have continuity with the center conductor of the coax, and thus the beam, and thus ground, like a folded dipole? Neather of mine do. There is no "physical" connection between the coax center conductor and the driven elements of the antenna.
All I can think of is that there are insulated elements inside the "Reddi Match" tubes which radiate to and from the driven elements. After checking everything, this is all that I can find odd.
Does anyone have experience with this model of Cushcraft, or a similar design, who can tell me if this is normal? Thank you in advance.

Tom

2532. Re: One Way Propagation ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 04:39:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11187vokd00ln44@corp.supernews.com>
Source record: 81971

Three possibilities:

1. One station is radiating more power than the other in the necessary direction. This means elevation as well as azimuth angle. You may both be applying 100 watts to an efficient antenna, but one might be radiating a lot more than the other in the necessary direction. If both sites have equal noise levels, the one radiating less power in the necessary direction will have the weaker signal at the other end. This is probably the most likely reason.

2. One station has a greater noise level. This might be because of actually greater noise reaching his QTH, or it might be because the other station's antenna has nulls in the directions where a substantial amount of noise is coming from.

3. Unreliable reporting. You should take all signal reports with a very big grain of salt. Different people have very different criteria for what constitutes an S9, or even R5, signal.

All these can lead to dramatically different reports at the two ends of the path, with no need for one-way propagation or violation of the reciprocity principle.

Roy Lewallen, W7EL

2533. Today's Free Movie (102044 viewers)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 04:42:10 UTC
From: cc12000@sbcglobal.net
Message-ID: <1108615329.981586.49640@l41g2000cwc.googlegroups.com>
Source record: 81872

Today's Free Movie (102044 viewers) >> www.movie-size.4x2.net

2534. Re: OPEN WIRE LINE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 05:04:57 UTC
From: me <nospam@nospam.com>
Message-ID: <nb981197kvt23mbic1qdlvu82gqdetah25@4ax.com>
Source record: 81873

That's a really nice approach. I just discovered a pair of 1/2" Heliax feedlines already thru my wall...abandoned many years ago. If these fail to work due to impedance mismatch or other as yet unknown problems, I will try your brass rod in PVC approach...or one of the several coax thru the wall methods. So many answers, so little time!
73
Dan K0DAN

On 16 Feb 2005 20:14:01 -0800, "KU6X" <hurstjsj@verizon.net> wrote:

>Here's my method to make a neat through the wall twin lead or OWL
>feedthrough:
>Materials: 3/4 inch or larger PVC pipe, 2 PVC end caps preferably with
>flat ends,
>2 lengths of 6-32 threaded brass rod (McMaster Carr) or True Value,
>6-32 nuts and washers, RTV.
>Cut the PVC pipe = the wall thickness + about 1 inch.
>Drill and tap one end cap for the rods and drill 6-32 clearance holes
>in the other cap. I used about 5/8 inch spacing.
>Cut the rods about 2 or 3 in. longer than the pipe.
>Drill a pilot hole from the inside wall through the outside with a long
>masonry drill (use a stud finder to miss the studs). Use a 1 inch
>spade style wood bit to bore a hole first through the inside wall and
>then through the outside stucco. I was surprised at how well the wood
>bit worked.
>The rest of the story is pretty obvious. I'd use RTV rather than PVC
>cement so that the assembly can later be pulled apart if necessary.
>73, John, KU6X

2535. Today's Free Movie (102044 viewers)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 06:26:36 UTC
From: cc12000@sbcglobal.net
Message-ID: <1108621596.717447.293980@l41g2000cwc.googlegroups.com>
Source record: 81874

Today's Free Movie (102044 viewers) >> www.movie-size.4x2.net

2536. Re: One Way Propagation ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 07:20:50 UTC
From: Gary
Message-ID: <h8h811h9olhmagqcskmbm5nf0ktuaper1e@4ax.com>
Source record: 81875

On Wed, 16 Feb 2005 20:39:19 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Three possibilities:
>
>1. One station is radiating more power than the other in the necessary
>direction. This means elevation as well as azimuth angle. You may both
>be applying 100 watts to an efficient antenna, but one might be
>radiating a lot more than the other in the necessary direction. If both
>sites have equal noise levels, the one radiating less power in the
>necessary direction will have the weaker signal at the other end. This
>is probably the most likely reason.
>
>2. One station has a greater noise level. This might be because of
>actually greater noise reaching his QTH, or it might be because the
>other station's antenna has nulls in the directions where a substantial
>amount of noise is coming from.
>
>3. Unreliable reporting. You should take all signal reports with a very
>big grain of salt. Different people have very different criteria for
>what constitutes an S9, or even R5, signal.
>
>All these can lead to dramatically different reports at the two ends of
>the path, with no need for one-way propagation or violation of the
>reciprocity principle.
>
>Roy Lewallen, W7EL

Thanks to Roy and all the others that responded and cleared this up
for me.

73 Gary K8IQ

2537. Re: The HIGHER the BETTER

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 07:23:35 UTC
From: Buck <iam@this.site>
Message-ID: <aih811hien0efhsgc7kg7l9atc2mvdr5g1@4ax.com>
Source record: 81876
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

On Wed, 16 Feb 2005 22:48:27 GMT, "Dan"
<w4nti@mindNOSPAMATALLspring.com> wrote:

>> On Mon, 14 Feb 2005 02:17:15 -0500, "David 01"
>> <ifiwantspam@illask.org> wrote:
>>
>>
>>>UNLESS you're working through repeaters and live in the valleys of a
>>>mountainous area. Then you're working bounces and if you get too high
>>>(high
>>>off the ground, but not as high as the hilltops around you), you can get
>>>up
>>>out of the signal.

>>
>The discussion was a M2 HORIZONTAL loop. Not normally used with a
>vertically polarized repeater. Try sticking to the subject.
>
>Dan/W4NTI
>

I didn't start the repeater discussion, I followed it.

Thanks tho.

Buck

Buck
--
For what it's worth.

2538. Re: One Way Propagation ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 07:39:41 UTC
From: Buck <iam@this.site>
Message-ID: <khi811h7sf563giu40eb64uqv198nth3sq@4ax.com>
Source record: 81877

On Wed, 16 Feb 2005 19:28:02 GMT, AB2RC <AB2RC@localhost.localdomain>
wrote:

>takeoff angle also plays a big part in this. One station may have a lower
>angle and be making only 1 hop to the other station, while the other station
>may have a higher angle and be hitting the first station via 2 hops --
>resulting in some signal loss.

I can see this.
--
73 for now
Buck
N4PGW

2539. Re: One Way Propagation ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 07:47:55 UTC
From: Buck <iam@this.site>
Message-ID: <cmi8111k9oojoha1u1kdmj2c693fb8edan@4ax.com>
Source record: 81878

On Wed, 16 Feb 2005 22:48:31 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>
>Even more important is accuracy of both "meters" and truth in reporting
>Art

I know what you mean, but it wouldn't apply in this case. Unless a
meter were unstable. The mobile is sometimes the stronger of the two
and sometimes the weaker of the two. Often they are of similar
levels.

>C> Changes
>C>in polarization in the ionosphere can easily explain the
>C>above if one station is horizontally polarized and QSOing
>C>with mobiles.

And, Cecil, would this not be true if both were of the same
polarization as well? If the polarization changes, it changes from
horizontal and would be vertical at the recipient's QTH.

Just a thought.

--
73 for now
Buck
N4PGW

2540. HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 08:02:26 UTC
From: Buck <iam@this.site>
Message-ID: <jgj8115010fbt155obg1uvoogkpbqqlo5j@4ax.com>
Source record: 81879

In WWII the allies were able to pinpoint the locations of German HF transmissions very accurately. They were able to pinpoint the locations of U-boats, etc. when they transmitted. (or so I have been led to believe).

What methods did they use to do this? Is it something duplicatable with Radio Amateurs in general or does it require some special type equipment?

I hear lots of amateurs describing interference and other problems on HF, but no one seems to be triangulating the offending stations. I am guessing that the real secret was in their communications with the 'spotters' to triangulate the positions.

Any suggestions?

Thanks

--
73 for now
Buck
N4PGW

2541. Today's Free Movie (102044 viewers)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 08:11:01 UTC
From: cc12000@sbcglobal.net
Message-ID: <1108627861.936015.235050@g14g2000cwa.googlegroups.com>
Source record: 81880

Today's Free Movie (102044 viewers) >> www.movie-size.4x2.net

2542. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 08:32:48 UTC
From: cl <clfurent@Yahoo.Com>
Message-ID: <zEYQd.44656$NC6.19350@newsread1.mlpsca01.us.to.verio.net>
Source record: 81881

"Buck" <iam@this.site> wrote in message
news:jgj8115010fbt155obg1uvoogkpbqqlo5j@4ax.com...
> In WWII the allies were able to pinpoint the locations of German HF
> transmissions very accurately. They were able to pinpoint the
> locations of U-boats, etc. when they transmitted. (or so I have been
> led to believe).
>
> What methods did they use to do this? Is it something duplicatable
> with Radio Amateurs in general or does it require some special type
> equipment?
>
>
> I hear lots of amateurs describing interference and other problems on
> HF, but no one seems to be triangulating the offending stations. I am
> guessing that the real secret was in their communications with the
> 'spotters' to triangulate the positions.
>
> Any suggestions?
>
> Thanks
>
> --
> 73 for now
> Buck
> N4PGW
>

Triangulating and so on, can and does work. You're talking a difference between "war" and the need to know - vs - finding an offending station - to shut it down, etc. The FCC isn't as involved as many would like to think. They can't keep up with it. For others to do so, would be nothing short of vigilante-ism. It's not worth being jailed or shot - trying to shut down an offending station. Not to mention, most signals heard over hundreds or thousands of miles away. Who really cares? Would you be willing to travel the 1000 miles to put a stop to it? Probably not. Most new people can't change a fuse - let alone triangulate. They're lucky they recall what a resistor or capacitor is or does or even looks like once they put the book down.

2543. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 08:51:53 UTC
From: Buck <iam@this.site>
Message-ID: <qem8111cb4lcsmmshv4s7tu0i4q5qu6gko@4ax.com>
Source record: 81882

On Thu, 17 Feb 2005 03:32:48 -0500, "cl" <clfurent@Yahoo.Com> wrote:

>Triangulating and so on, can and does work. You're talking a difference
>between "war" and the need to know - vs - finding an offending station - to
>shut it down, etc. The FCC isn't as involved as many would like to think.
>They can't keep up with it. For others to do so, would be nothing short of
>vigilante-ism. It's not worth being jailed or shot - trying to shut down an
>offending station. Not to mention, most signals heard over hundreds or
>thousands of miles away. Who really cares? Would you be willing to travel
>the 1000 miles to put a stop to it? Probably not. Most new people can't
>change a fuse - let alone triangulate. They're lucky they recall what a
>resistor or capacitor is or does or even looks like once they put the book
>down.

I wasn't proposing that they 'shut them down' but to triangulate them.
I don't know how accurate the locations were during the war, but I
hear they were pretty accurate.

I think you agreed with my assumption that, basically, it is a matter
of amateurs not being coordinated, or more accurately from you, not in
the right location.

Sometimes the offending station is nothing more than a stuck keyer,
but sometimes it is intentional interference.

As for the competency, I hate to admit it, but sometimes what I see
leads me to believe my IQ must be about 250. That isn't to offend
those with high IQ's as those who have a real-life 200 IQ must be the
equivalent of about 600 now.

Oh well, off the soapbox.

I wonder if there would be any interest in long-range fox hunts (not
the QRP version.) :)

--
73 for now
Buck
N4PGW

2544. Today's Free Movie (102044 viewers)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 09:55:19 UTC
From: cc12000@sbcglobal.net
Message-ID: <1108634118.973486.67790@l41g2000cwc.googlegroups.com>
Source record: 81883

Today's Free Movie (102044 viewers) >> www.movie-size.4x2.net

2545. Today's Free Movie (102044 viewers)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 11:39:39 UTC
From: cc12000@sbcglobal.net
Message-ID: <1108640379.588640.204090@o13g2000cwo.googlegroups.com>
Source record: 81884

Today's Free Movie (102044 viewers) >> www.movie-size.4x2.net

2546. Re: Cushcraft A27010S Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 12:06:33 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <421488C9.3080803@bloomer.net>
Source record: 81885

Looking at the instruction sheet on the Cushcraft website (since I wasn't familiar with this antenna), there is indeed no direct connection from the coax center conductor to the driven elements. This is a gamma matching network. The center coax conductor is connected to the inner tube of the "reddi-match" piece. It has a plastic insulator around it and slips inside the outer tube. This forms a capacitor. The RF "jumps the gap" from inner to outer conductor and then travels to the driven element via the small shorting strap connected between the reddi-match outer conductor and the driven element.

The places I would start looking for trouble is to measure the distances on the reddi-matches to match the instruction manual. Have you checked SWR with a meter? You also might check for continuity (and lack of short circuits) between inner and outer conductors of the coax "combiner" that attaches to each of the reddi-matches and allows a single feedline up to the antenna.

You were careful not to get any of that silicone grease (insulator!) into the center pin of the coax connector that is attached to each reddi-match assembly, right?

This is the same type of setup on my A147 2M yagi from Cushcraft and mine works fine.

Scott
N0EDV

Tom Tretheway wrote:
> My new Cushcraft 2meter/70cm antenna is a very poor performer; so poor
> that something must be wrong. The only thing that doesn't check out are the
> "Reddi Match" elements. Should the outside tube of the "Reddi Match"
> elements have continuity with the center conductor of the coax, and thus the
> beam, and thus ground, like a folded dipole? Neather of mine do. There is
> no "physical" connection between the coax center conductor and the driven
> elements of the antenna.
> All I can think of is that there are insulated elements inside the
> "Reddi Match" tubes which radiate to and from the driven elements. After
> checking everything, this is all that I can find odd.
> Does anyone have experience with this model of Cushcraft, or a similar
> design, who can tell me if this is normal? Thank you in advance.
>
> Tom
>
>

2547. 2 tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 12:33:39 UTC
From: ml <m@di.net>
Message-ID: <m-4D45B5.07333817022005@news.verizon.net>
Source record: 81886

i am going to use a sgc237 roof top to tune my ctr fed dipole.

already happen to own a sgc mac200

was wondering, if my swr at the shack aren't as low as i'd like can i use the other tuner together??

is that 'good' bad?? how about loss specificaly w/those 2 models in line not just counting the fact they are pi but over all bennf of tuning the swrs'

a bit off topic but anyone know who makes a good swr /watt meter pref digital hf and 2m/440 units

thanks

2548. Re: The HIGHER the BETTER

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 13:18:40 UTC
From: David 01 <ifiwantspam@illask.org>
Message-ID: <11196dikg1g0ea5@corp.supernews.com>
Source record: 81887
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

The subject on every message I saw SAID "The HIGHER the BETTER"!!!

"Buck" <iam@this.site> wrote in message
news:aih811hien0efhsgc7kg7l9atc2mvdr5g1@4ax.com...
> On Wed, 16 Feb 2005 22:48:27 GMT, "Dan"
> <w4nti@mindNOSPAMATALLspring.com> wrote:
>
>
> >> On Mon, 14 Feb 2005 02:17:15 -0500, "David 01"
> >> <ifiwantspam@illask.org> wrote:
> >>
> >>
> >>>UNLESS you're working through repeaters and live in the valleys of a
> >>>mountainous area. Then you're working bounces and if you get too high
> >>>(high
> >>>off the ground, but not as high as the hilltops around you), you can
get
> >>>up
> >>>out of the signal.
>
> >>
> >>>The discussion was a M2 HORIZONTAL loop. Not normally used with a
> >>>vertically polarized repeater. Try sticking to the subject.
> >>>
> >>>Dan/W4NTI
> >>>
>
> I didn't start the repeater discussion, I followed it.
>
> Thanks tho.
>
> Buck
>
> Buck
> --
> For what it's worth.
>

2549. Icom AH-4 mobile users: radiating element?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 13:24:02 UTC
From: k5dh@raytheon.com
Message-ID: <SV0Rd.1$Or6.0@dfw-service2.ext.ray.com>
Source record: 81888
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Icom AH-4 mobile users:

I recently installed an AH-4 antenna tuner in my mobile station, connected to my IC-706Mk2G. I'm using a 9 foot stainless steel CB whip as my radiating element, fed by about 2 feet of wire from the tuner to the base of the whip. What kind of radiating element are you using, and what kind of success do you have with it on 40m and 75m? I also have an Outbacker Perth antenna that I've used for many years, but I got tired of being unable to jump from band to band easily. I've thought about using the Outbacker with the AH-4, and just omitting the Wander Lead and matching transformer connection (in other words, use the Outbacker in its "raw" 75m state). I'm a bit concerned that the AH-4 won't handle this on 40m because the AH-4 manual says to avoid odd multiples of 1/2 wave, and that would be the case using the 75m antenna on 40m.

Let's hear your thoughts and experiences!

73,
Dean K5DH

2550. Re: 2 tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 14:22:07 UTC
From: F8BOE <f8boe-8@bluemail.ch>
Message-ID: <4214a88a$0$28046$626a14ce@news.free.fr>
Source record: 81889

I don't really see what your concept should be... Is it a troll or just for 11m band purpose?

You should better get a good antenna handbook to begin with.

"anonymous" <m@di.net> a écrit dans le troll de news:
m-4D45B5.07333817022005@news.verizon.net...
>i am going to use a sgc237 roof top to tune my ctr fed dipole.
>
> already happen to own a sgc mac200
>
> was wondering, if my swr at the shack aren't as low as i'd like can i
> use the other tuner together??
>
>
> is that 'good' bad?? how about loss specificaly w/those 2 models in
> line not just counting the fact they are pi but over all bennf of
> tuning the swrs'
>
>
> a bit off topic but anyone know who makes a good swr /watt meter pref
> digital hf and 2m/440 units
>
>
> thanks

2551. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 14:31:25 UTC
From: Harold Burton <hwburton@cableone.net>
Message-ID: <1119alvar2qfk36@corp.supernews.com>
Source record: 81890

"Buck" <iam@this.site> wrote in message
news:qem8111cb4lcsmmshv4s7tu0i4q5qu6gko@4ax.com...
> On Thu, 17 Feb 2005 03:32:48 -0500, "cl" <clfurent@Yahoo.Com> wrote:
>
>
> As for the competency, I hate to admit it, but sometimes what I see
> leads me to believe my IQ must be about 250. That isn't to offend
> those with high IQ's as those who have a real-life 200 IQ must be the
> equivalent of about 600 now.
>
> Oh well, off the soapbox.
>
> I wonder if there would be any interest in long-range fox hunts (not
> the QRP version.) :)
>
> --
> 73 for now
> Buck
> N4PGW
>
Being one of the new nocode techs, I have no illusions re my overall radio technical competency. I have one slight advantage over my newbie brethren though. Having been a Jr. High shop teacher (woodwork, metalwork, drafting, and electricity) I at least have some idea where to look for info that will allow me to identify basic electronic components. Perhaps with license upgrades I'll widen my knowledge and competency base, but for now antenna building is my main DIY interest and such expertise is not yet required. Your comments on IQs is interesting. Many businesses, after laying off older workers for years, seem to be actively seeking elders again. Perhaps they've decided that it's desirable to have at least some employees that can both read and make change without a pocket calculator.(G)

Harold
KD5SAK

2552. Re: Icom AH-4 mobile users: radiating element?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 15:19:40 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4214b60c_1@127.0.0.1>
Source record: 81891

k5dh@raytheon.com (=K=5=D=H=) wrote:
>Icom AH-4 mobile users:
>
>I recently installed an AH-4 antenna tuner in my mobile
>station, connected to my IC-706Mk2G. I'm using a 9 foot
>stainless steel CB whip as my radiating element, fed by
>about 2 feet of wire from the tuner to the base of the
>whip. What kind of radiating element are you using, and
>what kind of success do you have with it on 40m and 75m?

A whip is down 6dB+ on 40m and down 12dB+ on 75m from a screwdriver. I guarantee
you will not be satisfied with it.

>I also have an Outbacker Perth antenna that I've used
>for many years, but I got tired of being unable to jump
>from band to band easily. I've thought about using the
>Outbacker with the AH-4, and just omitting the Wander
>Lead and matching transformer connection (in other words,
>use the Outbacker in its "raw" 75m state). I'm a bit
>concerned that the AH-4 won't handle this on 40m because
>the AH-4 manual says to avoid odd multiples of 1/2 wave,
>and that would be the case using the 75m antenna on 40m.

Very bad idea. Using an Outbacker Perth (wired for 75m) will result in very
large losses because of self-resonance.
--
73, Cecil http://www.qsl.net/w5dxp

73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= 19 East/West-Coast Specialized Servers - Total Privacy via Encryption =---

2553. Re: Hook up

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 16:22:07 UTC
From: jcooper874@webtv.net
Message-ID: <6140-4214C4AF-551@storefull-3276.bay.webtv.net>
Source record: 81892

my dvd is hook threw the vcr no problem with picture

2554. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 16:48:37 UTC
From: richardharrison@webtv.net
Message-ID: <28254-4214CAE5-927@storefull-3254.bay.webtv.net>
Source record: 81893

Buck wrote:
"What methods did they use to do this?"

Terman says on page 1046 of his 1955 "Electronic and Radio Engineering::
"The fact that radio waves propagate away from the transmitter alomg a great-circle route makes radio direction finding a useful navigational aid."

Ships and aircraft have been equipped with shielded loop antennas for direction finding. At frequencies below 500 KHz,bearings can be read within 1%.

Ionospheric reflection so scrambles polarizations at higher frequencies, that loop bearings have higher errors.

An Adcock beam antenna can be made to ignore horizontally polarized waves from a certain direction and respond to only the vertically polarized waves. It suffers from very low signal pickup as compared with a loop, but gives accurate bearings at high frequencies over a distance of 100 miles where a loop would be useless.

In WW-2, aircraft and ships were often equipped with radios such as the Bendix RA-1B multiband receiver and a loop antenna, or the navy `s AN//ARC-5 equipment for direction finding.

Best regards, Richard harrison, KB5WZI

2555. Re: 2 tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 17:27:43 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <ju4Rd.6250$MG2.1518@newssvr31.news.prodigy.com>
Source record: 81894

ml,
Generally, not the 'best' idea in the world.
'Doc

2556. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 17:56:34 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <mV4Rd.48372$iC4.44629@newssvr30.news.prodigy.com>
Source record: 81895

Great Britain had many antenna farms located many miles apart for direction
finding.

--

73
Hank WD5JFR
"Buck" <iam@this.site> wrote in message
news:jgj8115010fbt155obg1uvoogkpbqqlo5j@4ax.com...
> In WWII the allies were able to pinpoint the locations of German HF
> transmissions very accurately. They were able to pinpoint the
> locations of U-boats, etc. when they transmitted. (or so I have been
> led to believe).
>
> What methods did they use to do this? Is it something duplicatable
> with Radio Amateurs in general or does it require some special type
> equipment?
>
>
> I hear lots of amateurs describing interference and other problems on
> HF, but no one seems to be triangulating the offending stations. I am
> guessing that the real secret was in their communications with the
> 'spotters' to triangulate the positions.
>
> Any suggestions?
>
> Thanks
>
> --
> 73 for now
> Buck
> N4PGW
>

2557. Re: OPEN WIRE LINE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 19:40:55 UTC
From: "pdrahn@coinet.com" <pdrahn@coinet.com>
Message-ID: <1108669255.601399.142650@l41g2000cwc.googlegroups.com>
Source record: 81896

Hi.
I recently completed just what you are planning to do. I got 2 NOS feed throughs last year on Ebay. They each consisted of a threaded rod with nuts and washers, two cone shaped insulators and more than enough ceramic cylinders, for the rod, to pass through my wall. I had to cut new cork gaskets to go under the insulators. The old ones just fell apart.

I had to construct a similar feed through for the connection to the ground just outside my shack. Here I used a threaded rod, two 1/4 in. plastic disks, and a plastic tube cut to length for the wall feed through.

If you are anywhere near a plastic supplier, such at TAP plastic, they will have all the stuff you need.

Good luck.

Paul, KD7HB

2558. Re: Icom AH-4 mobile users: radiating element?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 20:16:49 UTC
From: nitespark <nitespark@cox.net>
Message-ID: <LY6Rd.42306$EG1.39447@lakeread04>
Source record: 81897
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

=K=5=D=H= wrote:

> Icom AH-4 mobile users:
>
> I recently installed an AH-4 antenna tuner in my mobile
> station, connected to my IC-706Mk2G. I'm using a 9 foot
> stainless steel CB whip as my radiating element, fed by
> about 2 feet of wire from the tuner to the base of the
> whip. What kind of radiating element are you using, and
> what kind of success do you have with it on 40m and 75m?
> I also have an Outbacker Perth antenna that I've used
> for many years, but I got tired of being unable to jump
> from band to band easily. I've thought about using the
> Outbacker with the AH-4, and just omitting the Wander
> Lead and matching transformer connection (in other words,
> use the Outbacker in its "raw" 75m state). I'm a bit
> concerned that the AH-4 won't handle this on 40m because
> the AH-4 manual says to avoid odd multiples of 1/2 wave,
> and that would be the case using the 75m antenna on 40m.
>
> Let's hear your thoughts and experiences!
>
> 73,
> Dean K5DH
>

I was using a similar setup as yours. IC706MKII and the AH-4 tuner on a 9ft whip. I went back to my Webster Bandspanner and got consistently better results. While it was convenient when changing bands, it does little good if you cannot make the contact.

This setup might be good at the peak of a solar cycle when you can make the communications trip with lower power, but in average or below average conditions I think you are losing too much using the tuner and a whip.

73
Andy
WD4KDN

--
I have never met a liberal street cop.

2559. Re: Hook up

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 21:01:02 UTC
From: Archer <alexberkman@comcast.net>
Message-ID: <1108670698.763747.70450@g14g2000cwa.googlegroups.com>
Source record: 81898

It might be okay but it could be better, as a matter of fact most dvd player manuals recommend you don't hook it up that way because of the copy guard feature on the dvd.

2560. Re: G5RV with end bits

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 21:01:02 UTC
From: conconemail@libero.it
Message-ID: <1108674062.863567.86610@z14g2000cwz.googlegroups.com>
Source record: 81899

Yes they have a lot of intetesting links on ham radio topics
including ham radio software and antenna plans.

2561. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 21:35:12 UTC
From: John Edwards <johnedw@powerup.com.au>
Message-ID: <D28Rd.226$fZ5.8276@nnrp1.ozemail.com.au>
Source record: 81900

Some years ago, the local gov department (fcc to you) here in aus carried
out test on their hf df. They were able to pinpoint a station in soth
australia within about 1 km or so. Impressive I thought at the time.

JE

"Buck" <iam@this.site> wrote in message
news:jgj8115010fbt155obg1uvoogkpbqqlo5j@4ax.com...
> In WWII the allies were able to pinpoint the locations of German HF
> transmissions very accurately. They were able to pinpoint the
> locations of U-boats, etc. when they transmitted. (or so I have been
> led to believe).
>
> What methods did they use to do this? Is it something duplicatable
> with Radio Amateurs in general or does it require some special type
> equipment?
>
>
> I hear lots of amateurs describing interference and other problems on
> HF, but no one seems to be triangulating the offending stations. I am
> guessing that the real secret was in their communications with the
> 'spotters' to triangulate the positions.
>
> Any suggestions?
>
> Thanks
>
> --
> 73 for now
> Buck
> N4PGW
>

2562. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 22:17:27 UTC
From: richardharrison@webtv.net
Message-ID: <22847-421517F7-939@storefull-3256.bay.webtv.net>
Source record: 81901

Buck, N4PGW wrote:
"Is it something duplicable with Radio Amateurs in general or does it require some special type of equipment?"

Much British success in WW-2 in eavesdropping on German transmissions had as much to do with information processing as it had to do with its interception.

Germans used an "Enigma Machine" which was easily reset for a new code. They often changed the code and it was quite complicated. Germans used the machines to encode and decode their confidential messages. Early in the war, an Enigma Machine was captured. British code experts worked long, hard, and smartly to determine how the machine worked and broke its codes. Afterwards, the British were silent parties on the German`s war partyline. The British sometimes feigned ignorance so as not announce their access to Germany`s most secret information. It was a big factor in victory.

Stationary direction finding can take the directional antenna arrays used for transmitting and use them for receiving insteaad. Reciprocity means that the reception pattern is identical to the transmitting pattern. I have no idea what the British did in their enemy reception stations in WW-2. For HF, they could have used Yagi-Uda`s on rotators and indicators. They also could have used crossed loops or Adcocks, feeding a goniometer and not rotated the antenna. Terman shows how this is done on page 1051 of his 1955 edition.

During the "Cold War", when I worked in HF broadcasting, Radio Free Europe diligently monitored, recorded, and processed broadcasts from behinnd the "Iron Curtain". All the Communist news and commentary that was fit to broadcast from their point of view. To pick the desired transmissions from among the babble, some RFE receiving stations had the appearance of medium-wave multi-tower broadcast stations. Towers were tuned and phased to null interference and to grab the desired transmission. Other stations used sizeable loops. Some had air for a core and some had huge ferrite cores. Whatever proved best was used in any case..

Hams can surely use directional antenna systems.

Best regards, Richard Harrison, KB5WZI

2563. Re: Icom AH-4 mobile users: radiating element?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 23:28:35 UTC
From: nick smith <NickS@ntlworld.com>
Message-ID: <DM9Rd.1052$FA5.135@newsfe3-win.ntli.net>
Source record: 81902
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

"nitespark" <nitespark@cox.net> wrote in message
news:LY6Rd.42306$EG1.39447@lakeread04...
>
>
> =K=5=D=H= wrote:
>
> > Icom AH-4 mobile users:
> >
> > I recently installed an AH-4 antenna tuner in my mobile
> > station, connected to my IC-706Mk2G. I'm using a 9 foot
> > stainless steel CB whip as my radiating element, fed by
> > about 2 feet of wire from the tuner to the base of the
> > whip. What kind of radiating element are you using, and
> > what kind of success do you have with it on 40m and 75m?
> > I also have an Outbacker Perth antenna that I've used
> > for many years, but I got tired of being unable to jump
> > from band to band easily. I've thought about using the
> > Outbacker with the AH-4, and just omitting the Wander
> > Lead and matching transformer connection (in other words,
> > use the Outbacker in its "raw" 75m state). I'm a bit
> > concerned that the AH-4 won't handle this on 40m because
> > the AH-4 manual says to avoid odd multiples of 1/2 wave,
> > and that would be the case using the 75m antenna on 40m.
> >
> > Let's hear your thoughts and experiences!
> >
> > 73,
> > Dean K5DH

I have run a similar set up with the SGC - the 2 foot bit in the car is a
serious
bad point, to the extent that SGC actually make a "bracket" that enables the
box to be clamped to the outside of the car and the whip is mounted on part of
this bracket,
right up very close to the output terminal - the aerial on these boxes starts
and is very "active" at the output terminal.

You HAVE to understand and appreciate that to make them work at all, if not
particularly spectacularly - they are primarily a "convenience box" over a
"performance box", so do have their place, but are quite a compromise.

Nick

2564. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 23:32:36 UTC
From: "M. J. Powell" <mike@DeLeTe.pickmere.demon.co.uk>
Message-ID: <tIoQ7NcUmSFCFw+X@pickmere.demon.co.uk>
Source record: 81903

In message <22847-421517F7-939@storefull-3256.bay.webtv.net>, Richard Harrison <richardharrison@webtv.net> writes
>Buck, N4PGW wrote:
>"Is it something duplicable with Radio Amateurs in general or does it
>require some special type of equipment?"
>
>Much British success in WW-2 in eavesdropping on German transmissions
>had as much to do with information processing as it had to do with its
>interception.
>
snip
>
>Stationary direction finding can take the directional antenna arrays
>used for transmitting and use them for receiving insteaad. Reciprocity
>means that the reception pattern is identical to the transmitting
>pattern. I have no idea what the British did in their enemy reception
>stations in WW-2. For HF, they could have used Yagi-Uda`s on rotators
>and indicators.

Too broad a beam. Loop zeros are sharper.

> They also could have used crossed loops or Adcocks,
>feeding a goniometer and not rotated the antenna.

Correct.

U-boats used HF for reporting back to base in Lorrient, but MF for talk among themselves in the Wolfpack. It was this that was DFed by the shipborne CRT DF.

Mike

2565. Re: The HIGHER the BETTER

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-17 23:45:46 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <111ab5nj9uqe02a@news.supernews.com>
Source record: 81904
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hi Dan and you make a valid point about feedline loss. I am feeding M2 HO LOOP with 65 ft of 9914F low loss coax which incidentally enough is a "direct bury" coax. I use a 35 ft run of 9914F for my Ringo Ranger II. I have a 50 ft run of the same 9914F direct buried feeding my Hustler 5-BTV vertical. At HF frequencies especially with 9914F there is virtually no loss at 50ft.

Link for 9914F coax, jumpers and assemblies and coax loss tables. The 9914F is within .1 db of 9913 loss figures but is more flexible and can be buried directly into mother earth....
1. http://www.radio-ware.com

TY for making a good observation but in my case your "preaching to the choir". Hi Hi

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"Dan" <w4nti@mindNOSPAMATALLspring.com> wrote in message
news:l6QQd.2748$9J5.313@newsread2.news.atl.earthlink.net...
>
> "Charlie" <charlie@earthlink.com> wrote in message
> news:110vrhc5msu0l4e@news.supernews.com...
>> Raised my M2 Horizontal Loop antenna from 20ft above ground to 45ft above
>> ground and picked up a full S-unit (s7 to s8) at a receiving station 70
>> miles away. Mode was SSB and frequency was 144.200 mhz. Also my receiving
>> ability was enhanced dramatically....
>>
>> The HIGHER the BETTER !!!!
>>
>> Photos and tech info on the M2 HO Loop antenna at the site listed
>> below....
>>
>> --
>>
>> Charlie
>> Ham Radio - AD5TH
>> www.ad5th.com
>>
>>

> Unless the feedline loss equals the gain of the added height.
>
> Dan/W4NTI
>
>

2566. Re: World's Fastest Oscillating Nanomachine

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 01:04:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <72fa11phnki1ecnbd4qcegmbhim1q43jas@4ax.com>
Source record: 81905

On 17 Feb 2005 15:54:49 -0800, "Bill" <k4wge@arrl.net> wrote:

>It's also an antenna!
>
>"Operating at gigahertz speeds, the technology could help further
>miniaturize wireless communication devices like cell phones, which
>exchange information at gigahertz frequencies."
>
>http://www.sciencedaily.com/releases/2005/02/050212195221.htm
>
>"A team of Boston University physicists led by Assistant Professor
>Pritiraj Mohanty developed the nanomechanical oscillator."
>
>That's BU College of Engineering's Department of Aerospace and
>Mechanical Engineering, not the MET department.

Hi Bill,

Another example of why BU is not MIT.

The geometries are wholly out of order with electrical resonance. The "antenna" is an opportunistic description, unrelated to its actual dimensions and operation. Calling the oscillations nanomechanical is fine, but it remains mechanical (phonons not electrons).

However calling it nano anything when the size is 1ï¿½M+ across (and tens of that in length) is a strain on the nomenclature. In other words, a technology trying to be hip - or putting old wine in new bottles.

How this "Holds Promise For Telecommunications" is another strain when optical coupling easily eclipses this vague puffery.

As for the claim of fastest moving nanostructure yet created begs the observation that these folks don't really have a very deep view of what is going on in the nanotech field. Going on to tie themselves into "quantum computing" misses the mark so widely (and wildly) is another clue of marketing being scattered in search of funding.

73's
Richard Clark, KB7QHC

2567. Re: Newsgroups on Decline? AOL dropping this NG

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 01:08:27 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <111ag0hi1msdib3@corp.supernews.com>
Source record: 81906

Bill wrote:
> If AOL had dropped newsgroups in May of 1997, we might have avoided the
> Fraudtenna Follies.
>

Yah but look at all the fun that would have been missed.....

2568. Log Periodic question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 01:23:48 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <111agt8e278hld7@corp.supernews.com>
Source record: 81907

Does anyone recall the Tennadyne HF "Eagle" log periodic antenna and howmany elements it had? I was looking at the Tennadyne site and found they do not make less than 6 elements anymore for HF.

2569. Mobile HF antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 02:35:30 UTC
From: "Joe S." <nobody@nowhere.net>
Message-ID: <cv3k9202ggm@news4.newsguy.com>
Source record: 81909

I am considering purchasing a Yaseu FT-857 with the associated FC-40 antenna tuner and YA-007 8-ft whip for HF mobile use.

What is your experience with:
-- the FT-857
-- the FC-40 and YA-007 combination
-- other mobile antennas

Thanks.

--

Joe
W4HH

2570. Re: Log Periodic question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 02:38:24 UTC
From: W3JXP <jxp16@psu.edu>
Message-ID: <1u2dnSgoX_WHyIjfRVn-3A@adelphia.com>
Source record: 81908

Hi Butch:
Sorry I don't have any information the Eagle log periodic. But I would think that anything less than 6 elements would not be of much use on HF. Unless it covered maybe only 20 to 15M or something. I have the 6 element version of the Tennadyne Log and I'm very happy with it. Not too big and works very will for me.

--
John Passaneau W3JXP
State College Pa.
W3JXP@adelphia.net

"Butch" <lynyrd@cableone.net> wrote in message
news:111agt8e278hld7@corp.supernews.com...
> Does anyone recall the Tennadyne HF "Eagle" log periodic antenna and
> howmany elements it had? I was looking at the Tennadyne site and found
> they do not make less than 6 elements anymore for HF.

2571. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 03:58:05 UTC
From: RB <rbig@bellsouth.nospam.net>
Message-ID: <4IdRd.310$zn1.15@bignews6.bellsouth.net>
Source record: 81910

Brings back scenes from old WWII movies where the Germans were closing in on an Allied spy, with a suitcase radio set, sending from an upstairs flat, in the dark of night. Vans crawling along with loop antennas on the roof, and guys inside with comm gear and headphones telling the driver where to go, etc.

Wonder if loop antennas were what they really used, and how good they were? The spies generally used cw. How do you get a fix on the short dots and dashes?

2572. The HIGHER the BETTER was: The HIGHER the BETTER

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 04:30:07 UTC
From: Buck <iam@this.site>
Message-ID: <1nra1190rhgc4lm78jcfjll2kar7lgp2p7@4ax.com>
Source record: 81911
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

On Thu, 17 Feb 2005 08:18:40 -0500, "David 01"
<ifiwantspam@illask.org> wrote:

>The subject on every message I saw SAID "The HIGHER the BETTER"!!!

Like so many usenet threads, this one has a fork. No big deal, at
least to me. It just happens.

Buck
--
For what it's worth.

2573. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 04:38:42 UTC
From: Crazy George <munsch@atglobal.net>
Message-ID: <42157473_1@news1.prserv.net>
Source record: 81912

Buck:

Aegean Park Press has reprinted Navy OPNAV 20 - 26 under the title "Direction Finding". It is a summary of what was
done and how as of 1947. Pretty complete summary of WW2 techniques. Aegean has a web site for descriptions and sales.
Note the spelling.

--
Crazy George
the ATTGlobal.net is a SPAM trap. Use the att dot biz account.
"Buck" <iam@this.site> wrote in message news:jgj8115010fbt155obg1uvoogkpbqqlo5j@4ax.com...
> In WWII the allies were able to pinpoint the locations of German HF
> transmissions very accurately. They were able to pinpoint the
> locations of U-boats, etc. when they transmitted. (or so I have been
> led to believe).
>
> What methods did they use to do this? Is it something duplicatable
> with Radio Amateurs in general or does it require some special type
> equipment?
>
>
> I hear lots of amateurs describing interference and other problems on
> HF, but no one seems to be triangulating the offending stations. I am
> guessing that the real secret was in their communications with the
> 'spotters' to triangulate the positions.
>
> Any suggestions?
>
> Thanks
>
> --
> 73 for now
> Buck
> N4PGW
>

2574. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 04:46:10 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <4215739B.F4F486BD@shaw.ca>
Source record: 81913

RB wrote:
>
> Brings back scenes from old WWII movies....

Small loops are still used and seem to be very effective for DF. I think that the ARRL antenna book provides information in this direction. One system I saw used a short ferrite dipole array.

In most cases, DF sets displayed their goniometer outputs on a CRT or as signal strength on a meter. In this case, the dots and dashes melded into a continous output because of the persistence of the CRT or the AGC delay of the receiver.

The first DF equipment I used on the ships was WWII vintage and very effective on any type of signal.

Irv VE6BP
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/index.html
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/index.htm
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/index.htm
---
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2575. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 04:47:49 UTC
From: Buck <iam@this.site>
Message-ID: <2rsa11h0qdaqa3qs1p67t2i2s8smnk3ato@4ax.com>
Source record: 81914

On Thu, 17 Feb 2005 23:32:36 +0000, "M. J. Powell"
<mike@DeLeTe.pickmere.demon.co.uk> wrote:

>U-boats used HF for reporting back to base in Lorrient, but MF for talk
>among themselves in the Wolfpack. It was this that was DFed by the
>shipborne CRT DF.

By 'this', I assume you mean MF?

Thanks

--
73 for now
Buck
N4PGW

2576. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 06:29:34 UTC
From: bg998@FreeNet.Carleton.CA
Message-ID: <cv420e$4dp$1@theodyn.ncf.ca>
Source record: 81915

"RB" (rbig@bellsouth.nospam.net) writes:
>
> Wonder if loop antennas were what they really used, and how good they were?
> The spies generally used cw. How do you get a fix on the short dots and
> dashes?
>

With AGC turned off, just listen for the null in the signal as the loop is
rotated.

2577. Re: mountains reflect signal anyway?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 13:19:05 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4215eb9a_4@newsfeed.slurp.net>
Source record: 81916

"Cecil Moore" wrote
> Dave Platt wrote:
>> I believe that you could probably get a fairly effective
>> pattern-warping by using a non-tuned reflector which is significantly
>> longer than your collinear radiator.
>
> Passive non-resonant elements have very little effect.
> That's what allows a lot of multi-band beams to work.

As a point of reference, the radiation patterns of sidemounted FM broadcast transmit arrays are affected by a non-resonant mounting structure (the tower) -- especially for vertical polarization. Measured patterns from the manufacturer's test ranges demonstrate this, as do the NEC-2 studies in several of the papers on http://rfry.org .

RF

2578. Re: Icom AH-4 mobile users: radiating element?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 14:20:00 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4215fa4f$1_2@127.0.0.1>
Source record: 81917
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

nick smith wrote:
> You HAVE to understand and appreciate that to make them work at all, if not
> particularly spectacularly - they are primarily a "convenience box" over a
> "performance box", so do have their place, but are quite a compromise.

With a 13 ft. whip and SG-230, it made a pretty good
20m-10m mobile antenna for me.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2579. Re: mountains reflect signal anyway?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 14:28:08 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4215fc37$1_1@127.0.0.1>
Source record: 81918

Richard Fry wrote:

> "Cecil Moore" wrote
>> Passive non-resonant elements have very little effect.
>> That's what allows a lot of multi-band beams to work.
>
> As a point of reference, the radiation patterns of sidemounted FM
> broadcast transmit arrays are affected by a non-resonant mounting
> structure (the tower) -- especially for vertical polarization.

True, and please note that I was talking about *antenna
elements* not support structures.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2580. Re: Mobile HF antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 15:06:04 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <wvnRd.206$Ba3.188@newsread2.news.atl.earthlink.net>
Source record: 81919

Well the 857 is pretty much the same rig as the 897 inside,
except the 897 has the battery compartment. I am pretty happy with my 897.
It does everything I want to do. I have an FT-817 and I love it, it has done
two field days with me now. I think the "800 series" of tranceivers from
Yaesu has been pretty sucessful.

WB7FFI

"Joe S." <nobody@nowhere.net> wrote in message
news:cv3k9202ggm@news4.newsguy.com...
>I am considering purchasing a Yaseu FT-857 with the associated FC-40
>antenna
> tuner and YA-007 8-ft whip for HF mobile use.
>
> What is your experience with:
> -- the FT-857
> -- the FC-40 and YA-007 combination
> -- other mobile antennas
>
> Thanks.
>
>
> --
>
> -----
> Joe
> W4HH
>
>

2581. What kind of VHF yagi design would be okay?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 15:45:03 UTC
From: Richard <nearlynews_email@ntlworld.com>
Message-ID: <37mgr3F5d46b8U1@individual.net>
Source record: 81920

I'm wanting to build a receive VHF yagi covering the marine band, that is from 156.025 - 162.05 Mhz (6 Mhz frequency range).

I want a design that maximises gain.

I would have thought that what I need is a wide-band yagi, but that's all, not a very-wide band yagi.

Should I be using OWA design? Or what?

BTW, given the frequencies above, what is the yagi bandwith I'd require? I mean, should I be building a yagi described as having a 6Mhz bandwith?

TIA.

2582. HF6V from ground to roof

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 15:49:10 UTC
From: John L <john_stlmo>
Message-ID: <W7oRd.31732$wi2.26556@newssvr11.news.prodigy.com>
Source record: 81921

Hi all,

Going to be moving my ground mounted HF6V up to the roof this spring.

Should I keep the same radial length 1/4 wave (468 div by freq) or is there
a different formula for elevated radial lengths?

Thanks

2583. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 16:07:35 UTC
From: "J. Teske" <jdteske@comcast.net>
Message-ID: <qf3c1156ludc03i7o48c1lk9dhilil970m@4ax.com>
Source record: 81824

Intellgence agencies when they did HFDF used huge antenna arrays
called CDAAs (Circular Disposed Antenna Arrays). They were also known
as Wollenwebbers (presumably after an inventor). These arrays were
often very large, and sometimes were affectionally known as "elephant
cages." The diameter of these arrays could be as small as 50-60 feet
for a tactical unit to several hundred feet for large fixed sites in a
secure area. Each circle had many vertical elements.
They measured time difference of arrival by measuring the wavefront
timing on each antenna in the array as the wave passed through the
array. A computer then collated this information to calculate a
bearing. The readouts varied depending upon the era. Some were
digital, some were on an oscillicsope. I'm not quite sure how the
really early ones worked (before my time). The results of several
stations were then combined to get a "fix." Contrary to popular
belief, their accuracy had significant error factors so despite many
requests from military commanders who wanted to drop ordinance on a
target, you really couldn't do that based solely on HFDF. HFDF was
really originally intended for open ocean surveillance against things
like German subs in both WW I and WW II.
You could get a rough idea where a signal was coming from and then
you would have to sent a destroyer or aircraft to actually locate the
sub. There are other types of HFDF antennas as well, but none can
give pin point accuracy unless you are mobile and close in as in
transmitter hunts. As long at there was energy, you could get a
bearing be it a sustained carrier or a single dit. You would have to
rely on other externals (callsigns, radio finger printing etc) to
figure out who was sending a given signal.

W3JT

On 18 Feb 2005 06:29:34 GMT, bg998@FreeNet.Carleton.CA (Martin Potter)
wrote:

>
>"RB" (rbig@bellsouth.nospam.net) writes:
>>
>> Wonder if loop antennas were what they really used, and how good they were?
>> The spies generally used cw. How do you get a fix on the short dots and
>> dashes?
>>
>
>With AGC turned off, just listen for the null in the signal as the loop is
>rotated.
>
>

2584. Re: What kind of VHF yagi design would be okay?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 16:12:19 UTC
From: Richard <nearlynews_email@ntlworld.com>
Message-ID: <37mie5F5e1g87U1@individual.net>
Source record: 81822

"Richard" <nearlynews_email@ntlworld.com> wrote in message
news:37mgr3F5d46b8U1@individual.net...
> I'm wanting to build a receive VHF yagi covering the marine band, that is
> from 156.025 - 162.05 Mhz (6 Mhz frequency range).
>
> I want a design that maximises gain.
>
> I would have thought that what I need is a wide-band yagi, but that's all,
> not a very-wide band yagi.
>
> Should I be using OWA design? Or what?
>
> BTW, given the frequencies above, what is the yagi bandwith I'd require?
I
> mean, should I be building a yagi described as having a 6Mhz bandwith?
>
> TIA.
>

Futher: Some time ago I did download 4nec2, and obtained some yagi models. I would have thought that all I have to do is scale one of these models and then make corrections for the physical construction.

I managed to catogorise the models thus:

DJ6BV
OWA
SM5BSZ
VK3AAU
W6SA
Wideband Yagi (eg such 220-4eleYagi.nec) Not sue what this design is.
Wideband yagi W4NRL
Yagi (eg 220-3eleYagi.nec) Not sure what this design is.

One of these designs got to be wideband and maximised for gain I suppose.

2585. Re: mountains reflect signal anyway?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 16:12:23 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <42161438_2@newsfeed.slurp.net>
Source record: 81823

"Cecil Moore" wrote in message
> Richard Fry wrote:
>
>> "Cecil Moore" wrote
>>> Passive non-resonant elements have very little effect.
>>> That's what allows a lot of multi-band beams to work.
>>
> > As a point of reference, the radiation patterns of sidemounted FM
>> broadcast transmit arrays are affected by a non-resonant mounting
>> structure (the tower) -- especially for vertical polarization.
>
> True, and please note that I was talking about *antenna
> elements* not support structures.

But geing closer to the driven element(s), probably even non-resonant antenna elements may have more affect on the net antenna pattern than that produced by a supporting tower further away.

RF

2586. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 16:19:59 UTC
From: "M. J. Powell" <mike@DeLeTe.pickmere.demon.co.uk>
Message-ID: <4P2laaOvWhFCFwMY@pickmere.demon.co.uk>
Source record: 81825

In message <4IdRd.310$zn1.15@bignews6.bellsouth.net>, RB
<rbig@bellsouth.nospam.net> writes
>Brings back scenes from old WWII movies where the Germans were closing in on
>an Allied spy, with a suitcase radio set, sending from an upstairs flat, in
>the dark of night. Vans crawling along with loop antennas on the roof, and
>guys inside with comm gear and headphones telling the driver where to go,
>etc.
>
>Wonder if loop antennas were what they really used, and how good they were?

They were simple and with a good null. Only with arrays will you get a
better null.

>The spies generally used cw. How do you get a fix on the short dots and
>dashes?

Just swing the loop for minimum signal.

Mike

2587. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 16:22:32 UTC
From: "M. J. Powell" <mike@DeLeTe.pickmere.demon.co.uk>
Message-ID: <$$PkG4OIZhFCFwug@pickmere.demon.co.uk>
Source record: 81827

In message <4215739B.F4F486BD@shaw.ca>, Irv Finkleman <finkirv@shaw.ca>
writes
>RB wrote:
>>
>> Brings back scenes from old WWII movies....
>
>Small loops are still used and seem to be very effective for DF. I think that
>the ARRL antenna book provides information in this direction. One system I
>saw used a short ferrite dipole array.
>
>In most cases, DF sets displayed their goniometer outputs on a CRT or as
>signal strength on a meter. In this case, the dots and dashes melded into
>a continous output because of the persistence of the CRT or the AGC delay
>of the receiver.

I don't think there was a swinging goniometer with the CRT DF set. The
output of the two loop aerials fed the X and Y plates respectively so
that the trace appeared at the right angle and the bearing was read from
the screen.

Mike

2588. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 16:24:38 UTC
From: "M. J. Powell" <mike@DeLeTe.pickmere.demon.co.uk>
Message-ID: <lfsi+YPGbhFCFwut@pickmere.demon.co.uk>
Source record: 81826

In message <2rsa11h0qdaqa3qs1p67t2i2s8smnk3ato@4ax.com>, Buck
<iam@this.site> writes
>On Thu, 17 Feb 2005 23:32:36 +0000, "M. J. Powell"
><mike@DeLeTe.pickmere.demon.co.uk> wrote:
>
>>U-boats used HF for reporting back to base in Lorrient, but MF for talk
>>among themselves in the Wolfpack. It was this that was DFed by the
>>shipborne CRT DF.
>
>
>By 'this', I assume you mean MF?

Sorry for vagueness. Yes, they used the lower frequencies for short
ranges, probably because the LF didn't travel far. (But far enough for
the RN)

Mike

2589. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 17:02:23 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <4216202A.F064881A@shaw.ca>
Source record: 81828

"M. J. Powell" wrote:
>
> In message <4215739B.F4F486BD@shaw.ca>, Irv Finkleman <finkirv@shaw.ca>
> writes
> >RB wrote:
> >>
> >> Brings back scenes from old WWII movies....
> > >
> > >Small loops are still used and seem to be very effective for DF. I think that
> > >the ARRL antenna book provides information in this direction. One system I
> > >saw used a short ferrite dipole array.
> > >
> > >In most cases, DF sets displayed their goniometer outputs on a CRT or as
> > >signal strength on a meter. In this case, the dots and dashes melded into
> > >a continous output because of the persistence of the CRT or the AGC delay
> > >of the receiver.
> >
> > I don't think there was a swinging goniometer with the CRT DF set. The
> > output of the two loop aerials fed the X and Y plates respectively so
> > that the trace appeared at the right angle and the bearing was read from
> > the screen.
> >
> > Mike

There were a number of different types of DF sets. Some, as you
point out had x and y
plates connected to the loops, another had a mechanically rotating gonio.
We had one for radar detection which used horns with crystal detectors in
it which went to x and y plates (through amps). The HFDF used loops feeding
a mechanically rotating gonio with output to a crt.

Irv

--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/index.html
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/index.htm
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/index.htm
---
Irv Finkleman,

Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2590. Ladder Line and wind

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 17:11:05 UTC
From: Jim Miller <jim@removethisjtmiller.com>
Message-ID: <T7adnfKO6L8uvIvfRVn-pA@comcast.com>
Source record: 81829

I'm putting up a doublet centerfed by 450 ohm ladderline. It will be about 50ft away from the house to the feedpoint of the antenna. We live on top of a hill and winds here are often gusting to 60mph. The typical direction of the wind is perpendicular to the ladderline and I'm concerned about it whipping itself to death.

The ladder grabber at center of the doublet will be supported by a line running from the house to a tree so I'm considering attaching the ladderline to the support line leading to the house to minimize the whipping. The ladderline has to come this way anyway. This support line will be perpendicular to the axis of the antenna.

I briefly thought about threading the house line through the ladder windows but that seemed likely to spoil the impedence especially if wet.

Any concerns or recommendations?

tnx
jtm

2591. Doublet Length: More is better?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 17:14:31 UTC
From: Jim Miller <jim@removethisjtmiller.com>
Message-ID: <fludncDIN58cv4vfRVn-hQ@comcast.com>
Source record: 81830

I'm putting up a centerfed doublet fed by ladderline and an antenna tuner in the backyard and have two trees to support it which are about 112ft apart.

I could put up an 88 foot doublet between them easily. However would it be better to put up a full 100 footer (allowing for endline support) since I have to tune it anyway or is 88 foot a better choice?

It will be used for hambands as well as swl.

tnx
jtm

2592. Re: mountains reflect signal anyway?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 17:16:05 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42162371$1_2@127.0.0.1>
Source record: 81831

Richard Fry wrote:
> But geing closer to the driven element(s), probably even non-resonant
> antenna elements may have more affect on the net antenna pattern than
> that produced by a supporting tower further away.

Using EZNEC, one can observe that the current in a
closer non-resonant passive antenna element can be
pretty low while the current in a grounded tower
further away can be pretty high.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2593. Re: Ladder Line and wind

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 17:19:33 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42162441_2@127.0.0.1>
Source record: 81832

Jim Miller wrote:
> Any concerns or recommendations?

Use the #14 stranded ladder-line from The Wireman.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2594. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 17:41:07 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <UMpRd.32111$xt.24280@fed1read07>
Source record: 81833

All about DF, sense antennas, nulls, etc
http://www.avweb.com/news/avionics/183233-1.html

Side note -- A WWII B-24 bomber (Lady Be Good) ran out of fuel because they were not sure of the DF readings --that is -- if they were going toward or away from the home station. Crashed in the Libyan desert -- all of the crew perished after walking as far as 85 miles in the desert.

See URL:
http://www.qmfound.com/lady_be_good_b-24_bomber_recovery.htm

On our Navy planes in the 50's we had two ARN-6 - ADF (Direction Finders), 100-1750 KHz
In conjunction with Loran -- we usually knew where we were. (;-)

But also the Navigator would take periodic sextant readings (weather permitting) thru a bubble on top of the aircraft

No GPS in those days.(;-(

On one of the squadrons flights -- a circuit breaker blew and refused to be reset -- avionics were off -- the crew flew dead reckoning most of the rest of the flight.

--
Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?

"Irv Finkleman" <finkirv@shaw.ca> wrote in message news:4216202A.F064881A@shaw.ca...
> "M. J. Powell" wrote:
>>
>> In message <4215739B.F4F486BD@shaw.ca>, Irv Finkleman <finkirv@shaw.ca>
>> writes
>> >RB wrote:
>> >>
>> >> Brings back scenes from old WWII movies....
>> >
>> >Small loops are still used and seem to be very effective for DF. I think
>> >that
>> >the ARRL antenna book provides information in this direction. One system
>> >I
>> >saw used a short ferrite dipole array.

>> >
>> >In most cases, DF sets displayed their goniometer outputs on a CRT or as
>> >signal strength on a meter. In this case, the dots and dashes melded
>> >into
>> >a continous output because of the persistence of the CRT or the AGC
>> >delay
>> >of the receiver.
>>
>> I don't think there was a swinging goniometer with the CRT DF set. The
>> output of the two loop aerials fed the X and Y plates respectively so
>> that the trace appeared at the right angle and the bearing was read from
>> the screen.
>>
>> Mike
>
> There were a number of different types of DF sets. Some, as you
> point out had x and y
> plates connected to the loops, another had a mechanically rotating gonio.
> We had one for radar detection which used horns with crystal detectors in
> it which went to x and y plates (through amps). The HFDF used loops
> feeding
> a mechanically rotating gonio with output to a crt.
>
> Irv
>
>
> --
> ---------------------------------------
> Diagnosed Type II Diabetes March 5 2001
> Beating it with diet and exercise!
> 297/215/210 (to be revised lower)
> 58"/43"(!)/44" (already lower too!)
> ---------------------------------------
> Visit my HomePage at http://members.shaw.ca/finkirv/index.html
> Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/index.htm
> Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/index.htm
> --------------------
> Irv Finkleman,
> Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> Calgary, Alberta, Canada

2595. Re: mountains reflect signal anyway?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 17:42:31 UTC
From: richardharrison@webtv.net
Message-ID: <28255-42162907-367@storefull-3254.bay.webtv.net>
Source record: 81836

Cecil, W5DXP wrote:
"Passive non-resonant elements have very little effect."

True in a parasitic array such as a Yagi.

In some antenna arrays all the elements are fed by a transmission line. Directional arrays are also made by using elements which are not connected to a transmission line. These disconnected elements have current induced into them by the driven element and are called parasitic elements.

The effect of a parasitic element depends on the magnitude and phase of the current flowing in it. To get substantial current, the element must be near the driven element or other element carrying large current, and it must be almost resonant. A non-resonant element has a large reactance limiting its current flow and effectiveness.

A resonant length for a conductor in space is 1/2-wavelength.

A resonant length for a grounded conductor is 1/4-wavelength.

The 3-element Yagi is a common parasitic antenna. It has a driven element, a reflector element, and a director element. The length of all three elements is nearly 1/2-wavelength in most cases. To get large currents, near-resonance is essential.

The trick is to get the radiation from all elements to reinforce in the desired direction and cancel in other directions.

Phase of current in the reflector is often delayed by making it slightly longer than a 1/2-wavelength. Phase of current in the director is often slightly advanced by making it slightly shorter than a 1/2-wavelength.

Spacing between elements is close to get a large excitation of the parasitic elements. This makes a compact antenna. Close spacing means mutual impedance (coupling) between the elements, and this affects the drivepoint impedance. Close spacing increases directive gain but lowers the array`s radiation resistance. See Terman`s Fig 23-36 on page 904 of his 1955 "Electronic and Radio Engineering".

Large non-resonant reflectors are also used. Backward radiation can be eliminated with a plane conducting sheet. It`s impenetrable and must reflect. The earth often acts as such a reflector. The parasitic 1/2-wave reflector is a "degenerated" (Kraus` word) case of the plane reflector. I recall that either Kraus or Terman suggested that the best way to handle non-resonant reflectors was on an image basis.

Best regards, Richard Harrison, KB5WZI

2596. Re: Mobile HF antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 17:57:30 UTC
From: Dave <myself@yourself.ie>
Message-ID: <e0qRd.282$7P4.36@newsfe3-win.ntli.net>
Source record: 81834

```
">
>
> "Joe S." <nobody@nowhere.net> wrote in message
> news:cv3k9202ggm@news4.newsguy.com...
>>I am considering purchasing a Yaseu FT-857 with the associated FC-40
>>antenna
>> tuner and YA-007 8-ft whip for HF mobile use.
>>
>> What is your experience with:
>> -- the FT-857
>> -- the FC-40 and YA-007 combination
>> -- other mobile antennas
>>
>> Thanks.
>>

>> W4HH
```

I bought a 857 last friday it is a super radio I use an ATAS 120 it works very well and I have worked Australia and the US from the UK no problems before that I had an FT100D but the 857 is a much better radio I have yet to try any other antennas

2597. Re: mountains reflect signal anyway?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 17:58:11 UTC
From: dplatt@radagast.org
Message-ID: <111cb5jhssn05c2@corp.supernews.com>
Source record: 81835

>>> I believe that you could probably get a fairly effective
>>> pattern-warping by using a non-tuned reflector which is significantly
>>> longer than your collinear radiator.

>> Passive non-resonant elements have very little effect.
>> That's what allows a lot of multi-band beams to work.

>As a point of reference, the radiation patterns of sidemounted FM broadcast
>transmit arrays are affected by a non-resonant mounting structure (the
>tower) -- especially for vertical polarization. Measured patterns from the
>manufacturer's test ranges demonstrate this, as do the NEC-2 studies in
>several of the papers on http://rfry.org .

Check... that's just the sort of situation I was thinking of.

The effect on the pattern isn't all that strong, though... only a few
dB. As one example, the old ARRL VHF book gives the plans for a
four-bay stacked dipole antenna system. With the dipoles placed on
four sides of the mast, the antenna system has a gain of about 6 dB
(they don't say dBi or dBd but I assume it must be the latter). With
all four dipoles on the same side of the mast, the pattern is said to
be a cardioid of about 9 dB gain.

They don't say how deep the back-side null is. The cardioid pattern
might have a high enough F/B ratio to help with the original poster's
situation (mountain-side reflection), or he might need to use a tuned
reflector of the 5%-longer-than-resonant variety to get a more
directional pattern.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2598. Re: Ladder Line and wind

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 18:01:06 UTC
From: "jim@jtmiller.com" <jim@jtmiller.com>
Message-ID: <1108749666.646537.218690@l41g2000cwc.googlegroups.com>
Source record: 81837

hi cecil

wireman was my assumed source. are you suggesting that the #14 won't
need any additional support?

tnx
jtm

2599. Re: Ladder Line and wind

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 18:06:15 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mbbc1112nt462gh4m8oq753q5d7bcepkdp@4ax.com>
Source record: 81838

On Fri, 18 Feb 2005 12:11:05 -0500, "Jim Miller"
<jim@removethisjtmiller.com> wrote:

>Any concerns or recommendations?

Hi Jim,

The whipping action is due to vortex shedding - an imbalance of wind pressure on each side which is oscillatory in nature. To cure it, the simple resolution is to twist the line so that the face of the line rotates every 12 to 18 inches.

73's
Richard Clark, KB7QHC

2600. Re: What kind of VHF yagi design would be okay?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 18:11:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2obc11dtpj8kt13nrae5qfgq544tdiclhe@4ax.com>
Source record: 81839

On Fri, 18 Feb 2005 16:12:19 -0000, "Richard"
<nearlynews_email@ntlworld.com> wrote:

>Futher: Some time ago I did download 4nec2, and obtained some yagi models. I
>would have thought that all I have to do is scale one of these models and
>then make corrections for the physical construction.

Hi Richard,

If you do this literally so (even to element thickness). Some slop is
tolerable in going from one VHF frequency to another, but from HF to
VHF you need to scale closely.

>One of these designs got to be wideband and maximised for gain I suppose.

4nec2 should resolve this - it is its purpose after all.

73's
Richard Clark, KB7QHC

2601. Re: HF6V from ground to roof

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 18:13:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2vbc11pmal25ugpkujuaph407dtqh8muqu@4ax.com>
Source record: 81840

On Fri, 18 Feb 2005 15:49:10 GMT, "John L"
<john_stlmo<removethis>@yahoo.com> wrote:
> is there a different formula for elevated radial lengths?

Hi John,

Ground mounted is not very sensitive to lengths; in the air, this is
another story. Cut long and trim to tune.

73's
Richard Clark, KB7QHC

2602. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 18:13:59 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <MfqRd.47386$EG1.7785@lakeread04>
Source record: 81841

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote

> These days we have other forms of suicide. There are people who are
living
> such enforced miserable lives and in such oppressed conditions they prefer
> to sacrifice their own lives in the hope of improving the future lives of
> their families and their decendents.
>
> Citizens of the United States, and others, ask yourselves WHY?
> ----
> Reg, Amateur Radio, G4FGQ

Reg,

The alleged conditions you describe are not found in the people who do this, and if it were present would still have zero bearing on the cause of these lunatic suicides. Fractional existence and/or slavery may be found all over the globe and was rarely ever a cause of such insanity. Only the influence of Islam allows such departure from humanity and any hope of a better life here on earth. Islam executes this insane belief not only on others, but on themselves. A combination of education and eradication (genocide) may be applied as needed to calm this insanity. Londoners have their own form of insanity, that of banning guns from law abiding citizens whilst encouraging Muslim Mosques to add to the near 40% Muslim population who preach for the destruction of the West from inside the London city gates.

Regards,

Jack Painter
Virginia Beach, Virginia

2603. Re: Ladder Line and wind

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 18:27:49 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <hdcc111i6k8oq6ibfnsvvarve69j9v120g@4ax.com>
Source record: 81842

On Fri, 18 Feb 2005 12:11:05 -0500, "Jim Miller"
<jim@removethisjtmiller.com> wrote:

>I'm putting up a doublet centerfed by 450 ohm ladderline. It will be about
>50ft away from the house to the feedpoint of the antenna. We live on top of
>a hill and winds here are often gusting to 60mph. The typical direction of
>the wind is perpendicular to the ladderline and I'm concerned about it
>whipping itself to death.
>
>The ladder grabber at center of the doublet will be supported by a line
>running from the house to a tree so I'm considering attaching the ladderline
>to the support line leading to the house to minimize the whipping. The
>ladderline has to come this way anyway. This support line will be
>perpendicular to the axis of the antenna.
>
>I briefly thought about threading the house line through the ladder windows
>but that seemed likely to spoil the impedence especially if wet.
>
>Any concerns or recommendations?
>
>tnx
>jtm
>

My ladderline seems to do fine on windy days, and I did nothing
special to limit movement. You might bring it directly to your shack,
and if the wind bothers it, just twist it as someone else has
suggested.

On your other question, about doublet length, if you make it 102 feet,
it'll be G5RV-length, and there are plenty of articles on how those
perform on the various bands.

bob
k5qwg

2604. Re: What kind of VHF yagi design would be okay?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 18:29:09 UTC
From: Buck <iam@this.site>
Message-ID: <7scc11hs972c3p0j2gjn6fvlq133littll@4ax.com>
Source record: 81843

On Fri, 18 Feb 2005 15:45:03 -0000, "Richard"
<nearlynews_email@ntlworld.com> wrote:

>I'm wanting to build a receive VHF yagi covering the marine band, that is
>from 156.025 - 162.05 Mhz (6 Mhz frequency range).
>
>I want a design that maximises gain.
>
>I would have thought that what I need is a wide-band yagi, but that's all,
>not a very-wide band yagi.
>
>Should I be using OWA design? Or what?
>
>BTW, given the frequencies above, what is the yagi bandwith I'd require? I
>mean, should I be building a yagi described as having a 6Mhz bandwith?
>
>TIA.

On the receive side, I don't think you need to worry too much. If you
create a yagi for the center frequency, you may find very little
difference on the ends of the spectrum you want to monitor.

The wider spaced the elements, the narrower the bandwidth. I don't
know how much, if any, you will notice a difference at the band edges
with that beam.

Good luck

--
73 for now
Buck
N4PGW

2605. Re: Ladder Line and wind

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 18:46:42 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421639c3$1_1@127.0.0.1>
Source record: 81844

jim@jtmiller.com wrote:
> wireman was my assumed source. are you suggesting that the #14 won't
> need any additional support?

Jim, I think you could practice your Tarzan act
using that stuff to swing on. It is stranded
copperweld and extremely strong.
--
73, Cecil http://www.qsl.ner/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2606. Re: source for small end insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 19:26:52 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <0krRd.48028$EG1.24274@lakeread04>
Source record: 81845

<melbjer@hotmail.com> wrote
>
> I'm putting up a long wire antenna for a SW receiver. The area I live
> in has severe restrictions, so I need to hide it, or at least have it
> not be obvious. For the end insulators I was looking for small, about
> 1" long skinny plastic or ceramic insulators. I know they used to be
> available, but I can't find them anywhere. Can anyone point to a
> source for them? All I can find are 3" insulators with a 1" diameter.
> These are much too obvious for me to use. Thanks.
>
> Jer

Jer,

No insulator is required. Either kevlar or cotton line (even when wet) have about the same resistance as a wet or dry insulator, which is next to nothing. Insulators or the lack thereof do not affect transmitting (<1kw) and they most certainly do not affect receiving. About the only thing the special antenna-to-rope/line insulators do provide, is a form or strain relief due to the wide-radius of turn around the insulator. This means when the line holding the antenna breaks, it will probably break at your rope knot, not at the soft-curve around the insulator. Big deal, huh. To conceal a wire antenna, don't bother with insulators of any kind.

73,

Jack

2607. Re: What kind of VHF yagi design would be okay?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 19:44:10 UTC
From: Richard <nearlynews_email@ntlworld.com>
Message-ID: <37musbF5frthbU1@individual.net>
Source record: 81846

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:2obc11dtpj8kt13nrae5qfgq544tdiclhe@4ax.com...
> On Fri, 18 Feb 2005 16:12:19 -0000, "Richard"
> <nearlynews_email@ntlworld.com> wrote:
>
> >Futher: Some time ago I did download 4nec2, and obtained some yagi
models. I
> >would have thought that all I have to do is scale one of these models and
> >then make corrections for the physical construction.
>
> Hi Richard,
>
> If you do this literally so (even to element thickness). Some slop is
> tolerable in going from one VHF frequency to another, but from HF to
> VHF you need to scale closely.
>
> >One of these designs got to be wideband and maximised for gain I suppose.
>
> 4nec2 should resolve this - it is its purpose after all.

All the models I have are VHF ones.

Actually the bandwidth of the marine band, in terms of percentage is
6/159.025 = 3.78%. So, any beam ought to have a useble range of 3.78% at the
operating frequency. (I guess though that for any particular design it's
bandwith could be a producy of your personal SWR tolerance). I'm not even
sure if a yagi I need is just a regular one or a wideband type.

Anyway, I guess in truth, of those designs I mentioned, quite a few would be
satifactory. ie:

DJ6BV
OWA
SM5BSZ
VK3AAU
W6SA
Wideband Yagi (eg such 220-4eleYagi.nec) Not sue what this design is.
Wideband yagi W4NRL
Yagi (eg 220-3eleYagi.nec) Not sure what this design is.

I think perhaps I could probably go for any, (not sure about that) but folks
seem to rave about DL6BV designs and I think they may have a the requied
bandwith, but I'm guessing here, not being much of an antenna buff.

2608. Re: Icom AH-4 mobile users: radiating element?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 19:45:44 UTC
From: nick smith <NickS@ntlworld.com>
Message-ID: <IBrRd.267$8s.160@newsfe2-gui.ntli.net>
Source record: 81847
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
>
> With a 13 ft. whip and SG-230, it made a pretty good
> 20m-10m mobile antenna for me.

Hi Cecil,

I have one too - and I am sure it does make an excellent mobile antenna
system with 13 feet on its output.

I use mine for "hotel room use" mainly, or any quick lash up in available
space.
I am constantly amazed by the results I get and wouldn't part with it.

On the car I use a resonant whip about 3 feet long on the gutter for 40M and
equally that works well....

For a permanent fixed sytem though its an expensive convenience over other
systems
based on e.g. wire dipoles.

It is a great box though !

Nick

2609. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 20:20:47 UTC
From: "M. J. Powell" <mike@DeLeTe.pickmere.demon.co.uk>
Message-ID: <bOK9atef4kFCFwZC@pickmere.demon.co.uk>
Source record: 81851

In message <4216202A.F064881A@shaw.ca>, Irv Finkleman <finkirv@shaw.ca>
writes
>"M. J. Powell" wrote:
>>
>> In message <4215739B.F4F486BD@shaw.ca>, Irv Finkleman <finkirv@shaw.ca>
>> writes
>> >RB wrote:
>> >>
>> >> Brings back scenes from old WWII movies....
>> >
>> >Small loops are still used and seem to be very effective for DF. I
>> >think that
>> >the ARRL antenna book provides information in this direction. One system I
>> >saw used a short ferrite dipole array.
>> >
>> >In most cases, DF sets displayed their goniometer outputs on a CRT or as
>> >signal strength on a meter. In this case, the dots and dashes melded into
>> >a continous output because of the persistence of the CRT or the AGC delay
>> >of the receiver.
>>
>> I don't think there was a swinging goniometer with the CRT DF set. The
>> output of the two loop aerials fed the X and Y plates respectively so
>> that the trace appeared at the right angle and the bearing was read from
>> the screen.
>>
>> Mike
>
>There were a number of different types of DF sets. Some, as you
>point out had x and y
>plates connected to the loops, another had a mechanically rotating gonio.
>We had one for radar detection which used horns with crystal detectors in
>it which went to x and y plates (through amps).

That's interesting. I didn't know of microwave DFing.

> The HFDF used loops feeding
>a mechanically rotating gonio with output to a crt.

Ah! Right. Now I've got it. Thanks.

Mike

2610. Re: source for small end insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 20:24:14 UTC
From: "M. J. Powell" <mike@DeLeTe.pickmere.demon.co.uk>
Message-ID: <Ee26eefu7kFCFw6s@pickmere.demon.co.uk>
Source record: 81850

In message <0krRd.48028$EG1.24274@lakeread04>, Jack Painter
<223bthp@cox.net> writes
>
><melbjer@hotmail.com> wrote
>>
>> I'm putting up a long wire antenna for a SW receiver. The area I live
>> in has severe restrictions, so I need to hide it, or at least have it
>> not be obvious. For the end insulators I was looking for small, about
>> 1" long skinny plastic or ceramic insulators. I know they used to be
>> available, but I can't find them anywhere. Can anyone point to a
>> source for them? All I can find are 3" insulators with a 1" diameter.
>> These are much too obvious for me to use. Thanks.
>>
>> Jer
>
>Jer,
>
>No insulator is required. Either kevlar or cotton line (even when wet) have
>about the same resistance as a wet or dry insulator, which is next to
>nothing. Insulators or the lack thereof do not affect transmitting (<1kw)
>and they most certainly do not affect receiving. About the only thing the
>special antenna-to-rope/line insulators do provide, is a form or strain
>relief due to the wide-radius of turn around the insulator. This means when
>the line holding the antenna breaks, it will probably break at your rope
>knot, not at the soft-curve around the insulator. Big deal, huh. To conceal
>a wire antenna, don't bother with insulators of any kind.

Or use a large plastic button.

Mike
.J.Powell

2611. Re: What kind of VHF yagi design would be okay?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 20:26:13 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <FbsRd.2283$QQ3.1420@trnddc02>
Source record: 81848

Richard

I dont have any *one* Yagi design to recommend for your 160 MHz
application. But, I sure do like playing with Yagis. I have a few
questions about your design plan for this antenna.
The gain from a 3 or 4 element Yagi isnt more than you could get from a
omniazimuth colinear array, and I suppose you will prefer vertical
polarizathion.

Jerry

"Richard" <nearlynews_email@ntlworld.com> wrote in message
news:37mie5F5e1g87U1@individual.net...
>
> "Richard" <nearlynews_email@ntlworld.com> wrote in message
> news:37mgr3F5d46b8U1@individual.net...
>> I'm wanting to build a receive VHF yagi covering the marine band, that is
>> from 156.025 - 162.05 Mhz (6 Mhz frequency range).
>>
>> I want a design that maximises gain.
>>
>> I would have thought that what I need is a wide-band yagi, but that's
>> all,
>> not a very-wide band yagi.
>>
>> Should I be using OWA design? Or what?
>>
>> BTW, given the frequencies above, what is the yagi bandwith I'd require?
> I
>> mean, should I be building a yagi described as having a 6Mhz bandwith?
>>
>> TIA.
>>
>
> Futher: Some time ago I did download 4nec2, and obtained some yagi models.
> I
> would have thought that all I have to do is scale one of these models and
> then make corrections for the physical construction.
>
> I managed to catogorise the models thus:
>
> DJ6BV
> OWA
> SM5BSZ
> VK3AAU

> W6SA
> Wideband Yagi (eg such 220-4eleYagi.nec) Not sue what this design is.
> Wideband yagi W4NRL
> Yagi (eg 220-3eleYagi.nec) Not sure what this design is.
>
> One of these designs got to be wideband and maximised for gain I suppose.
>

2612. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 20:49:01 UTC
From: "aunwin@insightbb.com"
Message-ID: <0xsRd.9253$kS6.8563@attbi_s52>
Source record: 81849

Jack, who are the lunatics? To have faith in your religeon or beliefs is not insane,
We have christians who have faith in religeon and beliefs. In war many have given up their lives
to save others and we have in fact declared war against a religeon.,
Regarding Londoners having their own form of sanity, go to Hyde Park corner on a sunday
and hear the free speech that is the right of all even if you may disagree with it..
Regarding the gates of London of which there are eight which surround one square mile
if you say that 40,000 dwell inside those gates then many must be squatters inside the palace walls.
Reg is speaking as a European where the main threat of war in the world is seen to come from the Middle East
with the help of the U.S. Why else would we deliver 50 of our most sophisticated deep concrete bunker
smart bombs? Surely not for destruction of tents and shacks but more probably to penetrate heavily concrete
nuclear energy stations like their own. I believe Reg is sincere and correct in asking the USA from the other side of the pond regarding what we do in the Middle East. WHY?
As far as banning guns, I do believe they ban hand grenades and a plethoria of other weapons that can only
be used to kill people. It is a democratic country and it is the peoples will, why are you concerned about it?.
If there are many close by to you who have the same beliefs as you regarding genocide you may have to coinsider
whether you want to kill or be considered to be one endangered by the killing. Your religion may well be different
to your immediate population
Regards
Art

"Jack Painter" <223bthp@cox.net> wrote in message
news:MfqRd.47386$EG1.7785@lakeread04...
>
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote
>
>> These days we have other forms of suicide. There are people who are
> living
>> such enforced miserable lives and in such oppressed conditions they
>> prefer
>> to sacrifice their own lives in the hope of improving the future lives of

>> their families and their decendents.
>>
>> Citizens of the United States, and others, ask yourselves WHY?
>> ----
>> Reg, Amateur Radio, G4FGQ
>
> Reg,
>
> The alleged conditions you describe are not found in the people who do
> this,
> and if it were present would still have zero bearing on the cause of these
> lunatic suicides. Fractional existence and/or slavery may be found all
> over
> the globe and was rarely ever a cause of such insanity. Only the
> influence
> of Islam allows such departure from humanity and any hope of a better life
> here on earth. Islam executes this insane belief not only on others, but
> on
> themselves. A combination of education and eradication (genocide) may be
> applied as needed to calm this insanity. Londoners have their own form of
> insanity, that of banning guns from law abiding citizens whilst
> encouraging
> Muslim Mosques to add to the near 40% Muslim population who preach for the
> destruction of the West from inside the London city gates.
>
> Regards,
>
> Jack Painter
> Virginia Beach, Virginia
>
>
>

2613. Re: What kind of VHF yagi design would be okay?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 21:01:51 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <3JsRd.48593$EG1.7526@lakeread04>
Source record: 81852

"Richard" <nearlynews_email@ntlworld.com> wrote

> I'm wanting to build a receive VHF yagi covering the marine band, that is
> from 156.025 - 162.05 Mhz (6 Mhz frequency range).
>
> I want a design that maximises gain.
>
> I would have thought that what I need is a wide-band yagi, but that's all,
> not a very-wide band yagi.
>
> Should I be using OWA design? Or what?
>
> BTW, given the frequencies above, what is the yagi bandwith I'd require?
I
> mean, should I be building a yagi described as having a 6Mhz bandwith?
>
> TIA.

Richard, if you live in an area plagued by pager-interference to the marine-band, you may notice real improvement by a narrow-band yagi. I used to use a wide-band yagi for marine but abandoned it due to its impracticality in trying to cover 300 degrees of traffic from my station location. Even so, with its large front to back separation and fairly narrow directional gain, it did help reduce pager-interference.

73,
Jack Painter
Virginia Beach, Virginia

2614. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 21:32:26 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <K9tRd.48775$EG1.37860@lakeread04>
Source record: 81854

Hello Art,

I've been to London, and I never heard lunatics advocating the violent destruction of all things related to the "West" as we know it. But then I stayed out of Mosques, too. The reference to the city gates was anecdotal only. The 40% was a figure given to me by a London couple I met last week, when I quoted 30% muslim population living in London, apparently an old figure. This particular British couple I met happen to approve of both President George Bush and our mutual (countries) efforts to eradicate radical muslim actors. They also have a soldier-son in Kuwait so perhaps they are privy to information we are not.

We have not declared war on the nation of islam, but we should, because they have long ago declared war on the west and all of our tenets of free religion, free economies and forms of self-government.

Wise up and stop defending that which is focused on your own destruction. It has nothing to do with free speech. It has everything to do with survival. I don't mince words, and genocide is exactly what it will take to survive the onslaught of islam. Education may prevent it from reaching the level of insanity it presently enjoys. It enjoys this status largely due to the tolerance of fools who think their elected legislators represent them. Perhaps Reg remembers when Chamberlain lied to his countrymen, waiving the "peace is at hand" (paraphrased, Art) toilet paper that Nazi Germany gave him. Saying that Islam is a "peaceful religion" is the same rubbish.

Regards,
Jack

"aunwin@insightbb.com" wrote

> Jack, who are the lunatics? To have faith in your religeon or beliefs is
not
> insane,
> We have christians who have faith in religeon and beliefs. In war many
have
> given up their lives
> to save others and we have in fact declared war against a religeon.,
> Regarding Londoners having their own form of sanity, go to Hyde Park
corner
> on a sunday
> and hear the free speech that is the right of all even if you may disagree
> with it..
> Regarding the gates of London of which there are eight which surround one
> square mile
> if you say that 40,000 dwell inside those gates then many must be

squatters
> inside the palace walls.
> Reg is speaking as a European where the main threat of war in the world is
> seen to come from the Middle East
> with the help of the U.S. Why else would we deliver 50 of our most
> sophisticated deep concrete bunker
> smart bombs? Surely not for destruction of tents and shacks but more
> probably to penetrate heavily concrete
> nuclear energy stations like their own. I believe Reg is sincere and
correct
> in asking the USA from the other side of the pond regarding what we do in
> the Middle East. WHY?
> As far as banning guns, I do believe they ban hand grenades and a
plethoria
> of other weapons that can only
> be used to kill people. It is a democratic country and it is the peoples
> will, why are you concerned about it?.
> If there are many close by to you who have the same beliefs as you
regarding
> genocide you may have to coinsider
> whether you want to kill or be considered to be one endangered by the
> killing. Your religion may well be different
> to your immediate population
> Regards
> Art
>
> "Jack Painter" <223bthp@cox.net> wrote in message
> news:MfqRd.47386$EG1.7785@lakeread04...
> >
> > "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote
> >
> >> These days we have other forms of suicide. There are people who are
> > living
> >> such enforced miserable lives and in such oppressed conditions they
> >> prefer
> >> to sacrifice their own lives in the hope of improving the future lives
of
> >> their families and their decendents.
> >>
> >> Citizens of the United States, and others, ask yourselves WHY?
> >> ----
> >> Reg, Amateur Radio, G4FGQ
> >
> > Reg,
> >
> > The alleged conditions you describe are not found in the people who do
> > this,
> > and if it were present would still have zero bearing on the cause of
these
> > lunatic suicides. Fractional existence and/or slavery may be found all

> > over
> > the globe and was rarely ever a cause of such insanity. Only the
> > influence
> > of Islam allows such departure from humanity and any hope of a better
life
> > here on earth. Islam executes this insane belief not only on others, but
> > on
> > themselves. A combination of education and eradication (genocide) may be
> > applied as needed to calm this insanity. Londoners have their own form
of
> > insanity, that of banning guns from law abiding citizens whilst
> > encouraging
> > Muslim Mosques to add to the near 40% Muslim population who preach for
the
> > destruction of the West from inside the London city gates.
> >
> > Regards,
> >
> > Jack Painter
> > Virginia Beach, Virginia
> >
> >
> >
>
>

2615. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 21:37:51 UTC
From: John Edwards <johnedw@powerup.com.au>
Message-ID: <4btRd.302$v07.8154@nnrp1.ozemail.com.au>
Source record: 81853

Interestingly, aircraft used small loop type antennas for MF/HF DF in the 40s and 50s. Just turn loop for a null, and (maybe) use an omni sense antenna. Two spaced reception stations give a reasonable fix for a ground system.

JE

"John Edwards" <johnedw@powerup.com.au> wrote in message news:D28Rd.226$fZ5.8276@nnrp1.ozemail.com.au...
> Some years ago, the local gov department (fcc to you) here in aus carried
> out test on their hf df. They were able to pinpoint a station in soth
> australia within about 1 km or so. Impressive I thought at the time.
>
> JE
>
> "Buck" <iam@this.site> wrote in message
> news:jgj8115010fbt155obg1uvoogkpbqqlo5j@4ax.com...
> > In WWII the allies were able to pinpoint the locations of German HF
> > transmissions very accurately. They were able to pinpoint the
> > locations of U-boats, etc. when they transmitted. (or so I have been
> > led to believe).
> >
> > What methods did they use to do this? Is it something duplicatable
> > with Radio Amateurs in general or does it require some special type
> > equipment?
> >
> >
> > I hear lots of amateurs describing interference and other problems on
> > HF, but no one seems to be triangulating the offending stations. I am
> > guessing that the real secret was in their communications with the
> > 'spotters' to triangulate the positions.
> >
> > Any suggestions?
> >
> > Thanks
> >
> > --
> > 73 for now
> > Buck
> > N4PGW
> >
>
>

2616. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 21:39:00 UTC
From: richardharrison@webtv.net
Message-ID: <28397-42166074-968@storefull-3255.bay.webtv.net>
Source record: 81856

Art Unwin wrote:
"---go to Hyde Park Corner on Sunday---"

I did and though it had been 50 years since I last listened, I hadn`t missed a thing. The soap box orators were saying the same things about the same topics. There are still "Troubles" with Ireland.

Best regards, Richard Harrison, KB5WZI

2617. Re: What kind of VHF yagi design would be okay?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 21:40:16 UTC
From: Richard <nearlynews_email@ntlworld.com>
Message-ID: <37n5lvF518954U1@individual.net>
Source record: 81855

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:FbsRd.2283$QQ3.1420@trnddc02...
>
>
> Richard
>
> I dont have any *one* Yagi design to recommend for your 160 MHz
> application. But, I sure do like playing with Yagis. I have a few
> questions about your design plan for this antenna.
> The gain from a 3 or 4 element Yagi isnt more than you could get from a
> omniazimuth colinear array, and I suppose you will prefer vertical
> polarizathion.
>
> Jerry

Actually maybe I'm barking up the wrong tree. Maybe a co-linear is the way to go. I live about 70 miles from the sea, but maybe a good co-linear is as good as a 4 element yagi. I can receive a marine station from my location, and there is some marine traffic originating from canal boats about 30 miles away.

2618. Today's Free Movie >> www.movie134.4x2.net

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 22:25:49 UTC
From: cc21002@sbcglobal.net
Message-ID: <1108765549.802061.206100@z14g2000cwz.googlegroups.com>
Source record: 81857

Today's Free Movie >> www.movie134.4x2.net

(you may need realplayer to view)

2619. Re: Ladder Line and wind

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 22:47:35 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <42167027.3050546@news.crosslink.net>
Source record: 81858

On Fri, 18 Feb 2005 10:06:15 -0800, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Fri, 18 Feb 2005 12:11:05 -0500, "Jim Miller"
><jim@removethisjtmiller.com> wrote:
>
>>Any concerns or recommendations?
>
>Hi Jim,
>
>The whipping action is due to vortex shedding - an imbalance of wind
>pressure on each side which is oscillatory in nature. To cure it, the
>simple resolution is to twist the line so that the face of the line
>rotates every 12 to 18 inches.

Dear Richard,

I haven't heard about vortex shedding since 1960 when I was working on
the sonar system that measured the flow over the Polaris Missile Hatch
Doors on the Polaris boats. Bad News!

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

2620. TAPR Trakbox Automatic Satellite tracker

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 23:05:36 UTC
From: ayooper <yuuper@chartermi.net>
Message-ID: <wAuRd.1158$SM2.438@fe04.lga>
Source record: 81859

The Trakbox will aim your satellite antennas automatically. Controls your AZ-EL rotators. Just select one of the sats in it's user defined database, and it will track that sat. Check it out on ebay. Auction ends Feb. 28th, 2005.
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=4671&item=5753084092&rd=1&ssPageName=WDVW

2621. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 23:11:23 UTC
From: richardharrison@webtv.net
Message-ID: <28398-4216761B-340@storefull-3255.bay.webtv.net>
Source record: 81861

Art Unwin wrote:
"Jack, who are the lunatics?"

The suicide bombers are lunatics. Self preservation and survival are natural instincts. When you don`t love life, you`re nuts!

I saw a U.S. Marine in Baghdad on TV yesterday who said he wasn`t keen on dying for his country but he wanted to live to fight for his country. He has it right and that marine is apparently completely sane.

Several crusades have been launched from Europe against Islam. Most were failures. Bush mis-spoke when once calling his Iraq incursion a "crusade". The war has unified Islam against the U.S.A. But, the whole Ialamic world has not declared war on the U.S.A. and it won`t. The Iraq war must be won and the Iraqis must be pacified whatever it takes. The U.S., U.K. and their allies shall prevail. Why they haven`t hired soldiers of fortune to imflict on Iraq is a mystery to me.

Best regards, Richard Harrison, KB5WZI

2622. Re: What kind of VHF yagi design would be okay?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 23:21:55 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <nMuRd.11802$uc.2922@trnddc01>
Source record: 81860

"Richard" <nearlynews_email@ntlworld.com> wrote in message
news:37n5lvF518954U1@individual.net...
>
> "Jerry Martes" <j.jmartes@verizon.net> wrote in message
> news:FbsRd.2283$QQ3.1420@trnddc02...
>>
>>
>> Richard
>>
>> I dont have any *one* Yagi design to recommend for your 160 MHz
>> application. But, I sure do like playing with Yagis. I have a few
>> questions about your design plan for this antenna.
>> The gain from a 3 or 4 element Yagi isnt more than you could get from a
>> omniazimuth colinear array, and I suppose you will prefer vertical
>> polarizathion.
>>
>> Jerry
>
>
> Actually maybe I'm barking up the wrong tree. Maybe a co-linear is the
> way
> to go. I live about 70 miles from the sea, but maybe a good co-linear is
> as
> good as a 4 element yagi. I can receive a marine station from my
> location,
> and there is some marine traffic originating from canal boats about 30
> miles
> away.

Richard

Since you have complete control of the performance specifications for
this is an antenna you can build almost any Yagi and try it. A 6 db
colinear array could be difficult by comparison
70 miles is quite a long didtance for that kind of communication. I hope
you are located well above sea level.

Jerry

2623. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-18 23:55:07 UTC
From: Dave VanHorn <dvanhorn@dvanhorn.org>
Message-ID: <iNSdnaN-dPLUHYvfRVn-jw@comcast.com>
Source record: 81862

> I hear lots of amateurs describing interference and other problems on
> HF, but no one seems to be triangulating the offending stations. I am
> guessing that the real secret was in their communications with the
> 'spotters' to triangulate the positions.

Adcock arrays http://www.airwaysmuseum.com/HF%20CR%20DF%201.htm
http://members.aol.com/BmgEngInc/Adcock.html
worked quite well, but they require precision in construction, as well as
the site.
For VHF/UHF, there are all sorts of things available :)
N0MKJ and I used to hunt with the "fox-copter", featured in the 3/94 73
magazine.

Here's some references in 73 magazine:
http://www.pejla.se/ardf_litteratur.htm

And a bunch of links to play with:
http://www.dxzone.com/catalog/Operating_Modes/Radio_Direction_Finding/

2624. Re: source for small end insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 00:02:55 UTC
From: nick smith <NickS@ntlworld.com>
Message-ID: <PmvRd.2544$EA2.174@newsfe1-gui.ntli.net>
Source record: 81863

or a biro case drilled through at each end

Nick

2625. Magnetic Loops and RF Exposure

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 00:11:47 UTC
From: wizard12342002@yahoo.com
Message-ID: <1108771907.846717.218940@c13g2000cwb.googlegroups.com>
Source record: 81864

Does anyone have any knowledge regarding RF exposure issues from a small resonant loop antenna at HF frequencies? In particular, I am concerned about the very large magnetic near-field.

Thanks,

JJ

2626. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 00:21:07 UTC
From: Crazy George <munsch@atglobal.net>
Message-ID: <421689ce_1@news1.prserv.net>
Source record: 81865

Wullenweber: German for wool weaver. Germans had several in WW2, none existed elsewhere. Sites were stripped and
burned and the big iron goniometers buried during the closing days of the war. Took quite a bit of effort by ONR and
OSS to retrieve enough material to reconstruct the concept. And a lot of work at U of Ill. and ITT/FTR to make one
work. Beamformers, not TOA. That came a lot later.

The initial question was set in the WW2 time period, I believe.

Crazy George
the ATTGlobal.net extension is a SPAM trap. Use att dot biz instead.

2627. Re: One Way Propagation ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 00:34:09 UTC
From: CW <cmagers@earthlink.net>
Message-ID: <b7-dnfcQr_kgFYvfRVn-ug@comcast.com>
Source record: 81866

Doesn't work that way.

"Buck" <iam@this.site> wrote in message
news:q6r6115eto2cu1qjas55k6rq8kt2cfh4q6@4ax.com...

> Here is my theory, as unsound as it may be. Think of a station with
> 100 watts using a TV dish style antenna talking to a person using just
> a dipole with 100 watts. The dipole user will hear a much stronger
> signal. However, on HF, we don't use dishes. Or maybe we do...

2628. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 00:51:29 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <l4wRd.1247$DC6.995@newssvr14.news.prodigy.com>
Source record: 81867

Jack Painter wrote:
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote
>
>
>>These days we have other forms of suicide. There are people who are
>
> living
>
>>such enforced miserable lives and in such oppressed conditions they prefer
>>to sacrifice their own lives in the hope of improving the future lives of
>>their families and their decendents.
>>
>>Citizens of the United States, and others, ask yourselves WHY?
>>----
>>Reg, Amateur Radio, G4FGQ
>
>
> Reg,
>
> The alleged conditions you describe are not found in the people who do this,
> and if it were present would still have zero bearing on the cause of these
> lunatic suicides. Fractional existence and/or slavery may be found all over
> the globe and was rarely ever a cause of such insanity. Only the influence
> of Islam allows such departure from humanity and any hope of a better life
> here on earth. Islam executes this insane belief not only on others, but on
> themselves. A combination of education and eradication (genocide) may be
> applied as needed to calm this insanity. Londoners have their own form of
> insanity, that of banning guns from law abiding citizens whilst encouraging
> Muslim Mosques to add to the near 40% Muslim population who preach for the
> destruction of the West from inside the London city gates.
>
> Regards,
>
> Jack Painter
> Virginia Beach, Virginia
>
>
>

Religious fanatics of every stripe are dangerous, whether they be
Christian, Hindu, Moslem or anything else. So, too, are political
fanatics. The West has plenty of both.

Tom Donaly, KA6RUH

2629. Re: Ladder Line and wind

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 00:56:14 UTC
From: ml <m@di.net>
Message-ID: <m-90477C.19561418022005@news.verizon.net>
Source record: 81868

In article <hdcc111i6k8oq6ibfnsvvarve69j9v120g@4ax.com>,
Bob Miller <NOSPAM@neosoft.com> wrote:

> On Fri, 18 Feb 2005 12:11:05 -0500, "Jim Miller"
> <jim@removethisjtmiller.com> wrote:
>
> >I'm putting up a doublet centerfed by 450 ohm ladderline. It will be about
> >50ft away from the house to the feedpoint of the antenna. We live on top of
> >a hill and winds here are often gusting to 60mph. The typical direction of
> >the wind is perpendicular to the ladderline and I'm concerned about it
> >whipping itself to death.
> >
> >The ladder grabber at center of the doublet will be supported by a line
> >running from the house to a tree so I'm considering attaching the ladderline
> >to the support line leading to the house to minimize the whipping. The
> >ladderline has to come this way anyway. This support line will be
> >perpendicular to the axis of the antenna.
> >
> >I briefly thought about threading the house line through the ladder windows
> >but that seemed likely to spoil the impedence especially if wet.
> >
> >Any concerns or recommendations?
> >
> >tnx
> >jtm
> >
>
> My ladderline seems to do fine on windy days, and I did nothing
> special to limit movement. You might bring it directly to your shack,
> and if the wind bothers it, just twist it as someone else has
> suggested.
>
> On your other question, about doublet length, if you make it 102 feet,
> it'll be G5RV-length, and there are plenty of articles on how those
> perform on the various bands.
>
> bob
> k5qwg

what happens to the impedance of ladder line when you put a few gental
twsts?

anything significant

2630. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 01:02:04 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <gewRd.1428$OU1.660@newssvr21.news.prodigy.com>
Source record: 81869

Jack Painter wrote:

> Hello Art,
>
> I've been to London, and I never heard lunatics advocating the violent
> destruction of all things related to the "West" as we know it. But then I
> stayed out of Mosques, too. The reference to the city gates was anecdotal
> only. The 40% was a figure given to me by a London couple I met last week,
> when I quoted 30% muslim population living in London, apparently an old
> figure. This particular British couple I met happen to approve of both
> President George Bush and our mutual (countries) efforts to eradicate
> radical muslim actors. They also have a soldier-son in Kuwait so perhaps
> they are privy to information we are not.
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> We have not declared war on the nation of islam, but we should, because they
> have long ago declared war on the west and all of our tenets of free
> religion, free economies and forms of self-government.
>
> Wise up and stop defending that which is focused on your own destruction. It
> has nothing to do with free speech. It has everything to do with survival. I
> don't mince words, and genocide is exactly what it will take to survive the
> onslaught of islam. Education may prevent it from reaching the level of
> insanity it presently enjoys. It enjoys this status largely due to the
> tolerance of fools who think their elected legislators represent them.
> Perhaps Reg remembers when Chamberlain lied to his countrymen, waiving the
> "peace is at hand" (paraphrased, Art) toilet paper that Nazi Germany gave
> him. Saying that Islam is a "peaceful religion" is the same rubbish.
>
> Regards,
> Jack
>
> "aunwin@insightbb.com" wrote
>
>
>>Jack, who are the lunatics? To have faith in your religeon or beliefs is
>
> not
>
>>insane,
>>We have christians who have faith in religeon and beliefs. In war many
>
> have
>
>>given up their lives

>>to save others and we have in fact declared war against a religeon.,
>>Regarding Londoners having their own form of sanity, go to Hyde Park
>
> corner
>
>>on a sunday
>>and hear the free speech that is the right of all even if you may disagree
>>with it..
>> Regarding the gates of London of which there are eight which surround one
>>square mile
>>if you say that 40,000 dwell inside those gates then many must be
>
> squatters
>
>>inside the palace walls.
>>Reg is speaking as a European where the main threat of war in the world is
>>seen to come from the Middle East
>>with the help of the U.S. Why else would we deliver 50 of our most
>>sophisticated deep concrete bunker
>> smart bombs? Surely not for destruction of tents and shacks but more
>>probably to penetrate heavily concrete
>>nuclear energy stations like their own. I believe Reg is sincere and
>
> correct
>
>>in asking the USA from the other side of the pond regarding what we do in
>>the Middle East. WHY?
>>As far as banning guns, I do believe they ban hand grenades and a
>
> plethoria
>
>>of other weapons that can only
>>be used to kill people. It is a democratic country and it is the peoples
>>will, why are you concerned about it?.
>>If there are many close by to you who have the same beliefs as you
>
> regarding
>
>>genocide you may have to coinsider
>>whether you want to kill or be considered to be one endangered by the
>>killing. Your religion may well be different
>>to your immediate population
>>Regards
>>Art
>>
>>"Jack Painter" <223bthp@cox.net> wrote in message
>>news:MfqRd.47386$EG1.7785@lakeread04...
>>
>>>"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote
>>>

>>>
>>>>These days we have other forms of suicide. There are people who are
>>>
>>>living
>>>
>>>>such enforced miserable lives and in such oppressed conditions they
>>>>prefer
>>>>to sacrifice their own lives in the hope of improving the future lives
>
> of
>
>>>>their families and their decendents.
>>>>
>>>>Citizens of the United States, and others, ask yourselves WHY?
>>>>----
>>>>Reg, Amateur Radio, G4FGQ
>>>
>>>Reg,
>>>
>>>The alleged conditions you describe are not found in the people who do
>>>this,
>>>and if it were present would still have zero bearing on the cause of
>
> these
>
>>>lunatic suicides. Fractional existence and/or slavery may be found all
>>>over
>>>the globe and was rarely ever a cause of such insanity. Only the
>>>influence
>>>of Islam allows such departure from humanity and any hope of a better
>
> life
>
>>>here on earth. Islam executes this insane belief not only on others, but
>>>on
>>>themselves. A combination of education and eradication (genocide) may be
>>>applied as needed to calm this insanity. Londoners have their own form
>
> of
>
>>>insanity, that of banning guns from law abiding citizens whilst
>>>encouraging
>>>Muslim Mosques to add to the near 40% Muslim population who preach for
>
> the
>
>>>destruction of the West from inside the London city gates.
>>>
>>>Regards,
>>>

>>>Jack Painter
>>>Virginia Beach, Virginia
>>>
>>>
>>>
>>
>>
>
>

Islam can be a beautiful, satisfying religion, or it can not. Like some of the gutter Christian sects infesting America there are people who profess a belief in God who would use that belief as an excuse for killing innocent people. People who preach genocide are low, anti-social, dangerous, and a danger to society and should be locked up to keep them from doing harm.

Tom Donaly, KA6RUH

2631. TODAY'S FREE MOVIE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 01:05:19 UTC
From: cc22003@sbcglobal.net
Message-ID: <1108775119.522099.189880@z14g2000cwz.googlegroups.com>
Source record: 81870

www.movie135.4x2.net << TODAY'S FREE MOVIE

(you may need realplayer to view)

2632. Emtech ZM-2 bind post spacing?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 01:33:48 UTC
From: "jim@jtmiller.com" <jim@jtmiller.com>
Message-ID: <1108776828.111133.152510@z14g2000cwz.googlegroups.com>
Source record: 81871

Is the spacing of the binding posts on the Emtech ZM-2 consistent with
a dual banana plug?

tnx
jtm

2633. Twin lead lightning arrestor?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 01:39:07 UTC
From: "jim@jtmiller.com" <jim@jtmiller.com>
Message-ID: <1108777147.051903.4860@f14g2000cwb.googlegroups.com>
Source record: 81772

Any ideas for a lightning arrestor for twinlead?

I'd want one connected during use even though I'd have a knife switch
thrown to ground outside the house when not operating.

We live on top of a hill...

tnx
jtm

2634. Re: Icom AH-4 mobile users: radiating element?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 02:19:10 UTC
From: k5dh@qsl.net
Message-ID: <GZudncfzt8SDP4vfRVn-3A@centurytel.net>
Source record: 81773
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

I guess I should clarify that the 2 foot piece of lead
wire is all outside the vehicle except for 4 inches.

I overheard a station the other day saying that he was
using an AH-4 to load a 17m HamStick on all bands from
75m through 10m. I was thinking of doing the same but
using a 30m HamStick (not resonant on any ham band that
allows SSB operation). Anyone tried this?

73,
Dean K5DH

In article <SV0Rd.1$Or6.0@dfw-service2.ext.ray.com>, k5dh@raytheon.com says...
>
>Icom AH-4 mobile users:
>
>I recently installed an AH-4 antenna tuner in my mobile
>station, connected to my IC-706Mk2G. I'm using a 9 foot
>stainless steel CB whip as my radiating element, fed by
>about 2 feet of wire from the tuner to the base of the
>whip. What kind of radiating element are you using, and
>what kind of success do you have with it on 40m and 75m?
>I also have an Outbacker Perth antenna that I've used
>for many years, but I got tired of being unable to jump
>from band to band easily. I've thought about using the
>Outbacker with the AH-4, and just omitting the Wander
>Lead and matching transformer connection (in other words,
>use the Outbacker in its "raw" 75m state). I'm a bit
>concerned that the AH-4 won't handle this on 40m because
>the AH-4 manual says to avoid odd multiples of 1/2 wave,
>and that would be the case using the 75m antenna on 40m.
>
>Let's hear your thoughts and experiences!
>
>73,
>Dean K5DH
>

2635. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 02:40:23 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cv68unptg1@sparta.btinternet.com>
Source record: 81774

Aunwin, it is indeed reassuring to hear from a USA citizen, a voter, who can distinguish between the weapons of mass-destruction possessed and EXTREMELY EXTENSIVLY USED by the USA during the last 60 years on the towns, cities, rice fields and jungles of innumerable countries of this small Earth of ours, as distinct from civilised Briitish Gun Laws and the mixed-up religious population proportions of this still-free country.

Some people need to be reminded there has NOT YET been a single so-called terrorist attack on the UK by anybody except, for many years, by the Irish Republican Army, which is but one of the many disruptive international organisations financed by the CIA and, via USA taxpayers, the USA government.

But, as the USA government quite openly states, all is being done in the very well-worth-while interests of USA citizens. Who can blame them? They are only ordinary human beings after all.

To them, including USA drug-addicted soldiers, their lives are considerably more important than the remaining five billions of humanity who are doing their best against Aids, Earth warming, chicken flue virus, earthquakes, floods, starvation by the tens of millions, and shortages of clean water.

Solution - bring the International Energy Corporations under control.

It must now be assumed I am on the master list of the CIA's Dirty Tricks Dept computer and liable to disappear from circulation at any time.

And, to return to topic, to keep yourself sane, get yourself a free program.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

2636. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 02:40:23 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cv68unptg2@sparta.btinternet.com>
Source record: 81775

One night in 1944, there were a thousand Lancaster killing machines and other RAF bombers over Germany, complete with aircrews who well knew what they were about. It was a moonless and cloud-overcast night over the whole of Western Europe. Targets were civilian firestorm-raids on German towns and cities.

Navigation was via GEE equipment, a British hyperbolic, pulse-radar, VHF, 1942 invention which later, as the LF and VLF versions, was given the American name of LORAN (who copied it in the same size boxes.)

With GEE it was possible to accurately navigate several hundred miles from base and return safely even with fog over the airfield. Aircrews had become to depend on it and had neglected, forgotten how to use, other means of navigation such as dead-reckoning and the magnetic compass.

From shot-down and crashed aircraft the Germans had discovered the frequencies used by GEE receivers and fathomed-out how the equipment worked. But instead of using jammers immediately as they came out of the factories they waited until there was an appreciable quantity of them, waited until navigation conditions were difficult, no moon or stars, dispersed the jammers around Europe, waited until there were a 1000 bombers in the air, and then switched them all on simultaneously.

German radar-controlled anti-aircraft guns were always accurate. They were used in clear skies in daylight, sometimes in preference to optical instruments and range finders. Hundreds of bombers, lost, wandering about Europe were better than usual targets.

More than 100 heavy bombers failed to return to base. Some crash-landed, running out of fuel in Sweden, Poland, central Europe, northern Italy, France, even in north Africa. Others came down in the north sea. It was the geatest disaster in one night ever incurred by the RAF.

Although heavy losses and damage to aircraft was a normal event, the loss of more than 100 trained aircrews was a catastrophy. Incidentally, during the whole war 40,000 aircrew lives were lost due to enemy action and another 30,000 were lost due to flying accidents of one sort and another.

But, as usual, Uncle Sam helped us out. GI's left behind 70,000 unmarried mothers in the UK.

I just love statistics! ;o)

Reg.

2637. Re: Doublet Length: More is better?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 03:00:40 UTC
From: "jim@jtmiller.com" <jim@jtmiller.com>
Message-ID: <1108782040.733695.64900@o13g2000cwo.googlegroups.com>
Source record: 81776

The G5RV sites mention that drooping the last 8 feet at either end
would have minimal negative impact on performance.

Would the same be true of a 80m dipole length of 133ft?

How much could be drooped?

tnx
jtm

2638. Re: Twin lead lightning arrestor?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 03:03:57 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <vqad1117vpsqvga2b874c2essib2j65ai1@4ax.com>
Source record: 81777

On 18 Feb 2005 17:39:07 -0800, "jim@jtmiller.com" <jim@jtmiller.com>
wrote:

>Any ideas for a lightning arrestor for twinlead?
>
>I'd want one connected during use even though I'd have a knife switch
>thrown to ground outside the house when not operating.
>
>We live on top of a hill...
>
>tnx
>jtm

I use banana plugs to disconnect the ladderline when it looks stormy.
Lately, I've found Radio Shake sells some pretty nice, heavy duty
banana plugs, better than what I've found at hard-core electronics
stores.

Not sure how well any lightning arrester would work, but the Wireman
sells a couple of arrestors for balanced line -- one, a contraption
with 2 spark plugs, the other, a device from I.C.E.

Bob
k5qwg

2639. TODAY'S FREE MOVIE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 03:05:39 UTC
From: cc22003@sbcglobal.net
Message-ID: <1108782339.324515.151940@z14g2000cwz.googlegroups.com>
Source record: 81778

www.movie135.4x2.net << TODAY'S FREE MOVIE

(you may need realplayer to view)

2640. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 03:13:02 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <39yRd.50785$EG1.48474@lakeread04>
Source record: 81779

"Tom Donaly" <dtdonaly@sbcglobal.net> wrote

> Jack Painter wrote:
>
> > Hello Art,
> >
> > I've been to London, and I never heard lunatics advocating the violent
> > destruction of all things related to the "West" as we know it. But then
I
> > stayed out of Mosques, too. The reference to the city gates was
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> > only. The 40% was a figure given to me by a London couple I met last
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> > when I quoted 30% muslim population living in London, apparently an old
> > figure. This particular British couple I met happen to approve of both
> > President George Bush and our mutual (countries) efforts to eradicate
> > radical muslim actors. They also have a soldier-son in Kuwait so perhaps
> > they are privy to information we are not.
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> > We have not declared war on the nation of islam, but we should, because
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> > have long ago declared war on the west and all of our tenets of free
> > religion, free economies and forms of self-government.
> >
> > Wise up and stop defending that which is focused on your own
destruction. It
> > has nothing to do with free speech. It has everything to do with
survival. I
> > don't mince words, and genocide is exactly what it will take to survive
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> > onslaught of islam. Education may prevent it from reaching the level of
> > insanity it presently enjoys. It enjoys this status largely due to the
> > tolerance of fools who think their elected legislators represent them.
> > Perhaps Reg remembers when Chamberlain lied to his countrymen, waiving
the
> > "peace is at hand" (paraphrased, Art) toilet paper that Nazi Germany
gave
> > him. Saying that Islam is a "peaceful religion" is the same rubbish.
> >
> > Regards,
> > Jack
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> > "aunwin@insightbb.com" wrote
> >

> >
> >>Jack, who are the lunatics? To have faith in your religeon or beliefs is
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> > not
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> >>insane,
> >>We have christians who have faith in religeon and beliefs. In war many
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> > have
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> >>given up their lives
> >>to save others and we have in fact declared war against a religeon.,
> >>Regarding Londoners having their own form of sanity, go to Hyde Park
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> > corner
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> >>on a sunday
> >>and hear the free speech that is the right of all even if you may
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> >>with it..
> >> Regarding the gates of London of which there are eight which surround
one
> >>square mile
> >>if you say that 40,000 dwell inside those gates then many must be
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> > squatters
> >
> >>inside the palace walls.
> >>Reg is speaking as a European where the main threat of war in the world
is
> >>seen to come from the Middle East
> >>with the help of the U.S. Why else would we deliver 50 of our most
> >>sophisticated deep concrete bunker
> >> smart bombs? Surely not for destruction of tents and shacks but more
> >>probably to penetrate heavily concrete
> >>nuclear energy stations like their own. I believe Reg is sincere and
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> > correct
> >
> >>in asking the USA from the other side of the pond regarding what we do
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> >>the Middle East. WHY?
> >>As far as banning guns, I do believe they ban hand grenades and a
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> >>of other weapons that can only
> >>be used to kill people. It is a democratic country and it is the peoples
> >>will, why are you concerned about it?.
> >>If there are many close by to you who have the same beliefs as you

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> > regarding
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> >>genocide you may have to coinsider
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> >>"Jack Painter" <223bthp@cox.net> wrote in message
> >>news:MfqRd.47386$EG1.7785@lakeread04...
> >>
> >>>"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote
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> >>>>These days we have other forms of suicide. There are people who are
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> >>>>to sacrifice their own lives in the hope of improving the future lives
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> >>>>their families and their decendents.
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> >>>>Citizens of the United States, and others, ask yourselves WHY?
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> >>>>Reg, Amateur Radio, G4FGQ
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> >>>Reg,
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> >>>The alleged conditions you describe are not found in the people who do
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> >>>and if it were present would still have zero bearing on the cause of
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> > these
> >
> >>>lunatic suicides. Fractional existence and/or slavery may be found all
> >>>over
> >>>the globe and was rarely ever a cause of such insanity. Only the
> >>>influence
> >>>of Islam allows such departure from humanity and any hope of a better
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> > life
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> >>>here on earth. Islam executes this insane belief not only on others,
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> >>>on
> >>>themselves. A combination of education and eradication (genocide) may
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> > of
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> >>>insanity, that of banning guns from law abiding citizens whilst
> >>>encouraging
> >>>Muslim Mosques to add to the near 40% Muslim population who preach for
> >
> > the
> >
> >>>destruction of the West from inside the London city gates.
> >>>
> >>>Regards,
> >>>
> >>>Jack Painter
> >>>Virginia Beach, Virginia
> >>>
>
> Islam can be a beautiful, satisfying religion, or it can not. Like
> some of the gutter Christian sects infesting America there are people
> who profess a belief in God who would use that belief as an excuse
> for killing innocent people. People who preach genocide are low,
> anti-social, dangerous, and a danger to society and should be locked
> up to keep them from doing harm.
>
> Tom Donaly, KA6RUH

then Tom added:
>Religious fanatics of every stripe are dangerous, whether they be
Christian, Hindu, Moslem or anything else. So, too, are political
fanatics. The West has plenty of both.

Tom Donaly, KA6RUH

Well Tom, fortunately for you, there are rough men ready to fight in the middle of the night on the other side of the world, in order that you can sleep in your bed free from fear. As to your thinking that I should be locked up, I nonetheless defend your right to be a useless twit, unable to stand for anything, and able to make dribble about righteousness without a defining origin of those thoughts. Everything is o.k. with you, except things that suck. Someone should take care of that stuff for you, so you don't have to worry too much about it. Gotcha. Oh and Tom, we'll be watching for those zealous Christian sects infesting America, watching for the first sign of their *suicide bombings*. In the meantime, maybe you can point to some evidence of Christians doing that anywhere in the world, ever.

Jack

2641. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 03:32:14 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <4216B3CA.71991B1E@shaw.ca>
Source record: 81780

Caveat Lector wrote:
>
> All about DF, sense antennas, nulls, etc
> http://www.avweb.com/news/avionics/183233-1.html
>
> Side note -- A WWII B-24 bomber (Lady Be Good) ran out of fuel because they
> were not sure of the DF readings --that is -- if they were going toward or
> away from the home station. Crashed in the Libyan desert -- all of the crew
> perished after walking as far as 85 miles in the desert.
>
On DF antennas sense was always something to be taken with a grain of salt.
It was quite easy to have a reading 180 degrees out. We always had to consider
other factors about the targets such as where the coast was, or where the
last reported position of the target was.

I spent most of my time in the navy as an operator, then supervisor technician ('57 - '83) with shipborne electronic warfare. After commissioning I was Operations Officer at two Canadian stations who were part of the USN based Bullseye HFDF system (Wullenweber Antennae), and then as Operations Officer at CFS Alert, a small sigint/comint station at the northern tip of Ellesmere Island (300 miles north of Thule). Brrrr.

I went from pre-WW2 DF equipment (Canadian Navy was always a little slow in updating), to the latest state of the art -- or at least it was in 1983 when I left. It was a most interesting career. It still is, for the guys who are still in it.

You might find some good information and links on my Oldtimers Website listed below.

Irv VE6BP

--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/index.html
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/index.htm
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/index.htm
---
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2642. Re: Twin lead lightning arrestor?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 03:34:50 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <4216B466.4D25722F@shaw.ca>
Source record: 81781

"jim@jtmiller.com" wrote:
>
> Any ideas for a lightning arrestor for twinlead?
>
> I'd want one connected during use even though I'd have a knife switch
> thrown to ground outside the house when not operating.
>
> We live on top of a hill...
>
> tnx
> jtm

There was one shown in one of the earlier ARRL handbooks.

Irv VE6BP
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/index.html
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/index.htm
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/index.htm
---
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2643. Re: Twin lead lightning arrestor?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 03:36:48 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <IvyRd.50927$EG1.1760@lakeread04>
Source record: 81782

"Bob Miller" <NOSPAM@neosoft.com> wrote
> On 18 Feb 2005 17:39:07 -0800, "jim@jtmiller.com" <jim@jtmiller.com>
> wrote:
>
> >Any ideas for a lightning arrestor for twinlead?
> >
> >I'd want one connected during use even though I'd have a knife switch
> >thrown to ground outside the house when not operating.
> >
> >We live on top of a hill...
> >
> >tnx
> >jtm
>
> I use banana plugs to disconnect the ladderline when it looks stormy.
> Lately, I've found Radio Shake sells some pretty nice, heavy duty
> banana plugs, better than what I've found at hard-core electronics
> stores.
>
> Not sure how well any lightning arrester would work, but the Wireman
> sells a couple of arrestors for balanced line -- one, a contraption
> with 2 spark plugs, the other, a device from I.C.E.
>
> Bob
> k5qwg
>

I second Bob's reference to Industrial Communication Engineers (ICE)
products. After a lot of study and customer reference-checking, I specified
some of their products and have been very satisfied.

While the products can be purchased direct from the factory, they do not
undercut their dealer, Array Solutions (a very reputable company and easy to
work with).

Your balanced-line arrestor is listed here:

http://www.arraysolutions.com/Products/ice/impulse1.html#2

Because coax or balanced-line surge protection devices are only a small part
of lightning protection, I invite you to take a look at a few pages I
assembled on the subject. Disconnecting everything before a storm arrives
requires diligence at all times during thunderstorm season, and often panic
when the diligence fails you (when a sneaky T-cell develops right on top of
you). There are easier, albeit expensive ways to sleep better.

http://members.cox.net/pc-usa/station/ground0.htm

Best regards,

Jack Painter
Virginia Beach, Virginia

2644. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 03:52:36 UTC
From: "aunwin@insightbb.com"
Message-ID: <7KyRd.20206$tl3.19382@attbi_s02>
Source record: 81783

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cv68unptg1@sparta.btinternet.com...
>snip
>
> And, to return to topic, to keep yourself sane, get yourself a free
> program.
> ----

Yes, returning to the subject of TOA the antenna I am working with has a
natural TOA of 10 degrees instead of 14 degrees with the feed point at 65
feet
(for 20 meters. tho it can also be used on other bands)
If the antenna is tipped up to angles beyond 15 degrees the TOA increases
until it goes straight up.Thus the antenna can choose the correct angle for
a particular QSO or hops even if the wind is not "waving the antenna
about"! Grin
At present I am searching for a way to DECREASE its natural TOA.by way
of a 2M antenna project and if succesful will dispatch it to the RSGB for
comment.
Regards
Art

> ....
> Regards from Reg, G4FGQ
> For Free Radio Design Software go to
> http://www.btinternet.com/~g4fgq.regp
> ....
>
>

2645. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 04:21:16 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <111dfm2e96sekda@corp.supernews.com>
Source record: 81784

And your problem is?
Being of German descent with relatives in Germany, I feel that the
German people got what they deserved. Actions by the Luftwaffe were just
as horrific in London, Warsaw, Stalingrad and Antwerp to name a few.
The Luftwafe had similar devices to locate their targets in England with
the same results when their systems were captured by British Military
Intelligence (what an oxymoron).
BTW the Lancaster was one of the finest aircraft of it's type ever.

Dave WD9BDZ

Reg Edwards wrote:

> One night in 1944, there were a thousand Lancaster killing machines and
> other RAF bombers over Germany, complete with aircrews who well knew what
> they were about. It was a moonless and cloud-overcast night over the whole
> of Western Europe. Targets were civilian firestorm-raids on German towns and
> cities.
>
> Navigation was via GEE equipment, a British hyperbolic, pulse-radar, VHF,
> 1942 invention which later, as the LF and VLF versions, was given the
> American name of LORAN (who copied it in the same size boxes.)
>
> With GEE it was possible to accurately navigate several hundred miles from
> base and return safely even with fog over the airfield. Aircrews had become
> to depend on it and had neglected, forgotten how to use, other means of
> navigation such as dead-reckoning and the magnetic compass.
>
> From shot-down and crashed aircraft the Germans had discovered the
> frequencies used by GEE receivers and fathomed-out how the equipment worked.
> But instead of using jammers immediately as they came out of the factories
> they waited until there was an appreciable quantity of them, waited until
> navigation conditions were difficult, no moon or stars, dispersed the
> jammers around Europe, waited until there were a 1000 bombers in the air,
> and then switched them all on simultaneously.
>
> German radar-controlled anti-aircraft guns were always accurate. They were
> used in clear skies in daylight, sometimes in preference to optical
> instruments and range finders. Hundreds of bombers, lost, wandering about
> Europe were better than usual targets.
>
> More than 100 heavy bombers failed to return to base. Some crash-landed,
> running out of fuel in Sweden, Poland, central Europe, northern Italy,
> France, even in north Africa. Others came down in the north sea. It was the
> geatest disaster in one night ever incurred by the RAF.

>
> Although heavy losses and damage to aircraft was a normal event, the loss of
> more than 100 trained aircrews was a catastrophy. Incidentally, during the
> whole war 40,000 aircrew lives were lost due to enemy action and another
> 30,000 were lost due to flying accidents of one sort and another.
>
> But, as usual, Uncle Sam helped us out. GI's left behind 70,000 unmarried
> mothers in the UK.
>
> I just love statistics! ;o)
> ----
> Reg.
>
>

2646. Re: Icom AH-4 mobile users: radiating element?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 04:26:30 UTC
From: nm5k@wt.net
Message-ID: <1108787190.020216.229060@z14g2000cwz.googlegroups.com>
Source record: 81785
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

I overheard a station the other day saying that he was
using an AH-4 to load a 17m HamStick on all bands from
75m through 10m. I was thinking of doing the same but
using a 30m HamStick (not resonant on any ham band that
allows SSB operation). Anyone tried this? ....

It's pretty mediocre...It would be much better to actually tune
the hamstick to the different bands by changing the stinger
length.
But it would take a long stinger to tune 75m, with no loading
coil. A 10 meter hamstick can tune 20m by adding appx 2 ft
longer a stinger. A 20m stick can tune 40m by adding about 4-5
ft of stinger. I did that for a while, and it works much
better than you might think.
Myself, I always tune the antenna to resonance by using a hi-Q
loading coil. There is less coil losses, but also the current
distribution is much better, which raises the efficiency
quite a bit.
I just mounted my antenna on my #2 truck. It's even
higher than my other truck. I installed a ball mount on
the cab, about 6 inches below the roofline, on the pillar
between the back window, and my side window. The base of the
antenna is 64 inches off the ground. My antenna is 11 ft
total height, and is center loaded in the driving mode.
That puts my loading coil at about 124+ inches off the ground.
The stinger is 5 ft...Yep, it's tall, and I whack trees
o-plenty. But it works very well. I also have a 3 ft mast,
that I can add to the antenna, and have the coil 8 ft from
the base. The total height is about 19 ft....:) Naturally,
I don't drive with it that tall, but use it stationary...
That antenna compared to a tuner loaded whip?
Ain't none...:(I'd probably be 2-4 S units louder than you
on 75m to the average person...
A friend of mine wants to run a tuner loaded whip...I can't
talk him out of it...Oh well...I'll catch him some day after
he installs it, and do a side by side comparison with my
antenna. It's gonna be ugly the way I spank his heiney on
75m....:/ 40m too, to a slightly lesser extent...
BTW, I also have a shorter 10 ft antenna , with the coil at
about 2.5 ft off the base...It's my old antenna...But I'm
gonna use it on this truck for a "heavy tree" antenna when
I'm in town...With the coil lower, it will take trees better.
But I'll use the other anytime I'm on the road. This

is the highest I've mounted a mobile so far...I'm over the
legal limit of 13.6 a bit, being mine is about 16 ft tall
total..But it sways back, so when moving I can clear stuff
lower than that. A tuner loaded whip is ok on 20-10, but
even still, the hi-q coil antenna is still that much better.
On 20m, my antenna is like being at home...I don't use many
turns of coil on 20m...The efficiency is pretty high.
MK

2647. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 04:30:29 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <FhzRd.1341$DC6.910@newssvr14.news.prodigy.com>
Source record: 81786

Reg Edwards wrote:
> Aunwin, it is indeed reassuring to hear from a USA citizen, a voter, who can
> distinguish between the weapons of mass-destruction possessed and EXTREMELY
> EXTENSIVLY USED by the USA during the last 60 years on the towns, cities,
> rice fields and jungles of innumerable countries of this small Earth of
> ours, as distinct from civilised Briitish Gun Laws and the mixed-up
> religious population proportions of this still-free country.
>
>
> Some people need to be reminded there has NOT YET been a single so-called
> terrorist attack on the UK by anybody except, for many years, by the Irish
> Republican Army, which is but one of the many disruptive international
> organisations financed by the CIA and, via USA taxpayers, the USA
> government.
>
>
> But, as the USA government quite openly states, all is being done in the
> very well-worth-while interests of USA citizens. Who can blame them? They
> are only ordinary human beings after all.
>
>
> To them, including USA drug-addicted soldiers, their lives are considerably
> more important than the remaining five billions of humanity who are doing
> their best against Aids, Earth warming, chicken flue virus, earthquakes,
> floods, starvation by the tens of millions, and shortages of clean water.
>
> Solution - bring the International Energy Corporations under control.
>
> It must now be assumed I am on the master list of the CIA's Dirty Tricks
> Dept computer and liable to disappear from circulation at any time.
>
> And, to return to topic, to keep yourself sane, get yourself a free program.
> ----
> ....
> Regards from Reg, G4FGQ
> For Free Radio Design Software go to
> http://www.btinternet.com/~g4fgq.regp
> ....
>
>

Unmitigated hypocrisy. The British have no business sticking their
noses in the air over our behavior in Iraq. An example: there have
been two men who have been responsible for

using poison gas against civilians in that country. One of them is
the infamous Saddam. The other is the great British war hero
"Bomber" Harris, who, like Adolph Hitler, believed you could win
wars simply by slaughtering innocent people.
Stick your nose in a history book, Reg, and you might be able
to cure yourself of the habit of making these asinine posts.
73,
Tom Donaly, KA6RUH

2648. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 04:35:13 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4216c2c1$1_2@127.0.0.1>
Source record: 81787

Tom Donaly wrote:
> Islam can be a beautiful, satisfying religion, or it can not. Like
> some of the gutter Christian sects infesting America there are people
> who profess a belief in God who would use that belief as an excuse
> for killing innocent people.

The Judeo-Christian Bible advocates stoning adulterers to death.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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2649. Re: Ladder Line and wind

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 04:43:09 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <xtzRd.9688$hU7.6155@newssvr33.news.prodigy.com>
Source record: 81788

ml wrote:
> anything significant

Nope, not very...
'Doc

2650. Re: Icom AH-4 mobile users: radiating element?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 04:44:41 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4216c4f9$1_1@127.0.0.1>
Source record: 81789
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

=K=5=D=H= wrote:
> I guess I should clarify that the 2 foot piece of lead
> wire is all outside the vehicle except for 4 inches.

Copper is better than lead. :-)

> I overheard a station the other day saying that he was
> using an AH-4 to load a 17m HamStick on all bands from
> 75m through 10m. I was thinking of doing the same but
> using a 30m HamStick (not resonant on any ham band that
> allows SSB operation). Anyone tried this?

Hamsticks have a nasty characteristic. A 75m Hamstick is
self-resonant before it gets to 40m. A 40m Hamstick is
self-resonant (~9 MHz) before it gets to 30m. Self-resonance
is the frequency at which the inductive reactance equals the
stray capacitive reactance and results in heavy losses. I
don't know the self-resonant frequency for a 30m Hamstick
but I'll bet it's lower than 14 MHz.
--
73, Cecil http://www.qsl.net/w5dxp

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2651. Re: Doublet Length: More is better?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 04:48:05 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4216c5c5$1_1@127.0.0.1>
Source record: 81790

jim@jtmiller.com wrote:

> The G5RV sites mention that drooping the last 8 feet at either end
> would have minimal negative impact on performance.
>
> Would the same be true of a 80m dipole length of 133ft?
>
> How much could be drooped?

Drooping has little effect on 80m but drooping 1/4WL on
each end can have major effects.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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2652. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 04:51:07 UTC
From: Buck <iam@this.site>
Message-ID: <oahd11921i7ej1s8qg63nhef0j4fbd1pn7@4ax.com>
Source record: 81791

On Sun, 13 Feb 2005 01:47:44 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>==============================
>
>*On the same night as the infamous air raid on Coventry, a greater weight of
>bombs fell on the City of Birmingham and the industrial Black Country. Three
>days later fires were still burning in the adjacent town of West Bromwich.
>(These days West Bromwich is better noted for its football team.)
<BIG SNIP>

I'd say that from here on, the angle of radiation has shifted from
antennas to politics -- as evidenced by the replies to this branch of
the threads.

--
73 for now
Buck
N4PGW

2653. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 04:52:08 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <YBzRd.1470$OU1.503@newssvr21.news.prodigy.com>
Source record: 81793

Jack Painter wrote:

> "Tom Donaly" <dtdonaly@sbcglobal.net> wrote
>
>
>>Jack Painter wrote:
>>
>>
>>>Hello Art,
>>>
>>>I've been to London, and I never heard lunatics advocating the violent
>>>destruction of all things related to the "West" as we know it. But then
>
> I
>
>>>stayed out of Mosques, too. The reference to the city gates was
>
> anecdotal
>
>>>only. The 40% was a figure given to me by a London couple I met last
>
> week,
>
>>>when I quoted 30% muslim population living in London, apparently an old
>>>figure. This particular British couple I met happen to approve of both
>>>President George Bush and our mutual (countries) efforts to eradicate
>>>radical muslim actors. They also have a soldier-son in Kuwait so perhaps
>>>they are privy to information we are not.
>>>
>>>We have not declared war on the nation of islam, but we should, because
>
> they
>
>>>have long ago declared war on the west and all of our tenets of free
>>>religion, free economies and forms of self-government.
>>>
>>>Wise up and stop defending that which is focused on your own
>
> destruction. It
>
>>>has nothing to do with free speech. It has everything to do with
>
> survival. I
>

>>>don't mince words, and genocide is exactly what it will take to survive
>
> the
>
>>>onslaught of islam. Education may prevent it from reaching the level of
>>>insanity it presently enjoys. It enjoys this status largely due to the
>>>tolerance of fools who think their elected legislators represent them.
>>>Perhaps Reg remembers when Chamberlain lied to his countrymen, waiving
>
> the
>
>>>"peace is at hand" (paraphrased, Art) toilet paper that Nazi Germany
>
> gave
>
>>>him. Saying that Islam is a "peaceful religion" is the same rubbish.
>>>
>>>Regards,
>>>Jack
>>>
>>>"aunwin@insightbb.com" wrote
>>>
>>>
>>>
>>>>Jack, who are the lunatics? To have faith in your religeon or beliefs is
>>>
>>>not
>>>
>>>
>>>>insane,
>>>>We have christians who have faith in religeon and beliefs. In war many
>>>
>>>have
>>>
>>>
>>>>given up their lives
>>>>to save others and we have in fact declared war against a religeon.,
>>>>Regarding Londoners having their own form of sanity, go to Hyde Park
>>>
>>>corner
>>>
>>>
>>>>on a sunday
>>>>and hear the free speech that is the right of all even if you may
>
> disagree
>
>>>>with it..
>>>>Regarding the gates of London of which there are eight which surround
>

> one
>
>>>>square mile
>>>>if you say that 40,000 dwell inside those gates then many must be
>>>
>>>squatters
>>>
>>>
>>>>inside the palace walls.
>>>>Reg is speaking as a European where the main threat of war in the world
>
> is
>
>>>>seen to come from the Middle East
>>>>with the help of the U.S. Why else would we deliver 50 of our most
>>>>sophisticated deep concrete bunker
>>>>smart bombs? Surely not for destruction of tents and shacks but more
>>>>probably to penetrate heavily concrete
>>>>nuclear energy stations like their own. I believe Reg is sincere and
>>>
>>>correct
>>>
>>>
>>>>in asking the USA from the other side of the pond regarding what we do
>
> in
>
>>>>the Middle East. WHY?
>>>>As far as banning guns, I do believe they ban hand grenades and a
>>>
>>>plethoria
>>>
>>>
>>>>of other weapons that can only
>>>>be used to kill people. It is a democratic country and it is the peoples
>>>>will, why are you concerned about it?.
>>>>If there are many close by to you who have the same beliefs as you
>>>
>>>regarding
>>>
>>>
>>>>genocide you may have to coinsider
>>>>whether you want to kill or be considered to be one endangered by the
>>>>killing. Your religion may well be different
>>>>to your immediate population
>>>>Regards
>>>>Art
>>>>
>>>>"Jack Painter" <223bthp@cox.net> wrote in message
>>>>news:MfqRd.47386$EG1.7785@lakeread04...

>>>>
>>>>
>>>>>"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote
>>>>>
>>>>>
>>>>>
>>>>>>These days we have other forms of suicide. There are people who are
>>>>>
>>>>>living
>>>>>
>>>>>
>>>>>>such enforced miserable lives and in such oppressed conditions they
>>>>>>prefer
>>>>>>to sacrifice their own lives in the hope of improving the future lives
>>>
>>>of
>>>
>>>
>>>>>>their families and their decendents.
>>>>>>
>>>>>>Citizens of the United States, and others, ask yourselves WHY?
>>>>>>----
>>>>>>Reg, Amateur Radio, G4FGQ
>>>>>
>>>>>Reg,
>>>>>
>>>>>The alleged conditions you describe are not found in the people who do
>>>>>this,
>>>>>and if it were present would still have zero bearing on the cause of
>>>
>>>these
>>>
>>>
>>>>>lunatic suicides. Fractional existence and/or slavery may be found all
>>>>>over
>>>>>the globe and was rarely ever a cause of such insanity. Only the
>>>>>influence
>>>>>of Islam allows such departure from humanity and any hope of a better
>>>
>>>life
>>>
>>>
>>>>>here on earth. Islam executes this insane belief not only on others,
>
> but
>
>>>>>on
>>>>>themselves. A combination of education and eradication (genocide) may
>
> be

>
>>>>>applied as needed to calm this insanity. Londoners have their own form
>>>
>>>of
>>>
>>>
>>>>>insanity, that of banning guns from law abiding citizens whilst
>>>>>encouraging
>>>>>Muslim Mosques to add to the near 40% Muslim population who preach for
>>>
>>>the
>>>
>>>
>>>>>destruction of the West from inside the London city gates.
>>>>>
>>>>>Regards,
>>>>>
>>>>>Jack Painter
>>>>>Virginia Beach, Virginia
>>>>>
>>
>>Islam can be a beautiful, satisfying religion, or it can not. Like
>>some of the gutter Christian sects infesting America there are people
>>who profess a belief in God who would use that belief as an excuse
>>for killing innocent people. People who preach genocide are low,
>>anti-social, dangerous, and a danger to society and should be locked
>>up to keep them from doing harm.
>>
>>Tom Donaly, KA6RUH
>
>
> then Tom added:
>
>>Religious fanatics of every stripe are dangerous, whether they be
>
> Christian, Hindu, Moslem or anything else. So, too, are political
> fanatics. The West has plenty of both.
>
> Tom Donaly, KA6RUH
>
> Well Tom, fortunately for you, there are rough men ready to fight in the
> middle of the night on the other side of the world, in order that you can
> sleep in your bed free from fear. As to your thinking that I should be
> locked up, I nonetheless defend your right to be a useless twit, unable to
> stand for anything, and able to make dribble about righteousness without a
> defining origin of those thoughts. Everything is o.k. with you, except
> things that suck. Someone should take care of that stuff for you, so you
> don't have to worry too much about it. Gotcha. Oh and Tom, we'll be watching
> for those zealous Christian sects infesting America, watching for the first
> sign of their *suicide bombings*. In the meantime, maybe you can point to

> some evidence of Christians doing that anywhere in the world, ever.
>
> Jack
>
>

Many atrocities have been committed over the years in the name of Christ. That doesn't meant that Christianity is bad, but that there have been people willing to use it as an excuse for slaughter, as you do. Face it, Painter, when you advocate genocide, you're no better than the Islamic fanatics in Saudi Arabia calling for the annihilation of the infidels, or the racialist bigots of Nazi Germany screaming for the elimination of the Jews. Moreover, you should get something through your thick, Southern skull before you and people like you do something stupid: there are Islamic countries that possess nuclear capabilities. You're not going to be able to murder the people of those countries without getting something back in return. You need to calm down and quit watching those hick preachers on T.V. on Sunday. Maybe you should get out of your easy chair and go to a real Christian church and learn some real Christianity before you shoot off your mouth on this newsgroup and make a fool of yourself like Reg.

Tom Donaly, KA6RUH

2654. Re: One Way Propagation ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 04:52:45 UTC
From: Buck <iam@this.site>
Message-ID: <1ghd11pvldb5u3sb6eo4l0c34dfdpmdgrc@4ax.com>
Source record: 81792

On Fri, 18 Feb 2005 16:34:09 -0800, "CW" <cmagers@earthlink.net>
wrote:

>Doesn't work that way.
>

LOL, short - sweet- and to the point. :)

Thanks

--
73 for now
Buck
N4PGW

2655. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 05:00:25 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4216c8aa$1_2@127.0.0.1>
Source record: 81794

Jack Painter wrote:
> In the meantime, maybe you can point to
> some evidence of Christians doing that anywhere in the world, ever.

How do you feel about the sacking of Constanople?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
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2656. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 05:05:15 UTC
From: Buck <iam@this.site>
Message-ID: <g7id111bppkfs6idk9facbrpfdu50dtdsk@4ax.com>
Source record: 81795

On Fri, 18 Feb 2005 18:55:07 -0500, "Dave VanHorn"
<dvanhorn@dvanhorn.org> wrote:

>
>> I hear lots of amateurs describing interference and other problems on
>> HF, but no one seems to be triangulating the offending stations. I am
>> guessing that the real secret was in their communications with the
>> 'spotters' to triangulate the positions.
>
>Adcock arrays http://www.airwaysmuseum.com/HF%20CR%20DF%201.htm
>http://members.aol.com/BmgEngInc/Adcock.html
>worked quite well, but they require precision in construction, as well as
>the site.
>For VHF/UHF, there are all sorts of things available :)
>N0MKJ and I used to hunt with the "fox-copter", featured in the 3/94 73
>magazine.
>
>Here's some references in 73 magazine:
>http://www.pejla.se/ardf_litteratur.htm
>
>And a bunch of links to play with:
>http://www.dxzone.com/catalog/Operating_Modes/Radio_Direction_Finding/
>
Thank you,

I bookmarked the DF antenna and am reading the other articles.

--
73 for now
Buck
N4PGW

2657. TODAY'S FREE MOVIE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 05:07:37 UTC
From: cc22003@sbcglobal.net
Message-ID: <1108789657.514044.324520@g14g2000cwa.googlegroups.com>
Source record: 81796

www.movie135.4x2.net << TODAY'S FREE MOVIE

(you may need realplayer to view)

2658. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 05:10:29 UTC
From: "aunwin@insightbb.com"
Message-ID: <9TzRd.21901$4q6.18062@attbi_s01>
Source record: 81797

Tom, remember mustard gas used in the first world war?
Terrible stuff to use yet the largest stockpile in the world
of that terrible stuff is held in mid U.S., for what reason
I do not know, Do you?
Regarding Commander Harris, are you saying that he took a squadron
to Iraq and sprayed poison gas?
Art

"Tom Donaly" <dtdonaly@sbcglobal.net> wrote in message
news:FhzRd.1341$DC6.910@newssvr14.news.prodigy.com...
> Reg Edwards wrote:
snip.....................................
>>
>>
>
> Unmitigated hypocrisy. The British have no business sticking their
> noses in the air over our behavior in Iraq. An example: there have
> been two men who have been responsible for
> using poison gas against civilians in that country. One of them is
> the infamous Saddam. The other is the great British war hero
> "Bomber" Harris, who, like Adolph Hitler, believed you could win
> wars simply by slaughtering innocent people.
> Stick your nose in a history book, Reg, and you might be able
> to cure yourself of the habit of making these asinine posts.
> 73,
> Tom Donaly, KA6RUH

2659. ITS WORTH LOOKING AT

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 07:19:53 UTC
From: masatosan <neosilvia87@hotmail.com>
Message-ID: <1108797593.103964.114070@f14g2000cwb.googlegroups.com>
Source record: 81798

Im tellin yah it workx and its so worth it

Turn $5.00 into $50,000...read this to find out how!!!
READING THIS COULD CHANGE YOUR LIFE!!!
I found this on a bulletin board like this one and decided to try it.
A little while back, I was browsing through a newsgroup, just like you are now, and came across an article similar to this that said you could make thousands of dollars within weeks with only an initial investment of $5.00! So I thought, "Yeah right, this must be a scam", but like most of us, I was curious, so I kept reading... I also did an internet search and found nothing but success stories.

Anyway, it said that you need to send $1.00 to each of the 5 names and address stated in the article. You then place your own name and address in the bottom of the list at ..5, and post the article in at least 200 newsgroups. (There are thousands) No catch, that was it. So after thinking it over, and talking to a few people first, I thought about trying it. I figured "what have I got to lose except 5 stamps and $5.00, right?"

Then I invested the measly $5.00 (I use the word "measly" because $5 really is measly compared to the money I have made through the initial investment). Well GUESS WHAT!!... within 7 days, I started getting money in the mail! I was shocked! I figured it would end soon, but the money just kept coming in.
In my first week, I made about $25.00. By the end of the second week I had made a total of over $1,000.00! In the third week I had over $10,000.00 and it's still growing.

This is now my fourth week and I have made just over $42,000.00 and it's still coming in rapidly. It's certainly worth $5.00, and 5 stamps, I have spent more than that on the lottery!!
Let me tell you how this works and most importantly, why it works....
Also, make sure you print a copy of this article NOW, so you can get the information off of it as you need it.
I promise you that if you follow the directions exactly, that you will start making more money than you thought possible by doing something so easy!

Suggestion:
Read this entire message carefully! (print it out or download it.)
Follow the simple directions and watch the money come in! It's easy.
It's legal. And, your investment is only $5.00 (Plus postage)

IMPORTANT:
This is not a rip-off; it is not indecent; it is not illegal; and it is

virtually no risk - it really works!!!! If all of the following instructions are adhered to, you will receive extraordinary dividends.
PLEASE NOTE:
Please follow these directions EXACTLY, and $50,000 or more can be yours in 20 to 60 days.
This program remains successful because of the honesty and integrity of the participants. Please continue it's success by carefully adhering to the instructions.
You will now become part of the Mail Order business. In this business your product is not solid and tangible, it's a service. You are in the business of developing Mailing Lists.
Many large corporations are happy to pay big bucks for quality lists. However, the money made from the mailing lists is secondary to the income which is made from people like you and me asking to be included in that list.
Here are the 4 easy steps to success:

STEP 1:
Get 5 separate pieces of paper and write the following on each piece of paper "PLEASE PUT ME ON YOUR MAILING LIST."
Now get 5 US $1.00 bills and place ONE inside EACH of the 6 pieces of paper so the bill will not be seen through the envelope (to prevent thievery).
Next, place one paper in each of the 5 envelopes and seal them. You should now have 5 sealed envelopes, each with a piece of paper stating the phrase "PLEASE
PUT ME ON YOUR MAILING LIST.", your name and address, and a $1.00 bill.
What you are doing is creating a service. THIS IS ABSOLUTELY LEGAL!
You are requesting a legitimate service and you are paying for it!
Like most of us I was a little skeptical and a little worried about the legal aspects of it all. So I checked it out with the U.S. Post Office (1-800-725-2161) and they confirmed that it is indeed legal!
Mail the 5 envelopes to the following addresses:

..1) Jason R
3702 Werner Ave.
Austin, TX 78722

..2) J Arenas
1600 Malibu
Carrollton, TX 75006

..3) Richonda S
CMR 402 BOX 274
APO, AE 09180

..4) J Roth
2901 Barton Skyway ..3406
Austin, TX 78746

..5)Jesse James
1778 Swift Ave.

Ventura, Ca 93003

STEP 2: Now take the ..1 name off the list that you see above, move the other names up (5 becomes 4, 4 becomes 3, etc...) and add YOUR Name as number 5 on the list.

STEP 3: Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups. (I think there are close to 32,000+) All you need is 200, but remember, the more you post, the more money you make!

This is perfectly legal! If you have any doubts, refer to Title 18 Sec. 1302 & 1341 of the Postal lottery laws. Keep a copy of these steps for yourself and, whenever you need money, you can use it again, and again.

PLEASE REMEMBER that this program remains successful because of the honesty and integrity of the participants and by their carefully adhering to the directions.
Look at it this way. If you are of integrity, the program will continue and the money that so many others have received will come your way.

NOTE:
You may want to retain every name and address sent to you, either on a computer or hard copy and keep the notes people send you. This VERIFIES that you are truly providing a service. (Also, it might be a good idea to wrap the $1 bill in dark paper to reduce the risk of mail theft.)
So, as each post is downloaded and the directions carefully followed, five members will be reimbursed for their participation as a List Developer with one dollar each.
Your name will move up the list geometrically so that when your name reaches the ..1 position you will be receiving thousands of dollars in CASH!!!
What an opportunity for only $5.00 ($1.00 for each of the first five people listed above)
Send it now, add your own name to the list and you're in business!

---DIRECTIONS ----- FOR HOW TO POST TO NEWSGROUPS----------
Step 1)
You do not need to re-type this entire letter to do your own posting. Simply put your cursor at the beginning of this letter and drag your cursor to the bottom of this document, and select 'copy' from the edit menu. This will copy the
entire letter into the computer's memory.
Step 2)
Open a blank 'notepad' file and place your cursor at the top of the blank page. From the 'edit' menu select 'paste'. This will paste a copy of the letter into notepad so that you can add your name to the list.
Step 3) Save your new notepad file as a .txt file. If you want to do your postings in different settings, you'll always have this file to go back to.
Step 4)
Use Netscape or Internet explorer and try searching for various

newsgroups (on-line forums, message boards, chat sites, discussions, etc.)
Step 5)
Visit these message boards and post this article as a new message by highlighting the text of this letter and selecting paste from the edit menu. Fill in the Subject, this
will be the header that everyone sees as they scroll through the list of postings in a particular group, click the post message button.
You're done with your first one!
Congratulations...THAT'S IT!
All you have to do is jump to different newsgroups and post away, after you get the hang of it, it will take about 30 seconds for each newsgroup!
REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200
That's it! You will begin receiving money from around the world within days! You may eventually want to rent a P.O.Box due to the large amount of mail you will receive. If you wish to stay anonymous, you can invent a name to use, as long as the postman will deliver it.
JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT.
Now the WHY part:
Out of 200 postings, say I receive only 5 replies (a very low example). So then I made $5.00 with my name at ..5 on the letter.
Now, each of the 5 persons who just sent me $1.00 make the MINIMUM 200 postings, each with my name at ..5 and only 5 persons respond to each of the original 5, that is another $25.00 for me, now those 25 each make 200 MINIMUM posts with my name at ..4 and only 5 replies each, I will bring in an additional $125.00!
Now, those 125 persons turn around and post the MINIMUM 200 with my name at ..3 and only receive 5 replies each, I will make an additional $626.00!
OK, now here is the fun part, each of those 625 persons post a MINIMUM 200 letters with my name at ..2 and they each only receive 5 replies, that just made me $3,125.00!!!
Those 3,125 persons will all deliver this message to 200 newsgroups with my name at ..1 and if still ONLY 5 persons per 200 newsgroups react I will receive $15,625,00!
With an original investment of only $5.00! AMAZING! When your name is no longer on the list, you just take the latest posting in the newsgroups, and send out another $5.00 to names on the list, putting your name at number 5 again. And start posting again.
The thing to remember is do you realize that thousands of people all over the world are joining the internet and reading these articles everyday?, JUST LIKE YOU are now!!
So, can you afford $5.00 and see if it really works?? I think so...
People have said, "what if the plan is played out and no one sends you the money? So what! What are the chances of that happening when there are tons of new honest users and new honest people who are joining the internet and newsgroups everyday and are willing to give it a try?
Estimates are at 20,000 to 50,000 new users, every day, with thousands

of those joining the actual internet.
Remember, play FAIRLY and HONESTLY and this will really work!!!

2660. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 07:27:29 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <MTBRd.52083$EG1.32805@lakeread04>
Source record: 81799

"Tom Donaly" <dtdonaly@sbcglobal.net> wrote

> Jack Painter wrote:
>
> > "Tom Donaly" <dtdonaly@sbcglobal.net> wrote
> >>Jack Painter wrote:
> >>
> >>>Hello Art,
> >>>
> >>>I've been to London, and I never heard lunatics advocating the violent
> >>>destruction of all things related to the "West" as we know it. But then
> > >
> > > I
> > >
> >>>stayed out of Mosques, too. The reference to the city gates was
> > >
> > > anecdotal
> > >
> >>>only. The 40% was a figure given to me by a London couple I met last
> > >
> > > week,
> > >
> >>>when I quoted 30% muslim population living in London, apparently an old
> >>>figure. This particular British couple I met happen to approve of both
> >>>President George Bush and our mutual (countries) efforts to eradicate
> >>>radical muslim actors. They also have a soldier-son in Kuwait so
perhaps
> >>>they are privy to information we are not.
> >>>
> >>>We have not declared war on the nation of islam, but we should, because
> > >
> > > they
> > >
> >>>have long ago declared war on the west and all of our tenets of free
> >>>religion, free economies and forms of self-government.
> >>>
> >>>Wise up and stop defending that which is focused on your own
> > >
> > > destruction. It
> > >
> >>>has nothing to do with free speech. It has everything to do with
> > >
> > > survival. I
> > >

> >>>don't mince words, and genocide is exactly what it will take to survive
> >
> > the
> >
> >>>onslaught of islam. Education may prevent it from reaching the level of
> >>>insanity it presently enjoys. It enjoys this status largely due to the
> >>>tolerance of fools who think their elected legislators represent them.
> >>>Perhaps Reg remembers when Chamberlain lied to his countrymen, waiving
> >
> > the
> >
> >>>"peace is at hand" (paraphrased, Art) toilet paper that Nazi Germany
> >
> > gave
> >
> >>>him. Saying that Islam is a "peaceful religion" is the same rubbish.
> >>>
> >>>Regards,
> >>>Jack
> >>>
> >>>"aunwin@insightbb.com" wrote
> >>>
> >>>
> >>>
> >>>>Jack, who are the lunatics? To have faith in your religeon or beliefs
is
> >>>
> >>>not
> >>>
> >>>
> >>>>insane,
> >>>>We have christians who have faith in religeon and beliefs. In war many
> >>>
> >>>have
> >>>
> >>>
> >>>>given up their lives
> >>>>to save others and we have in fact declared war against a religeon.,
> >>>>Regarding Londoners having their own form of sanity, go to Hyde Park
> >>>
> >>>corner
> >>>
> >>>
> >>>>on a sunday
> >>>>and hear the free speech that is the right of all even if you may
> >
> > disagree
> >
> >>>>with it..
> >>>>Regarding the gates of London of which there are eight which surround

> >
> > one
> >
> >>>>square mile
> >>>>if you say that 40,000 dwell inside those gates then many must be
> >>>
> >>>squatters
> >>>
> >>>
> >>>>inside the palace walls.
> >>>>Reg is speaking as a European where the main threat of war in the
world
> >
> > is
> >
> >>>>seen to come from the Middle East
> >>>>with the help of the U.S. Why else would we deliver 50 of our most
> >>>>sophisticated deep concrete bunker
> >>>>smart bombs? Surely not for destruction of tents and shacks but more
> >>>>probably to penetrate heavily concrete
> >>>>nuclear energy stations like their own. I believe Reg is sincere and
> >>>
> >>>correct
> >>>
> >>>
> >>>>in asking the USA from the other side of the pond regarding what we do
> >
> > in
> >
> >>>>the Middle East. WHY?
> >>>>As far as banning guns, I do believe they ban hand grenades and a
> >>>
> >>>plethoria
> >>>
> >>>
> >>>>of other weapons that can only
> >>>>be used to kill people. It is a democratic country and it is the
peoples
> >>>>will, why are you concerned about it?.
> >>>>If there are many close by to you who have the same beliefs as you
> >>>
> >>>regarding
> >>>
> >>>
> >>>>genocide you may have to coinsider
> >>>>whether you want to kill or be considered to be one endangered by the
> >>>>killing. Your religion may well be different
> >>>>to your immediate population
> >>>>Regards
> >>>>Art

> >>>>
> >>>>"Jack Painter" <223bthp@cox.net> wrote in message
> >>>>news:MfqRd.47386$EG1.7785@lakeread04...
> >>>>
> >>>>
> >>>>"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote
> >>>>>
> >>>>>
> >>>>>
> >>>>>These days we have other forms of suicide. There are people who are
> >>>>>
> >>>>>living
> >>>>>
> >>>>>
> >>>>>such enforced miserable lives and in such oppressed conditions they
> >>>>>prefer
> >>>>>to sacrifice their own lives in the hope of improving the future
lives
> >>>
> >>>of
> >>>
> >>>
> >>>their families and their decendents.
> >>>>>
> >>>>>Citizens of the United States, and others, ask yourselves WHY?
> >>>>>----
> >>>>>Reg, Amateur Radio, G4FGQ
> >>>>>
> >>>>>Reg,
> >>>>>
> >>>>>The alleged conditions you describe are not found in the people who
do
> >>>>>this,
> >>>>>and if it were present would still have zero bearing on the cause of
> >>>
> >>>these
> >>>
> >>>
> >>>lunatic suicides. Fractional existence and/or slavery may be found
all
> >>>>>over
> >>>>>the globe and was rarely ever a cause of such insanity. Only the
> >>>>>influence
> >>>>>of Islam allows such departure from humanity and any hope of a better
> >>>
> >>>life
> >>>
> >>>
> >>>here on earth. Islam executes this insane belief not only on others,
> >

> > but
> >
> >>>>>on
> >>>>>themselves. A combination of education and eradication (genocide) may
> >
> > be
> >
> >>>>>applied as needed to calm this insanity. Londoners have their own
form
> >>>
> >>>of
> >>>
> >>>
> >>>>>insanity, that of banning guns from law abiding citizens whilst
> >>>>>encouraging
> >>>>>Muslim Mosques to add to the near 40% Muslim population who preach
for
> >>>
> >>>the
> >>>
> >>>
> >>>>>destruction of the West from inside the London city gates.
> >>>>>
> >>>>>Regards,
> >>>>>
> >>>>>Jack Painter
> >>>>>Virginia Beach, Virginia
> >>>>>
> >>
> >>Islam can be a beautiful, satisfying religion, or it can not. Like
> >>some of the gutter Christian sects infesting America there are people
> >>who profess a belief in God who would use that belief as an excuse
> >>for killing innocent people. People who preach genocide are low,
> >>anti-social, dangerous, and a danger to society and should be locked
> >>up to keep them from doing harm.
> >>
> >>Tom Donaly, KA6RUH
> >
> >
> > then Tom added:
> >
> >>Religious fanatics of every stripe are dangerous, whether they be
> >
> > Christian, Hindu, Moslem or anything else. So, too, are political
> > fanatics. The West has plenty of both.
> >
> > Tom Donaly, KA6RUH
> >
> > Well Tom, fortunately for you, there are rough men ready to fight in the
> > middle of the night on the other side of the world, in order that you

can
> > sleep in your bed free from fear. As to your thinking that I should be
> > locked up, I nonetheless defend your right to be a useless twit, unable
to
> > stand for anything, and able to make dribble about righteousness without
a
> > defining origin of those thoughts. Everything is o.k. with you, except
> > things that suck. Someone should take care of that stuff for you, so you
> > don't have to worry too much about it. Gotcha. Oh and Tom, we'll be
watching
> > for those zealous Christian sects infesting America, watching for the
first
> > sign of their *suicide bombings*. In the meantime, maybe you can point
to
> > some evidence of Christians doing that anywhere in the world, ever.
> >
> > Jack
> >
> >
>
> Many atrocities have been committed over the years in the name of
> Christ. That doesn't meant that Christianity is bad, but that there
> have been people willing to use it as an excuse for slaughter, as
> you do. Face it, Painter, when you advocate genocide, you're no better
> than the Islamic fanatics in Saudi Arabia calling for the annihilation
> of the infidels, or the racialist bigots of Nazi Germany screaming for
> the elimination of the Jews. Moreover, you should get something
> through your thick, Southern skull before you and people like you
> do something stupid: there are Islamic countries that possess nuclear
> capabilities. You're not going to be able to murder the people of
> those countries without getting something back in return. You need
> to calm down and quit watching those hick preachers on T.V. on Sunday.
> Maybe you should get out of your easy chair and go to a real Christian
> church and learn some real Christianity before you shoot off your
> mouth on this newsgroup and make a fool of yourself like Reg.
>
> Tom Donaly, KA6RUH

I never made the argument that Christians should rise up against Islam, you
did. You're as fond of attacking Christians as anything else you don't
understand, but we could leave that out of the discussion easily, as it just
gets you more confused and doesn't answer the problem that I stated, which
was:

> >>>We have not declared war on the nation of islam, but we should, because
they
> >>>have long ago declared war on the west and all of our tenets of free
> >>>religion, free economies and forms of self-government.

Read that to yourself a few times, Tom.

I may have a big mouth, but I will not apologize for the beliefs and fundamentals that made western life the best the world has ever known. It is also the only system of beliefs that sacrifices our sons and daughters to free others from tyranny, and to educate and promote free trade that allows employment of all in an honest living. That saps like you will argue everything Americans say or do is more evidence that we are truly a divided country. But what divides us in not what the muslims want to kill us for, and you are too much of an ass to see that you will be as dead a sap-sucker as I will be a patriot, unless we agree on the definition of islam as evil. That has nothing whatsoever to do with christianity or any other religion. It is reality.

Other places your stereotype darts landed were also wrong; I grew up in the north-east, have a bachelor of science from a northern school (minor in poli-sci), and was also educated in West Germany where I was an exchange student for a year. I traveled all over europe then and many times later, not counting my service as a launch operations supervisor aboard a ballistic missile sub, forward deployed in scotland. I'm well aware of the atrocities of nazi germany, and its another mark of your ignorance that you could assume you know what my education and experience was there. Want to teach me some more about who has nuclear weapons next? My "thick southern skull" is so ripe for your vast knowledge of tripe, tom.

Islam and its muslim cronies that have been the cause of crusades in the past and are causing history to repeat itself now. I never heard any tv preacher say that, it's as obvious as the day is light. Maybe you folks in california just don't appreciate what it felt like to have one plane load of muslim suicide-bombers fly over you and then crash in your state, and have another one headed for the same place, fall a little short. Or hear about how two of the same bombers were in your city for two weeks scoping out weak points in your seaport and military installations. But virginians do remember that it was the city council of berkley california that made several demands to the u.s. government to stop bombing japan even as we were losing thousands of young marines and sailors every week to push the japanee out of the occupied territories of the pacific. Good thing I don't believe in stereotypes like you do, or else you and most of your state would be given one-way tickets out.

Jack

2661. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 07:58:59 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <8lCRd.52084$EG1.5381@lakeread04>
Source record: 81800

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:4216c8aa$1_2@127.0.0.1...
> Jack Painter wrote:
> > In the meantime, maybe you can point to
> > some evidence of Christians doing that anywhere in the world, ever.
>
> How do you feel about the sacking of Constanople?
> --
> 73, Cecil http://www.qsl.net/w5dxp

Hi Cecil,

"the sacking"? 1204 or 1453? Pretty ruthless, but don't recall the christian defenders using suicide bomber tactics, then or ever. I'll take Richard's story of that young marine's comments (was it an adaptation of remarks from the movie "Patton"?) about not being keen to die for his country, but looking forward to fighting for it (making the other guy die for his country).

Jack

2662. Re: HF6V from ground to roof

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 11:29:35 UTC
From: Jim <K4SQR@juno.com>
Message-ID: <1108812575.846217.16940@o13g2000cwo.googlegroups.com>
Source record: 81801

John;

468/f(MHz) is for a 1/2 wave dipole.
Try 240 or 246/f(MHz) for radials.
GL,
Jim

John L wrote:
> Hi all,
>
> Going to be moving my ground mounted HF6V up to the roof this spring.
>
> Should I keep the same radial length 1/4 wave (468 div by freq) or is
there
> a different formula for elevated radial lengths?
>
> Thanks

2663. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 11:50:33 UTC
From: "M. J. Powell" <mike@DeLeTe.pickmere.demon.co.uk>
Message-ID: <m9fCG4IJgyFCFw9V@pickmere.demon.co.uk>
Source record: 81803

In message <111dfm2e96sekda@corp.supernews.com>, David G. Nagel
<nagel@core.com> writes
>And your problem is?
>Being of German descent with relatives in Germany, I feel that the
>German people got what they deserved. Actions by the Luftwaffe were
>just as horrific in London, Warsaw, Stalingrad and Antwerp to name a few.
>The Luftwafe had similar devices to locate their targets in England
>with the same results when their systems were captured by British
>Military Intelligence (what an oxymoron).

Do you consider Prof. R.V. Jones to be an oxymoron? Or any other kind of
moron?

Mike

2664. Re: source for small end insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 11:52:31 UTC
From: "M. J. Powell" <mike@DeLeTe.pickmere.demon.co.uk>
Message-ID: <wdyHenJ$hyFCFwct@pickmere.demon.co.uk>
Source record: 81802

In message <PmvRd.2544$EA2.174@newsfe1-gui.ntli.net>, nick smith
<NickS@ntlworld.com> writes
>or a biro case drilled through at each end

A button has the holes already drilled!

Mike
--
M.J.Powell

2665. Several questions about mobile HF antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 12:30:03 UTC
From: "Joe S." <nobody@nowhere.net>
Message-ID: <cv7bga022ik@news1.newsguy.com>
Source record: 81804

I am considering purchasing an FT-857D and mobile antenna to install in/on my old Nissan pickup. My work shift is 0400-1300 or 0500-1400 M-F with a 35-minute commute along an interstate highway and I would like to spend the time operating HF from the Mississippi Gulf Coast.

While the rig is no problem, the antenna is. I have been reading the postings to this NG about mobile HF antennas and the opinions and experience are all over the map.

For simplicity, I'm looking at the Yaesu ATAS-120 -- I think that's the model number -- screwdriver antenna for the 857D. I read a lot of references to adding a whip to the top of the screwdriver antenna. Am I correct that I will need to add a whip to the ATAS-120, or, am I misreading something here?

If 75-meter operation results in an antenna that whips trees and bangs into the overhead at gas stations, I would simply forego 75 and operate 40 and up.

Would you folks be so kinds as to explain:
-- Your experience with the ATAS-120.
-- How did you mount your ATAS-120 or similar screwdriver antenna?
-- What's this business about a whip on top of the screwdriver antenna?

I am not the sharpest knife in the drawer so use simple sentences and short words.

Thanks.

--

Joe

2666. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 16:12:38 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42176638$1_1@127.0.0.1>
Source record: 81805

Jack Painter wrote:
> "Cecil Moore" <w5dxp@hotmail.com> wrote in message
>>How do you feel about the sacking of Constantinople?

> "the sacking"? 1204 or 1453?

The 1204 sacking of the Christian city by Christian
Crusaders during the Fourth Crusade.

"Eventually, the crusaders were victorious, and the citizens of the
city, strangely, at least to western eyes, welcomed them into the city
as usurpers, not as conquerors. The crusaders did not see it this way,
and they inflicted a horrible and savage sacking on Constantinople for
three days, during which many ancient works of art were stolen or
destroyed."

How does one defend those Christian acts?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2667. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 16:34:44 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <EUJRd.1338$Pz7.128@newssvr13.news.prodigy.com>
Source record: 81807

aunwin@insightbb.com wrote:
> Tom, remember mustard gas used in the first world war?
> Terrible stuff to use yet the largest stockpile in the world
> of that terrible stuff is held in mid U.S., for what reason
> I do not know, Do you?
> Regarding Commander Harris, are you saying that he took a squadron
> to Iraq and sprayed poison gas?
> Art
>
> "Tom Donaly" <dtdonaly@sbcglobal.net> wrote in message
> news:FhzRd.1341$DC6.910@newssvr14.news.prodigy.com...
>
>>Reg Edwards wrote:
>
> snip.....................................
>
>>>
>>Unmitigated hypocrisy. The British have no business sticking their
>>noses in the air over our behavior in Iraq. An example: there have
>>been two men who have been responsible for
>>using poison gas against civilians in that country. One of them is
>>the infamous Saddam. The other is the great British war hero
>>"Bomber" Harris, who, like Adolph Hitler, believed you could win
>>wars simply by slaughtering innocent people.
>>Stick your nose in a history book, Reg, and you might be able
>>to cure yourself of the habit of making these asinine posts.
>>73,
>>Tom Donaly, KA6RUH
>
>
>

Hi Art,
before WWII, when Britain was heavily involved in Iraq that's
exactly what he did.
73,
Tom Donaly, KA6RUH

2668. Mount antennas on pole

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 16:35:25 UTC
From: Chris <d@iolfree.ie>
Message-ID: <cv7psd$9vd$1@reader01.news.esat.net>
Source record: 81806

I want to purchase a 20-30 foot pole to put in my back garden as a place to mount the antennas on.I live in the country side so i dont need to worry about complaints.How would i mount antennas on to a basic metal pole?

Chris

2669. Re: PART 15 AM antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 16:36:28 UTC
From: Randall J <capt_avatar@yahoo.com>
Message-ID: <gWJRd.8204$6p7.6160@news01.roc.ny>
Source record: 81808

Found my answers here:
http://lpam.info/index.php?page=antennas#loadingcoil

Randall J wrote:
> I operate a Part 15 station for my neighborhood (FM) and have acquired
> an AM transmitter. I've seen plans for vertical antennas but would
> rather make my own from the few parts I have. I have 8ft of aluminum
> tubing and would like to make a loading coil using 3 inch diameter PVC
> pipe. Given the frequency I operate on (1610khz), 8 ft of tubing, and a
> 3.5 inch coil form, how many turns of 22AWG insulated wire would I need
> to wrap? (Oh the tubing is in two pieces and I can slide the top piece
> up and down).
>
> Is there a program I can download to find this out?
>
> Randall

2670. Re: Magnetic Loops and RF Exposure

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 16:41:16 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd1er1c.2nrp.bit-bucket@shell.config.com>
Source record: 81809

On 18 Feb 2005 16:11:47 -0800, wizard12342002@yahoo.com wrote:
> Does anyone have any knowledge regarding RF exposure issues from a
> small resonant loop antenna at HF frequencies? In particular, I am
> concerned about the very large magnetic near-field.

Are you *transmitting* with this loop???

2671. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 16:50:40 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <111erj4iclk0e7b@corp.supernews.com>
Source record: 81811

M. J. Powell wrote:
> In message <111dfm2e96sekda@corp.supernews.com>, David G. Nagel
> <nagel@core.com> writes
>
>> And your problem is?
>> Being of German descent with relatives in Germany, I feel that the
>> German people got what they deserved. Actions by the Luftwaffe were
>> just as horrific in London, Warsaw, Stalingrad and Antwerp to name a few.
>> The Luftwafe had similar devices to locate their targets in England
>> with the same results when their systems were captured by British
>> Military Intelligence (what an oxymoron).
>
>
> Do you consider Prof. R.V. Jones to be an oxymoron? Or any other kind of
> moron?
>
> Mike

Individuals are always the exception...

Dave

2672. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 16:57:24 UTC
From: Ron in Radio Heaven <kc4yoy@carolina.rr.con>
Message-ID: <UdKRd.6144$Yf5.668168@twister.southeast.rr.com>
Source record: 81810

> > Do you consider Prof. R.V. Jones to be an oxymoron? Or any other
> > kind of moron?
> >
> > Mike
>

I wonder if he understands what "oxymoron" means.

Ron

2673. Re: Mount antennas on pole

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 16:59:49 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <111es4arqm8of2f@corp.supernews.com>
Source record: 81815

Chris wrote:

> I want to purchase a 20-30 foot pole to put in my back garden as a place to
> mount the antennas on.I live in the country side so i dont need to worry
> about complaints.How would i mount antennas on to a basic metal pole?
>
> Chris
>
>

Most pole mount antennas have a suitable bracket attached that will accept two "U" bolts that usually come with it.

With the pole on the ground, lay the antenna so that the pole top and antenna bottom line up. Using the "U" bolts and any additional hardware that comes with it attach the two together.

If the diameter of the pole is to great for the "U" bolts you may have to make an adapter plate, also unless the pole is of very large diameter you may have to use guy wires to support such a tall system. The guys should form a 45 to 60 degree slope.

Make sure the pole can stand by it's self without bending. My elmer was trying to erect a long pipe to hold a tri-bander with my help. We attached a come along to his tractor and the bottom of the pipe. After much cranking on the come along we stopped to check our progress. When we turned around to look we were presented with a pretzel. The pipe was to soft for the application and the antenna was still on the ground while the base was vertical. ;^)

Dave WD9BDZ

2674. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 17:01:18 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <yhKRd.1608$OU1.782@newssvr21.news.prodigy.com>
Source record: 81814

Jack Painter wrote:

> "Tom Donaly" <dtdonaly@sbcglobal.net> wrote
>
>
>>Jack Painter wrote:
>>
>>
>>>"Tom Donaly" <dtdonaly@sbcglobal.net> wrote
>>>
>>>>Jack Painter wrote:
>>>>
>>>>
>>>>>Hello Art,
>>>>>
>>>>>I've been to London, and I never heard lunatics advocating the violent
>>>>>destruction of all things related to the "West" as we know it. But then
>>>
>>>I
>>>
>>>
>>>>>stayed out of Mosques, too. The reference to the city gates was
>>>
>>>anecdotal
>>>
>>>
>>>>>only. The 40% was a figure given to me by a London couple I met last
>>>
>>>week,
>>>
>>>
>>>>>when I quoted 30% muslim population living in London, apparently an old
>>>>>figure. This particular British couple I met happen to approve of both
>>>>>President George Bush and our mutual (countries) efforts to eradicate
>>>>>radical muslim actors. They also have a soldier-son in Kuwait so
>
> perhaps
>
>>>>>they are privy to information we are not.
>>>>>
>>>>>We have not declared war on the nation of islam, but we should, because
>>>
>>>they
>>>

>>>
>>>>>have long ago declared war on the west and all of our tenets of free
>>>>>religion, free economies and forms of self-government.
>>>>>
>>>>>Wise up and stop defending that which is focused on your own
>>>
>>>destruction. It
>>>
>>>
>>>>>has nothing to do with free speech. It has everything to do with
>>>
>>>survival. I
>>>
>>>
>>>>>don't mince words, and genocide is exactly what it will take to survive
>>>
>>>the
>>>
>>>
>>>>>onslaught of islam. Education may prevent it from reaching the level of
>>>>>insanity it presently enjoys. It enjoys this status largely due to the
>>>>>tolerance of fools who think their elected legislators represent them.
>>>>>Perhaps Reg remembers when Chamberlain lied to his countrymen, waiving
>>>
>>>the
>>>
>>>
>>>>>"peace is at hand" (paraphrased, Art) toilet paper that Nazi Germany
>>>
>>>gave
>>>
>>>
>>>>>him. Saying that Islam is a "peaceful religion" is the same rubbish.
>>>>>
>>>>>Regards,
>>>>>Jack
>>>>>
>>>>>"aunwin@insightbb.com" wrote
>>>>>
>>>>>
>>>>>
>>>>>
>>>>>>Jack, who are the lunatics? To have faith in your religeon or beliefs
>
> is
>
>>>>>not
>>>>>
>>>>>
>>>>>

>>>>>>insane,
>>>>>>We have christians who have faith in religeon and beliefs. In war many
>>>>>
>>>>>have
>>>>>
>>>>>
>>>>>
>>>>>>given up their lives
>>>>>>to save others and we have in fact declared war against a religeon.,
>>>>>>Regarding Londoners having their own form of sanity, go to Hyde Park
>>>>>
>>>>>corner
>>>>>
>>>>>
>>>>>
>>>>>>on a sunday
>>>>>>and hear the free speech that is the right of all even if you may
>>>
>>>disagree
>>>
>>>
>>>>>>with it..
>>>>>>Regarding the gates of London of which there are eight which surround
>>>
>>>one
>>>
>>>
>>>>>>square mile
>>>>>>if you say that 40,000 dwell inside those gates then many must be
>>>>>
>>>>>squatters
>>>>>
>>>>>
>>>>>
>>>>>>inside the palace walls.
>>>>>>Reg is speaking as a European where the main threat of war in the
>
> world
>
>>>is
>>>
>>>
>>>>>>seen to come from the Middle East
>>>>>>with the help of the U.S. Why else would we deliver 50 of our most
>>>>>>sophisticated deep concrete bunker
>>>>>>smart bombs? Surely not for destruction of tents and shacks but more
>>>>>>probably to penetrate heavily concrete
>>>>>>nuclear energy stations like their own. I believe Reg is sincere and
>>>>>
>>>>>correct

>>>>>
>>>>>
>>>>>
>>>>>>in asking the USA from the other side of the pond regarding what we do
>>>
>>>in
>>>
>>>
>>>>>>the Middle East. WHY?
>>>>>>As far as banning guns, I do believe they ban hand grenades and a
>>>>>
>>>>>plethoria
>>>>>
>>>>>
>>>>>
>>>>>>of other weapons that can only
>>>>>>be used to kill people. It is a democratic country and it is the
>
> peoples
>
>>>>>>will, why are you concerned about it?.
>>>>>>If there are many close by to you who have the same beliefs as you
>>>>>
>>>>>regarding
>>>>>
>>>>>
>>>>>
>>>>>>genocide you may have to coinsider
>>>>>>whether you want to kill or be considered to be one endangered by the
>>>>>>killing. Your religion may well be different
>>>>>>to your immediate population
>>>>>>Regards
>>>>>>Art
>>>>>>
>>>>>>"Jack Painter" <223bthp@cox.net> wrote in message
>>>>>>news:MfqRd.47386$EG1.7785@lakeread04...
>>>>>>
>>>>>>
>>>>>>
>>>>>>>"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote
>>>>>>>
>>>>>>>
>>>>>>>
>>>>>>>
>>>>>>>>These days we have other forms of suicide. There are people who are
>>>>>>>
>>>>>>>living
>>>>>>>
>>>>>>>
>>>>>>>

>>>>>>>>such enforced miserable lives and in such oppressed conditions they
>>>>>>>>prefer
>>>>>>>>to sacrifice their own lives in the hope of improving the future
>
> lives
>
>>>>>of
>>>>>
>>>>>
>>>>>
>>>>>>>>their families and their decendents.
>>>>>>>>
>>>>>>>>Citizens of the United States, and others, ask yourselves WHY?
>>>>>>>>----
>>>>>>>>Reg, Amateur Radio, G4FGQ
>>>>>>>
>>>>>>>Reg,
>>>>>>>
>>>>>>>The alleged conditions you describe are not found in the people who
>
> do
>
>>>>>>>this,
>>>>>>>and if it were present would still have zero bearing on the cause of
>>>>>
>>>>>these
>>>>>
>>>>>
>>>>>
>>>>>>>lunatic suicides. Fractional existence and/or slavery may be found
>
> all
>
>>>>>>>over
>>>>>>>the globe and was rarely ever a cause of such insanity. Only the
>>>>>>>influence
>>>>>>>of Islam allows such departure from humanity and any hope of a better
>>>>>
>>>>>life
>>>>>
>>>>>
>>>>>
>>>>>>>here on earth. Islam executes this insane belief not only on others,
>>>
>>>but
>>>
>>>
>>>>>>>on
>>>>>>>themselves. A combination of education and eradication (genocide) may
>>>

>>>be
>>>
>>>
>>>>>>>applied as needed to calm this insanity. Londoners have their own
>
> form
>
>>>>>of
>>>>>
>>>>>
>>>>>
>>>>>>>insanity, that of banning guns from law abiding citizens whilst
>>>>>>>encouraging
>>>>>>>Muslim Mosques to add to the near 40% Muslim population who preach
>
> for
>
>>>>>the
>>>>>
>>>>>
>>>>>
>>>>>>>destruction of the West from inside the London city gates.
>>>>>>>
>>>>>>>Regards,
>>>>>>>
>>>>>>>Jack Painter
>>>>>>>Virginia Beach, Virginia
>>>>>>>
>>>>
>>>>Islam can be a beautiful, satisfying religion, or it can not. Like
>>>>some of the gutter Christian sects infesting America there are people
>>>>who profess a belief in God who would use that belief as an excuse
>>>>for killing innocent people. People who preach genocide are low,
>>>>anti-social, dangerous, and a danger to society and should be locked
>>>>up to keep them from doing harm.
>>>>
>>>>Tom Donaly, KA6RUH
>>>
>>>
>>> then Tom added:
>>>
>>>
>>>>Religious fanatics of every stripe are dangerous, whether they be
>>>
>>>Christian, Hindu, Moslem or anything else. So, too, are political
>>>fanatics. The West has plenty of both.
>>>
>>>Tom Donaly, KA6RUH
>>>
>>>Well Tom, fortunately for you, there are rough men ready to fight in the

>>>middle of the night on the other side of the world, in order that you
>
> can
>
>>>sleep in your bed free from fear. As to your thinking that I should be
>>>locked up, I nonetheless defend your right to be a useless twit, unable
>
> to
>
>>>stand for anything, and able to make dribble about righteousness without
>
> a
>
>>>defining origin of those thoughts. Everything is o.k. with you, except
>>>things that suck. Someone should take care of that stuff for you, so you
>>>don't have to worry too much about it. Gotcha. Oh and Tom, we'll be
>
> watching
>
>>>for those zealous Christian sects infesting America, watching for the
>
> first
>
>>>sign of their *suicide bombings*. In the meantime, maybe you can point
>
> to
>
>>>some evidence of Christians doing that anywhere in the world, ever.
>>>
>>>Jack
>>>
>>>
>>
>>Many atrocities have been committed over the years in the name of
>>Christ. That doesn't meant that Christianity is bad, but that there
>>have been people willing to use it as an excuse for slaughter, as
>>you do. Face it, Painter, when you advocate genocide, you're no better
>>than the Islamic fanatics in Saudi Arabia calling for the annihilation
>>of the infidels, or the racialist bigots of Nazi Germany screaming for
>>the elimination of the Jews. Moreover, you should get something
>>through your thick, Southern skull before you and people like you
>>do something stupid: there are Islamic countries that possess nuclear
>>capabilities. You're not going to be able to murder the people of
>>those countries without getting something back in return. You need
>>to calm down and quit watching those hick preachers on T.V. on Sunday.
>>Maybe you should get out of your easy chair and go to a real Christian
>>church and learn some real Christianity before you shoot off your
>>mouth on this newsgroup and make a fool of yourself like Reg.
>>
>>Tom Donaly, KA6RUH

>
>
>
> I never made the argument that Christians should rise up against Islam, you
> did. You're as fond of attacking Christians as anything else you don't
> understand, but we could leave that out of the discussion easily, as it just
> gets you more confused and doesn't answer the problem that I stated, which
> was:
>
>
>>>>>We have not declared war on the nation of islam, but we should, because
>
> they
>
>>>>>have long ago declared war on the west and all of our tenets of free
>>>>>religion, free economies and forms of self-government.
>
>
> Read that to yourself a few times, Tom.
>
> I may have a big mouth, but I will not apologize for the beliefs and
> fundamentals that made western life the best the world has ever known. It is
> also the only system of beliefs that sacrifices our sons and daughters to
> free others from tyranny, and to educate and promote free trade that allows
> employment of all in an honest living. That saps like you will argue
> everything Americans say or do is more evidence that we are truly a divided
> country. But what divides us in not what the muslims want to kill us for,
> and you are too much of an ass to see that you will be as dead a sap-sucker
> as I will be a patriot, unless we agree on the definition of islam as evil.
> That has nothing whatsoever to do with christianity or any other religion.
> It is reality.
>
> Other places your stereotype darts landed were also wrong; I grew up in the
> north-east, have a bachelor of science from a northern school (minor in
> poli-sci), and was also educated in West Germany where I was an exchange
> student for a year. I traveled all over europe then and many times later,
> not counting my service as a launch operations supervisor aboard a ballistic
> missile sub, forward deployed in scotland. I'm well aware of the atrocities
> of nazi germany, and its another mark of your ignorance that you could
> assume you know what my education and experience was there. Want to teach me
> some more about who has nuclear weapons next? My "thick southern skull" is
> so ripe for your vast knowledge of tripe, tom.
>
> Islam and its muslim cronies that have been the cause of crusades in the
> past and are causing history to repeat itself now. I never heard any tv
> preacher say that, it's as obvious as the day is light. Maybe you folks in
> california just don't appreciate what it felt like to have one plane load of
> muslim suicide-bombers fly over you and then crash in your state, and have
> another one headed for the same place, fall a little short. Or hear about
> how two of the same bombers were in your city for two weeks scoping out weak

> points in your seaport and military installations. But virginians do
> remember that it was the city council of berkley california that made
> several demands to the u.s. government to stop bombing japan even as we were
> losing thousands of young marines and sailors every week to push the japanee
> out of the occupied territories of the pacific. Good thing I don't believe
> in stereotypes like you do, or else you and most of your state would be
> given one-way tickets out.
>
> Jack
>
>

Islam is no more evil than any other ancient religion, and even if
it were, you couldn't stop it by aping it. As for this wonderful
country, it wasn't built on the principals of ethnic hatred and
genocide (if you leave out what happened to the Native Americans).
You may be from the North East, but your intellect is straight out of
the middle ages, just like that of the people you profess to hate.
It's a good thing most people don't share your views. The U.S. would
quickly deteriorate into a second-rate country of religious fanatics,
ethnic bigots and tribalists making us ripe for exploitation by any
people who were willing to exploit our backwardness.

Tom Donaly, KA6RUH

2675. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 17:23:18 UTC
From: richardharrison@webtv.net
Message-ID: <12466-42177606-37@storefull-3256.bay.webtv.net>
Source record: 81813

Caveat Lector wrote:
"A WWII B-24 bomber (Lady Be Good) ran out of fuel because they were not sure of the DF readings."

Too bad they ran out of gas and drash landed in the Libyan desert. The B-24 must have been covered with sand for most of the time because there was still most of it intact to be found.

On April 4, 1943, the Lady Be Good radioed for a directional reading from the high frequency direction finding station at Bernina as the earth was covered with clouds and there were strong winds causing navigational errors. They needed a position fix.

I had breakfast this morning with a WW-2 B-24 pilot who flew in the same area. He said that requests for position fixes were often answered by Germans pretending to be the direction finding facility, and they would intentionally lead the questioners astray.

Best regards, Richard Harrison, KB5WZI

2676. Re: Magnetic Loops and RF Exposure

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 17:24:02 UTC
From: wizard12342002@yahoo.com
Message-ID: <1108833842.614027.276010@o13g2000cwo.googlegroups.com>
Source record: 81816

Allodoxaphobia wrote:

> Are you *transmitting* with this loop???

.....

The intent would be to transmit.

-JJ

2677. Re: Several questions about mobile HF antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 17:40:54 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <GSKRd.1673$DW.33@newssvr17.news.prodigy.com>
Source record: 81812

Joe,
A word about the whip thingy. The ATAS-120 comes with a
whip which is adequate for it's stated band coverages. A
longer whip can allow it to cover lower frequencies. Just
how 'long' the whip gets depends on how much you are willing
to modify your driving habits - lol, as in forget the drive-
through windows, low trees, etc. (more or less typical for the
average 80 meter mobile'er). In general, the bigger, uglier,
and more inconvenient the HF mobile antenna, the 'better' it
works...
'Doc

2678. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 18:02:13 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <GaLRd.52132$EG1.18625@lakeread04>
Source record: 81817

"Cecil Moore" <w5dxp@hotmail.com> wrote

> Jack Painter wrote:
> > "Cecil Moore" <w5dxp@hotmail.com> wrote in message
> >>How do you feel about the sacking of Constantinople?
> >
> > "the sacking"? 1204 or 1453?
> >
> The 1204 sacking of the Christian city by Christian
> Crusaders during the Fourth Crusade.
>
> "Eventually, the crusaders were victorious, and the citizens of the
> city, strangely, at least to western eyes, welcomed them into the city
> as usurpers, not as conquerors. The crusaders did not see it this way,
> and they inflicted a horrible and savage sacking on Constantinople for
> three days, during which many ancient works of art were stolen or
> destroyed."
>
> How does one defend those Christian acts?
> --
> 73, Cecil http://www.qsl.net/w5dxp

Sympathizers of islam? (greek v latin *). Selected dates:

626: Siege of Constantinople by Persians and Avars
674-78: Siege of Constantinople by Arabs
717-18: Second siege of Constantinople by Arabs
1054: Schism between Eastern (Greek) and Western (Latin) Churches *
1097: First crusade
1147: Second Crusade. Normans capture Corfu, Corinth and Thebes
1182: Massacre of Latins in Constantinople *
1204: Capture of Constantinople by Fourth Crusade and establishment of Latin Empire *
1261: Recapture of Constantinople by Nicaean force and end of Latin Empire
1397-1402: Siege of Constantinople by Sultan Bajezid
1422: Murad besieges Constantinople
1453: Turks take Constantinople on May 29.

How do the battles to contain muslims then differ from now?

Islam and the Theology of Power
A Muslim scholar looks at Islamism
http://www.islamfortoday.com/elfadl01.htm

El Fadl says that Islamism is at its core a,
... supremacist puritanism that compensates for feelings of defeat,

disempowerment and alienation with a distinct sense of self-righteous arrogance vis-&#65533;-vis the nondescript "other" -- whether the other is the West, non-believers in general or even Muslims of a different sect and Muslim women. In this sense, it is accurate to describe this widespread modern trend as supremacist, for it sees the world from the perspective of stations of merit and extreme polarization.

Read the whole thing. It's eye opening.

73,
Jack Painter
Virginia Beach, Virginia

2679. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 18:12:13 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <7oLRd.32264$xt.13645@fed1read07>
Source record: 81818

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:12466-42177606-37@storefull-3256.bay.webtv.net...
> Caveat Lector wrote:
> "A WWII B-24 bomber (Lady Be Good) ran out of fuel because they were not
> sure of the DF readings."
>
> Too bad they ran out of gas and drash landed in the Libyan desert. The
> B-24 must have been covered with sand for most of the time because there
> was still most of it intact to be found.
>
> On April 4, 1943, the Lady Be Good radioed for a directional reading
> from the high frequency direction finding station at Bernina as the
> earth was covered with clouds and there were strong winds causing
> navigational errors. They needed a position fix.
>
> I had breakfast this morning with a WW-2 B-24 pilot who flew in the same
> area. He said that requests for position fixes were often answered by
> Germans pretending to be the direction finding facility, and they would
> intentionally lead the questioners astray.
>
> Best regards, Richard Harrison, KB5WZI

Interesting -- code operators could tell one operator from another just by
their style or fist.
Wonder if CW was used for the request and reply ???

--
Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?
>

2680. Re: Ladder Line and wind

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 19:08:18 UTC
From: Dan Roth <dpvjroth@locl.net>
Message-ID: <4217c5a9@news.greennet.net>
Source record: 81744

Use heavy duty fishing line threaded through the feedline windows.

--
Dan Roth, N9NO

"Jim Miller" <jim@removethisjtmiller.com> wrote in message
news:T7adnfKO6L8uvIvfRVn-pA@comcast.com...
> I'm putting up a doublet centerfed by 450 ohm ladderline. It will be about
> 50ft away from the house to the feedpoint of the antenna. We live on top
> of
> a hill and winds here are often gusting to 60mph. The typical direction of
> the wind is perpendicular to the ladderline and I'm concerned about it
> whipping itself to death.
>
> The ladder grabber at center of the doublet will be supported by a line
> running from the house to a tree so I'm considering attaching the
> ladderline
> to the support line leading to the house to minimize the whipping. The
> ladderline has to come this way anyway. This support line will be
> perpendicular to the axis of the antenna.
>
> I briefly thought about threading the house line through the ladder
> windows
> but that seemed likely to spoil the impedence especially if wet.
>
> Any concerns or recommendations?
>
> tnx
> jtm
>
>

2681. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 19:08:49 UTC
From: richardharrison@webtv.net
Message-ID: <24492-42178EC1-45@storefull-3253.bay.webtv.net>
Source record: 81819

Tom Donaly wrote:
A long, long message. Never saw so many "whereases". Thought we would never get to a "therefore".

Best regards, Richard Harrison, KB5WZI

2682. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 19:18:09 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421791b4$1_2@127.0.0.1>
Source record: 81820

Jack Painter wrote:
> Read the whole thing. It's eye opening.

Read the whole Bible. It's eye opening. Particularly
the part advocating stoning to death all adulterers.
Thou shalt not kill (except adulterers).

Islam, Christianity, and Judaism all have the identical
God-head and share many books of the Bible. Allah,
Jehovah, and Yahweh are all the same divine entity,
a member of the Elohim (plural gods) clan. When Jesus
prayed in Aramaic, he prayed to Allah. Under Islam,
Jesus is considered to have been a great prophet.
Jesus' image hangs in many Islamic mosques.

Stirring up hatred for Islam is just as evil as stirring
up hatred for Christianity, Judaism, or any other religion.
It is definitely NOT what Jesus taught so you are not
following your religious teachings any better than
the Islamic terrorists are following their religious
teachings. Shame on you.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

2683. Re: Doublet Length: More is better?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 19:24:32 UTC
From: Dan <starkenburg.remove@this.sio.midco.net>
Message-ID: <Rb-dnT9umNHtD4rfRVn-2Q@midco.net>
Source record: 81821

More is not always better. As far as performance goes, some have suggested that your antenna pattern can have more lobes (a bad thing) if you went with the 100' of wire vs. the 88'. Having a very lobey pattern makes it hard to determine where your signal is actually going, whereas having less lobes usually means your signal will radiate at 90 degree angles to the doublet antenna.

See an article describing this at:
http://www.cebik.com/aledz.html

In the article, the author thinks 44' is the optimal length for a 40-10M antenna and 88' is the optimal length for an 80-20M antenna, assuming you want to maintain an accurate radiation pattern.

73,
Dan

"Jim Miller" <jim@removethisjtmiller.com> wrote in message
news:fIudncDIN58cv4vfRVn-hQ@comcast.com...
> I'm putting up a centerfed doublet fed by ladderline and an antenna tuner
in
> the backyard and have two trees to support it which are about 112ft apart.
>
> I could put up an 88 foot doublet between them easily. However would it be
> better to put up a full 100 footer (allowing for endline support) since I
> have to tune it anyway or is 88 foot a better choice?
>
> It will be used for hambands as well as swl.
>
> tnx
> jtm
>
>

2684. Re: Installed M2 Horizontal Loop today - PHOTOS

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 19:50:05 UTC
From: Dan <starkenburg.remove@this.sio.midco.net>
Message-ID: <7JqdnWgM0erwBYrfRVn-ug@midco.net>
Source record: 81722
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

I installed a Cushcraft ARX2B Ringo Ranger II yesterday. It's on a 10' mast on a rooftop tripod. The measurements given in the manual for assembling the antenna for a specific frequency were right on the mark. I used the dimensions for 147MHz and my MFJ-259B showed the "sweet spot" to be 146.88MHz. SWR bandwidth is a bit narrower than I'd prefer, but it is a very usable antenna for the 2M FM application.

As far as performance.... I cannot complain at this point. I am able to bring up a repeater 80 miles away half scale. My wife and I tried out simplex today and it performed well. Previously I've owned the Diamond X50A and CP22E antennas, as well as a slew of groundplane and J-Pole antennas. Based on the performance I've experienced so far, it appears the ARX2B is better than most, as it should be because it's a 5/8 wave x 3 (vs. a 1/4 wave x 3 for the X50A and a 5/8 wave x 2 for the CP22E).

I'd suggest you have the guys in your area double check their assembly as I'd tend to think they did something wrong if they're comparing the performance to a dummy load. The antenna has something like 40 pieces out of the box.... plus a few different adjustment points (middle and bottom coils, plus the length of the antenna between coils).... so there is a lot that could be done wrong with the antenna. Also, I'd tend to think the "weak point" of the antenna would be the run of coax that connects the radials to the bottom coil, so that would also be a good place to look.

73,
Dan

"David 01" <ifiwantspam@illask.org> wrote in message
news:1115p7dheu0ai31@corp.supernews.com...
> No offense, but where I live live the guys joke that they use the ringo
> ranger II as a fishing pole or dummy load. We haven't experienced a good
one
> here. Anything else is far better in our experience and I know of no one
> actually using one now, but they say there's a stack of them avsailable
for
> free behind a certain store.
>
> "Charlie" <charlie@earthlink.com> wrote in message
> news:1108njbbertjqcc@news.supernews.com...
> > 1. http://www.ad5th.com/VHF.html
> >
> > Also shown my Ringo Ranger II - ARX-2B. Links to technical data for each
> > antenna also.
> >

> > --
> >
> > Charlie
> > Ham Radio - AD5TH
> > www.ad5th.com
> > Live Blues Music
> > www.492acousticblues.com
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2685. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 20:19:20 UTC
From: "M. J. Powell" <mike@DeLeTe.pickmere.demon.co.uk>
Message-ID: <psvRCwhl95FCFws6@pickmere.demon.co.uk>
Source record: 81725

In message <111erj4iclk0e7b@corp.supernews.com>, David G. Nagel
<nagel@core.com> writes
>M. J. Powell wrote:
>> In message <111dfm2e96sekda@corp.supernews.com>, David G. Nagel
>><nagel@core.com> writes
>>
>>> And your problem is?
>>> Being of German descent with relatives in Germany, I feel that the
>>>German people got what they deserved. Actions by the Luftwaffe were
>>>just as horrific in London, Warsaw, Stalingrad and Antwerp to name a few.
>>> The Luftwafe had similar devices to locate their targets in England
>>>with the same results when their systems were captured by British
>>>Military Intelligence (what an oxymoron).
>> Do you consider Prof. R.V. Jones to be an oxymoron? Or any other
>>kind of moron?
>> Mike
>
>Individuals are always the exception...

He had plenty of good companions. Blumlein for one. Who paid the price.

Mike

2686. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 20:20:54 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <GcNRd.1591$DC6.882@newssvr14.news.prodigy.com>
Source record: 81723

Richard Harrison wrote:
> Tom Donaly wrote:
> A long, long message. Never saw so many "whereases". Thought we would
> never get to a "therefore".
>
> Best regards, Richard Harrison, KB5WZI
>

Hi Richard,
if you don't like the message, don't read it.
Are you an advocate of religious intolerance, too?
73,
Tom Donaly, KA6RUH

2687. *post 100* >> GOOD NEWS! - Over 2000 years ago Jesus Christ suffered and died on a cross and rose from the dead so that we can be forgiven of our sins(misdeeds) and have a home in Heaven when this life has ended. Most people just don't know how to ask Jesus Christ into their hearts. Heres how...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 20:27:57 UTC
From: RL_Grossi_2005@sbcglobal.net
Message-ID: <1108844877.514609.110300@z14g2000cwz.googlegroups.com>
Source record: 81724

Good News!

Do you know how simple it is to go to Heaven after this life has ended?

The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel supernaturally to a virgin Jewish woman named Mary. He lived a sinless life for thirty-three years and then sacrificed His sinless blood and died on a cross to pay the death penalty for our sins.

After Jesus died He rose from the dead three days later as He said He would. The Holy Bible also tells us that Jesus Christ ascended into Heaven and that all who accept Him as their Lord and Saviour will live forever with Him in Heaven where there is no more death, sorrow, sickness and pain.

The Holy Bible very clearly explains how simple it is to be saved and on your way to Heaven, "For if you confess with your mouth, "Jesus is Lord," and believe in your heart that God raised him from the dead, you WILL BE SAVED." (Romans 10:9)

You can be saved right now and on your way to Heaven if you will open your heart to Jesus and pray the following prayer:

Dear Jesus Christ, I want to be saved so that I can have a home in Heaven when I die. I agree with You that I am a sinner. I believe You love me and want to save me. I believe that You bled and died on the cross to pay the penalty for my sins. I believe that You rose from the dead. Please forgive my sins and come into my heart and be my Lord and Saviour. Thank You Lord Jesus Christ for forgiving me and saving me through Your merciful grace. Amen.

You are now a Christian if you said the prayer and allowed God to save you. Welcome to the family of God.

If you decide to wait till later you may die before you get another chance to be saved because none of us knows exactly when we will die.

This means that if we die without trusting in Jesus Christ as our Lord and Saviour we will be forever separated from the love of God in a place called Hell. This place called Hell is a place of eternal torment, suffering, pain and agony for all those who reject Jesus Christ.

Choose Jesus Christ today and you will have peace in your life now and forever.

Have a great day!
Internet Evangelist R.L. Grossi

Free Online Bible
http://www.biblegateway.com

Free Online Movies
http://www.tbn.org/index.php/8/1.html

Animation
http://www.gieson.com/Library/projects/animations/walk/index.html

The Passion Of The Christ
http://www.ThePassionOfTheChrist.ch.tt

Beware Of Cults
http://www.carm.org/cults/cultlist.htm

About Hell
http://www.equip.org/free/DH198.htm

Is Jesus God?
http://www.powertochange.com/questions/qna2.html

2688. Re: Installed M2 Horizontal Loop today - PHOTOS

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 20:43:12 UTC
From: David 01 <ifiwantspam@illask.org>
Message-ID: <111f972e81s9ke9@corp.supernews.com>
Source record: 81726
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

It was a miracle that I even looked at this post given the topic, but I did and found that you were replying to me under a subject to which I didn't post (i.e. you changed it).

It's good that you're satisfied with the Ringo Ranger II and that they have a defender somewhere (you don't own stock in the company, do you?). But I know that my experience was not from a bad install (37 years of communications experience now) and I doubt that so many others all did it wrong. Maybe you messed up with your other antennas and that made the ringo look better.

I stated facts to you and no matter your likes or dislikes what I stated shall remain fact.

73

David

"Dan" <starkenburg.remove@this.sio.midco.net> wrote in message news:7JqdnWgM0erwBYrfRVn-ug@midco.net...
> I installed a Cushcraft ARX2B Ringo Ranger II yesterday. It's on a 10' mast
> on a rooftop tripod. The measurements given in the manual for assembling
> the antenna for a specific frequency were right on the mark. I used the
> dimensions for 147MHz and my MFJ-259B showed the "sweet spot" to be
> 146.88MHz. SWR bandwidth is a bit narrower than I'd prefer, but it is a
> very usable antenna for the 2M FM application.
>
> As far as performance.... I cannot complain at this point. I am able to
> bring up a repeater 80 miles away half scale. My wife and I tried out
> simplex today and it performed well. Previously I've owned the Diamond X50A
> and CP22E antennas, as well as a slew of groundplane and J-Pole antennas.
> Based on the performance I've experienced so far, it appears the ARX2B is
> better than most, as it should be because it's a 5/8 wave x 3 (vs. a 1/4
> wave x 3 for the X50A and a 5/8 wave x 2 for the CP22E).
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> I'd suggest you have the guys in your area double check their assembly as
> I'd tend to think they did something wrong if they're comparing the
> performance to a dummy load. The antenna has something like 40 pieces out
> of the box.... plus a few different adjustment points (middle and bottom
> coils, plus the length of the antenna between coils).... so there is a lot
> that could be done wrong with the antenna. Also, I'd tend to think the
> "weak point" of the antenna would be the run of coax that connects the
> radials to the bottom coil, so that would also be a good place to look.

>
> 73,
> Dan
>
>
>
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>
> "David 01" <ifiwantspam@illask.org> wrote in message
> news:1115p7dheu0ai31@corp.supernews.com...
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> > ranger II as a fishing pole or dummy load. We haven't experienced a good
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> > here. Anything else is far better in our experience and I know of no one
> > actually using one now, but they say there's a stack of them avsailable
> for
> > free behind a certain store.
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> > "Charlie" <charlie@earthlink.com> wrote in message
> > news:1108njbbertjqcc@news.supernews.com...
> > > 1. http://www.ad5th.com/VHF.html
> > >
> > > Also shown my Ringo Ranger II - ARX-2B. Links to technical data for
each
> > > antenna also.
> > >
> > > --
> > >
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2689. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 21:02:17 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <tPNRd.52154$EG1.48963@lakeread04>
Source record: 81727

"Cecil Moore" <w5dxp@hotmail.com> wrote
> Jack Painter wrote:
> > Read the whole thing. It's eye opening.
>
> Read the whole Bible. It's eye opening. Particularly
> the part advocating stoning to death all adulterers.
> Thou shalt not kill (except adulterers).

Allow me to introduce you to the New Testament, which while acknolwedging the history and covenants formed in most of the Old Testament, includes the spoken words of the Lord Jesus Christ, the one and only Savior. Taken as a whole, these testaments together form the basis for Christianity.

>
> Islam, Christianity, and Judaism all have the identical
> God-head and share many books of the Bible. Allah,
> Jehovah, and Yahweh are all the same divine entity,
> a member of the Elohim (plural gods) clan. When Jesus
> prayed in Aramaic, he prayed to Allah. Under Islam,
> Jesus is considered to have been a great prophet.
> Jesus' image hangs in many Islamic mosques.
>
> Stirring up hatred for Islam is just as evil as stirring
> up hatred for Christianity, Judaism, or any other religion.
> It is definitely NOT what Jesus taught so you are not
> following your religious teachings any better than
> the Islamic terrorists are following their religious
> teachings. Shame on you.
> --
> 73, Cecil http://www.qsl.net/w5dxp

I don't need to bring whatever religion (or lack thereof in 90% of liberals and probably 50% of conservatives today) is followed in the United States in order to argue for the destruction of Islam, before it destroys us. And if you do insist on bringing up Christianity and calling me shameful or without belief of the teachings of Christ, then please cite where you think Christ wanted us to succumb to evil or murderous practice, whether on the highway or by foreign invasion. Some duties He said were the job of the state, and that is where our influence comes into play, as we are part of the state in any system of self government. Bringing a highwayman to the magistrate (dead or alive), foreign or domestic terrorists to trial (same condition applies), or defeating a whole army of evil (read MUSLIM, socialist, communist, etc) is the job of the state. I was a volunteer then and now for the "state". And I am still a Christian, though it is no business of yours whether a religion is the background for the #1 law of nature or not: self preservation. As a

people, as a country, and as any of the freely practiced religions (including none at all for atheists) we are at war with Islam, whether you admit this or not. There is enough evidence to convince a misbehaving child of this fact, but you can certainly set a new standard for misbehavior there - as long as you stay out of our way while the rest of us survive.

73, Jack

2690. Re: Installed M2 Horizontal Loop today - PHOTOS

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 21:06:23 UTC
From: David 01 <ifiwantspam@illask.org>
Message-ID: <111faiibk2rg34a@corp.supernews.com>
Source record: 81728
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

I see that the subject was changed before. The first 3 messages I replied to were "The HIGHER the BETTER" then 3 of these that someone changed and I didn't notice, then one more "higher" then back to these. I didn't notice the change because they were in the thread together.

"David 01" <ifiwantspam@illask.org> wrote in message news:111f972e81s9ke9@corp.supernews.com...
> It was a miracle that I even looked at this post given the topic, but I did
> and found that you were replying to me under a subject to which I didn't
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>
> It's good that you're satisfied with the Ringo Ranger II and that they have
> a defender somewhere (you don't own stock in the company, do you?). But I
> know that my experience was not from a bad install (37 years of
> communications experience now) and I doubt that so many others all did it
> wrong. Maybe you messed up with your other antennas and that made the ringo
> look better.
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> I stated facts to you and no matter your likes or dislikes what I stated
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>
> 73
>
> David
>
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> > I installed a Cushcraft ARX2B Ringo Ranger II yesterday. It's on a 10' mast
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> > very usable antenna for the 2M FM application.
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> X50A

> > and CP22E antennas, as well as a slew of groundplane and J-Pole
antennas.
> > Based on the performance I've experienced so far, it appears the ARX2B
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> > better than most, as it should be because it's a 5/8 wave x 3 (vs. a 1/4
> > wave x 3 for the X50A and a 5/8 wave x 2 for the CP22E).
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> > I'd suggest you have the guys in your area double check their assembly
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> > "weak point" of the antenna would be the run of coax that connects the
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> > 73,
> > Dan
> >
> >
> >
> >
> >
> > "David 01" <ifiwantspam@illask.org> wrote in message
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> > > No offense, but where I live live the guys joke that they use the
ringo
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> > > > 1. http://www.ad5th.com/VHF.html
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> > > > Also shown my Ringo Ranger II - ARX-2B. Links to technical data for
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> > > >

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2691. vert antenna construction

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 21:14:55 UTC
From: Angela & Gary <gmbelcas@charter.net>
Message-ID: <gmbelcas-D686BD.13145519022005@comcast.dca.giganews.com>
Source record: 81729

I am looking to use a piece of PVC as the center insulator of a vertical dipole I'm planning to put up. Anyone know the insulating characteristics of this stuff? It's not going to conduct significantly @ hf when wet?? Thanks for the help.

gary

2692. Re: vert antenna construction

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 21:32:28 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <deORd.14450$RI5.1036@bignews4.bellsouth.net>
Source record: 81730

"Angela & Gary" <gmbelcas@charter.net> wrote in message
news:gmbelcas-D686BD.13145519022005@comcast.dca.giganews.com...
> I am looking to use a piece of PVC as the center insulator of a vertical
> dipole I'm planning to put up. Anyone know the insulating
> characteristics of this stuff? It's not going to conduct significantly
> @ hf when wet?? Thanks for the help.
>
> gary

It works fine.
I used a short piece of pvc to connect 2 pieces of aluminum conduit.
I fed the coax thru one end of the alum conduit to have a vertical dipole
fed from inside where the 3 pieces come together

2693. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 21:35:37 UTC
From: Jim Kelley <jwkelley@nospam.edu>
Message-ID: <cv8doa$bp9$1@news.service.uci.edu>
Source record: 81731

Cecil Moore wrote:
> Jack Painter wrote:
>
>> In the meantime, maybe you can point to
>> some evidence of Christians doing that anywhere in the world, ever.
>
>
> How do you feel about the sacking of Constanople?

Most cultures have advanced in the last 800 years.

ac6xg

2694. Re: Installed M2 Horizontal Loop today - PHOTOS

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 23:09:14 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <111fhq64qj60ibb@news.supernews.com>
Source record: 81732
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Who cares anymore what you think...

You are either an imbecile or a troll or have some chip on your shoulder.
Seek professional help.

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"David 01" <ifiwantspam@illask.org> wrote in message
news:111faiibk2rg34a@corp.supernews.com...
>I see that the subject was changed before. The first 3 messages I replied
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>> look better.
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>> I stated facts to you and no matter your likes or dislikes what I stated
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>> David
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>> > "weak point" of the antenna would be the run of coax that connects the
>> > radials to the bottom coil, so that would also be a good place to look.
>> >
>> > 73,
>> > Dan
>> >
>> >
>> >
>> >
>> >
>> > "David 01" <ifiwantspam@illask.org> wrote in message
>> > news:1115p7dheu0ai31@corp.supernews.com...
>> > > No offense, but where I live live the guys joke that they use the
> ringo

>> > > ranger II as a fishing pole or dummy load. We haven't experienced a
> good
>> > one
>> > > here. Anything else is far better in our experience and I know of no
> one
>> > > actually using one now, but they say there's a stack of them
> avsailable
>> > for
>> > > free behind a certain store.
>> > >
>> > > "Charlie" <charlie@earthlink.com> wrote in message
>> > > news:1108njbbertjqcc@news.supernews.com...
>> > > > 1. http://www.ad5th.com/VHF.html
>> > > >
>> > > > Also shown my Ringo Ranger II - ARX-2B. Links to technical data for
>> each
>> > > > antenna also.
>> > > >
>> > > > --
>> > > >
>> > > > Charlie
>> > > > Ham Radio - AD5TH
>> > > > www.ad5th.com
>> > > > Live Blues Music
>> > > > www.492acousticblues.com
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2695. Re: Installed M2 Horizontal Loop today - PHOTOS

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 23:33:44 UTC
From: David 01 <ifiwantspam@illask.org>
Message-ID: <111fj7865ikhn72@corp.supernews.com>
Source record: 81733
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

A message like that reveals a lot about the writer.

God Bless You

"Charlie" <charlie@earthlink.com> wrote in message
news:111fhq64qj60ibb@news.supernews.com...
> Who cares anymore what you think...
>
> You are either an imbecile or a troll or have some chip on your shoulder.
> Seek professional help.
>
> --
>
> Charlie
> Ham Radio - AD5TH
> www.ad5th.com
> Live Blues Music
> www.492acousticblues.com
>
>
>
>
> "David 01" <ifiwantspam@illask.org> wrote in message
> news:111faiibk2rg34a@corp.supernews.com...
> >I see that the subject was changed before. The first 3 messages I replied
> >to
> > were "The HIGHER the BETTER" then 3 of these that someone changed and I
> > didn't notice, then one more "higher" then back to these. I didn't
notice
> > the change because they were in the thread together.
> >
> > "David 01" <ifiwantspam@illask.org> wrote in message
> > news:111f972e81s9ke9@corp.supernews.com...
> >> It was a miracle that I even looked at this post given the topic, but I
> > did
> >> and found that you were replying to me under a subject to which I
didn't
> >> post (i.e. you changed it).
> >>
> >> It's good that you're satisfied with the Ringo Ranger II and that they
> > have
> >> a defender somewhere (you don't own stock in the company, do you?). But
I
> >> know that my experience was not from a bad install (37 years of

> >> communications experience now) and I doubt that so many others all did
it
> >> wrong. Maybe you messed up with your other antennas and that made the
> > ringo
> >> look better.
> >>
> >> I stated facts to you and no matter your likes or dislikes what I
stated
> >> shall remain fact.
> >>
> >> 73
> >>
> >> David
> >>
> >> "Dan" <starkenburg.remove@this.sio.midco.net> wrote in message
> >> news:7JqdnWgM0erwBYrfRVn-ug@midco.net...
> >> > I installed a Cushcraft ARX2B Ringo Ranger II yesterday. It's on a
10'
> >> mast
> >> > on a rooftop tripod. The measurements given in the manual for
> > assembling
> >> > the antenna for a specific frequency were right on the mark. I used
> >> > the
> >> > dimensions for 147MHz and my MFJ-259B showed the "sweet spot" to be
> >> > 146.88MHz. SWR bandwidth is a bit narrower than I'd prefer, but it
is
> >> > a
> >> > very usable antenna for the 2M FM application.
> >> >
> >> > As far as performance.... I cannot complain at this point. I am able
> >> > to
> >> > bring up a repeater 80 miles away half scale. My wife and I tried
out
> >> > simplex today and it performed well. Previously I've owned the
Diamond
> >> X50A
> >> > and CP22E antennas, as well as a slew of groundplane and J-Pole
> > antennas.
> >> > Based on the performance I've experienced so far, it appears the
ARX2B
> > is
> >> > better than most, as it should be because it's a 5/8 wave x 3 (vs. a
> >> > 1/4
> >> > wave x 3 for the X50A and a 5/8 wave x 2 for the CP22E).
> >> >
> >> > I'd suggest you have the guys in your area double check their
assembly
> > as
> >> > I'd tend to think they did something wrong if they're comparing the
> >> > performance to a dummy load. The antenna has something like 40

pieces
> > out
> >> > of the box.... plus a few different adjustment points (middle and
> >> > bottom
> >> > coils, plus the length of the antenna between coils).... so there is
a
> > lot
> >> > that could be done wrong with the antenna. Also, I'd tend to think
the
> >> > "weak point" of the antenna would be the run of coax that connects
the
> >> > radials to the bottom coil, so that would also be a good place to
look.
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> >> > Dan
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> >> >
> >> > "David 01" <ifiwantspam@illask.org> wrote in message
> >> > news:1115p7dheu0ai31@corp.supernews.com...
> >> > > No offense, but where I live live the guys joke that they use the
> > ringo
> >> > > ranger II as a fishing pole or dummy load. We haven't experienced a
> > good
> >> > one
> >> > > here. Anything else is far better in our experience and I know of
no
> > one
> >> > > actually using one now, but they say there's a stack of them
> > avsailable
> >> > for
> >> > > free behind a certain store.
> >> > >
> >> > > "Charlie" <charlie@earthlink.com> wrote in message
> >> > > news:1108njbbertjqcc@news.supernews.com...
> >> > > > 1. http://www.ad5th.com/VHF.html
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> >> > > > Also shown my Ringo Ranger II - ARX-2B. Links to technical data
for
> >> each
> >> > > > antenna also.
> >> > > >
> >> > > > --
> >> > > >
> >> > > > Charlie
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> >> > > > Live Blues Music
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2696. *post 101* >> GOOD NEWS! - Over 2000 years ago Jesus Christ suffered and died on a cross and rose from the dead so that we can be forgiven of our sins(misdeeds) and have a home in Heaven when this life has ended. Most people just don't know how to ask Jesus Christ into their hearts. Heres how...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 23:38:55 UTC
From: RL_Grossi_2005@sbcglobal.net
Message-ID: <1108856335.788096.249180@g14g2000cwa.googlegroups.com>
Source record: 81734

Good News!

Do you know how simple it is to go to Heaven after this life has ended?

The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel supernaturally to a virgin Jewish woman named Mary. He lived a sinless life for thirty-three years and then sacrificed His sinless blood and died on a cross to pay the death penalty for our sins.

After Jesus died He rose from the dead three days later as He said He would. The Holy Bible also tells us that Jesus Christ ascended into Heaven and that all who accept Him as their Lord and Saviour will live forever with Him in Heaven where there is no more death, sorrow, sickness and pain.

The Holy Bible very clearly explains how simple it is to be saved and on your way to Heaven, "For if you confess with your mouth, "Jesus is Lord," and believe in your heart that God raised him from the dead, you WILL BE SAVED." (Romans 10:9)

You can be saved right now and on your way to Heaven if you will open your heart to Jesus and pray the following prayer:

Dear Jesus Christ, I want to be saved so that I can have a home in Heaven when I die. I agree with You that I am a sinner. I believe You love me and want to save me. I believe that You bled and died on the cross to pay the penalty for my sins. I believe that You rose from the dead. Please forgive my sins and come into my heart and be my Lord and Saviour. Thank You Lord Jesus Christ for forgiving me and saving me through Your merciful grace. Amen.

You are now a Christian if you said the prayer and allowed God to save you. Welcome to the family of God.

If you decide to wait till later you may die before you get another chance to be saved because none of us knows exactly when we will die.

This means that if we die without trusting in Jesus Christ as our Lord and Saviour we will be forever separated from the love of God in a place called Hell. This place called Hell is a place of eternal torment, suffering, pain and agony for all those who reject Jesus Christ.

Choose Jesus Christ today and you will have peace in your life now and forever.

Have a great day!
Internet Evangelist R.L. Grossi

Free Online Bible
http://www.biblegateway.com

Free Online Movies
http://www.tbn.org/index.php/8/1.html

Animation
http://www.gieson.com/Library/projects/animations/walk/index.html

The Passion Of The Christ
http://www.ThePassionOfTheChrist.ch.tt

Beware Of Cults
http://www.carm.org/cults/cultlist.htm

About Hell
http://www.equip.org/free/DH198.htm

Is Jesus God?
http://www.powertochange.com/questions/qna2.html

2697. Re: Installed M2 Horizontal Loop today - PHOTOS

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-19 23:59:23 UTC
From: David 01 <ifiwantspam@illask.org>
Message-ID: <111fkn0c86dkid5@corp.supernews.com>
Source record: 81735
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Hey Charles!

I looked you up and a lot is explained. I thought you had died or something.
I hadn't seen you trolling on the firewall newsgroups like you used to and
your AB7SL web site was gone.

It's been a long time.

Believe it or not, I'm glad to see that you are alive and kicking and not as
caustic as you used to be.

I really do mean it.

God Bless You!

"David 01" <ifiwantspam@illask.org> wrote in message
news:111fj7865ikhn72@corp.supernews.com...
> A message like that reveals a lot about the writer.
>
> God Bless You
>
> "Charlie" <charlie@earthlink.com> wrote in message
> news:111fhq64qj60ibb@news.supernews.com...
> > Who cares anymore what you think...
> >
> > You are either an imbecile or a troll or have some chip on your
shoulder.
> > Seek professional help.
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> >
> > Charlie
> > Ham Radio - AD5TH
> > www.ad5th.com
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> > www.492acousticblues.com
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> > "David 01" <ifiwantspam@illask.org> wrote in message
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> > >I see that the subject was changed before. The first 3 messages I
replied
> > >to

> > > were "The HIGHER the BETTER" then 3 of these that someone changed and
I
> > > didn't notice, then one more "higher" then back to these. I didn't
> notice
> > > the change because they were in the thread together.
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> > > news:111f972e81s9ke9@corp.supernews.com...
> > >> It was a miracle that I even looked at this post given the topic, but
I
> > > did
> > >> and found that you were replying to me under a subject to which I
> didn't
> > >> post (i.e. you changed it).
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> > >> It's good that you're satisfied with the Ringo Ranger II and that
they
> > > have
> > >> a defender somewhere (you don't own stock in the company, do you?).
But
> I
> > >> know that my experience was not from a bad install (37 years of
> > >> communications experience now) and I doubt that so many others all
did
> it
> > >> wrong. Maybe you messed up with your other antennas and that made the
> > > ringo
> > >> look better.
> > >>
> > >> I stated facts to you and no matter your likes or dislikes what I
> stated
> > >> shall remain fact.
> > >>
> > >> 73
> > >>
> > >> David
> > >>
> > >> "Dan" <starkenburg.remove@this.sio.midco.net> wrote in message
> > >> news:7JqdnWgM0erwBYrfRVn-ug@midco.net...
> > >> > I installed a Cushcraft ARX2B Ringo Ranger II yesterday. It's on a
> 10'
> > >> mast
> > >> > on a rooftop tripod. The measurements given in the manual for
> > > assembling
> > >> > the antenna for a specific frequency were right on the mark. I
used
> > >> > the
> > >> > dimensions for 147MHz and my MFJ-259B showed the "sweet spot" to be
> > >> > 146.88MHz. SWR bandwidth is a bit narrower than I'd prefer, but it
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> > >> > a
> > >> > very usable antenna for the 2M FM application.
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> > >> > As far as performance.... I cannot complain at this point. I am
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> > >> > to
> > >> > bring up a repeater 80 miles away half scale. My wife and I tried
> out
> > >> > simplex today and it performed well. Previously I've owned the
> Diamond
> > >> X50A
> > >> > and CP22E antennas, as well as a slew of groundplane and J-Pole
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> > >> > Based on the performance I've experienced so far, it appears the
> ARX2B
> > > is
> > >> > better than most, as it should be because it's a 5/8 wave x 3 (vs.
a
> > >> > 1/4
> > >> > wave x 3 for the X50A and a 5/8 wave x 2 for the CP22E).
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> > >> > I'd suggest you have the guys in your area double check their
> assembly
> > > as
> > >> > I'd tend to think they did something wrong if they're comparing the
> > >> > performance to a dummy load. The antenna has something like 40
> pieces
> > > out
> > >> > of the box.... plus a few different adjustment points (middle and
> > >> > bottom
> > >> > coils, plus the length of the antenna between coils).... so there
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> > > lot
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> > >> > "weak point" of the antenna would be the run of coax that connects
> the
> > >> > radials to the bottom coil, so that would also be a good place to
> look.
> > >> >
> > >> > 73,
> > >> > Dan
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> > >> >
> > >> >
> > >> >
> > >> >
> > >> > "David 01" <ifiwantspam@illask.org> wrote in message
> > >> > news:1115p7dheu0ai31@corp.supernews.com...

> > >> > > No offense, but where I live live the guys joke that they use the
> > > ringo
> > >> > > ranger II as a fishing pole or dummy load. We haven't experienced
a
> > > good
> > >> > one
> > >> > > here. Anything else is far better in our experience and I know of
> no
> > > one
> > >> > > actually using one now, but they say there's a stack of them
> > > avsailable
> > >> > for
> > >> > > free behind a certain store.
> > >> > >
> > >> > > "Charlie" <charlie@earthlink.com> wrote in message
> > >> > > news:1108njbbertjqcc@news.supernews.com...
> > >> > > > 1. http://www.ad5th.com/VHF.html
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> > >> > > > Also shown my Ringo Ranger II - ARX-2B. Links to technical data
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> > >> each
> > >> > > > antenna also.
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2698. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 00:38:39 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <j_QRd.3320$Pz7.416@newssvr13.news.prodigy.com>
Source record: 81746

Jack Painter wrote:
> "Cecil Moore" <w5dxp@hotmail.com> wrote
>
>>Jack Painter wrote:
>>
>>>Read the whole thing. It's eye opening.
>>
>>Read the whole Bible. It's eye opening. Particularly
>>the part advocating stoning to death all adulterers.
>>Thou shalt not kill (except adulterers).
>
>
> Allow me to introduce you to the New Testament, which while acknolwedging
> the history and covenants formed in most of the Old Testament, includes the
> spoken words of the Lord Jesus Christ, the one and only Savior. Taken as a
> whole, these testaments together form the basis for Christianity.
>
>
>>Islam, Christianity, and Judaism all have the identical
>>God-head and share many books of the Bible. Allah,
>>Jehovah, and Yahweh are all the same divine entity,
>>a member of the Elohim (plural gods) clan. When Jesus
>>prayed in Aramaic, he prayed to Allah. Under Islam,
>>Jesus is considered to have been a great prophet.
>>Jesus' image hangs in many Islamic mosques.
>>
>>Stirring up hatred for Islam is just as evil as stirring
>>up hatred for Christianity, Judaism, or any other religion.
>>It is definitely NOT what Jesus taught so you are not
>>following your religious teachings any better than
>>the Islamic terrorists are following their religious
>>teachings. Shame on you.
>>--
>>73, Cecil http://www.qsl.net/w5dxp
>
>
> I don't need to bring whatever religion (or lack thereof in 90% of liberals
> and probably 50% of conservatives today) is followed in the United States in
> order to argue for the destruction of Islam, before it destroys us. And if
> you do insist on bringing up Christianity and calling me shameful or without
> belief of the teachings of Christ, then please cite where you think Christ
> wanted us to succumb to evil or murderous practice, whether on the highway
> or by foreign invasion. Some duties He said were the job of the state, and
> that is where our influence comes into play, as we are part of the state in

> any system of self government. Bringing a highwayman to the magistrate (dead
> or alive), foreign or domestic terrorists to trial (same condition applies),
> or defeating a whole army of evil (read MUSLIM, socialist, communist, etc)
> is the job of the state. I was a volunteer then and now for the "state". And
> I am still a Christian, though it is no business of yours whether a religion
> is the background for the #1 law of nature or not: self preservation. As a
> people, as a country, and as any of the freely practiced religions
> (including none at all for atheists) we are at war with Islam, whether you
> admit this or not. There is enough evidence to convince a misbehaving child
> of this fact, but you can certainly set a new standard for misbehavior
> there - as long as you stay out of our way while the rest of us survive.
>
> 73, Jack
>
>

One of the fastest growing religions in the U.S. today is Islam. Muslims participate in all parts of society, including national defense. Like it or not, Jack, your jihad against Islam is doomed to failure, just as your sick version of Christianity is. The Wahhabists of Saudi Arabia are certainly loathsome people, but you're not doing the world, or yourself, a favor by patterning your behavior after them.

Tom Donaly, KA6RUH

2699. HF Loop Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 00:39:02 UTC
From: jimbo <jimbo62@spamex.com>
Message-ID: <1108859942.236236.126910@l41g2000cwc.googlegroups.com>
Source record: 81736

Is a loop antenna a way to get a "long" antenna in limited space? I am having a hard time finding detailed information on loop antennas. I have seen some references to using a long wire, but making several loops which requires much less space.

And the second question is about feed lines. Could I connect 450 ohm ladder line to the ends of the loop(s) and then run it to a balanced tuner in my shack? Most references I have seen about loop antennas talk about capacitors installed at the loop.

Any insight will be appreciated.

Thanks, jimbo

2700. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 00:42:21 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <N1RRd.3321$Pz7.768@newssvr13.news.prodigy.com>
Source record: 81737

Jim Kelley wrote:

>
>
> Cecil Moore wrote:
>
>> Jack Painter wrote:
>>
>>> In the meantime, maybe you can point to
>>> some evidence of Christians doing that anywhere in the world, ever.
>>
>>
>>
>> How do you feel about the sacking of Constanople?
>
>
> Most cultures have advanced in the last 800 years.
>
> ac6xg
>

Yes, but there are some Christian-Muslim-Hindu-Jewish fanatics
who want to regress to a pre-scientific age because they think
their people were better off back then.
73,
Tom Donaly, KA6RUH

2701. Re: HF Loop Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 00:50:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <97nf11patdjkc17cq5e6knjv008r3g2agm@4ax.com>
Source record: 81738

On 19 Feb 2005 16:39:02 -0800, "jimbo" <jimbo62@spamex.com> wrote:

>Is a loop antenna a way to get a "long" antenna in limited space? I am
>having a hard time finding detailed information on loop antennas. I
>have seen some references to using a long wire, but making several
>loops which requires much less space.

Hi OM,

That is one way, but if you mean making several turns (loops?) the
topic will become muddied by what is meant by "loops."

>And the second question is about feed lines. Could I connect 450 ohm
>ladder line to the ends of the loop(s) and then run it to a balanced
>tuner in my shack?

Sure, no big deal, you run the same assortment of difficulties and
benefits, just at different frequencies.

>Most references I have seen about loop antennas talk
>about capacitors installed at the loop.

Ah! Now we are back in the mud of discussion. Those are SMALL loops.
You know, like 1M across.

So, to avoid further difficulties, just what size of a loop are you
thinking? Loop OR dipole, offering the prospective size makes a
considerable difference to the accuracy of responses.

73's
Richard Clark, KB7QHC

2702. Re: HF Loop Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 01:33:29 UTC
From: jimbo <jimbo62@spamex.com>
Message-ID: <1108863209.322851.197320@o13g2000cwo.googlegroups.com>
Source record: 81739

Thanks for your reply.

Well, for example, if I wanted a chance on 40-160 meters, I would need
a fairly long dipole, maybe 80 feet on each "wing". But maybe a square
"loop" with four turns only 10 feet on a side would also work?

jimbo

Richard Clark wrote:
> On 19 Feb 2005 16:39:02 -0800, "jimbo" <jimbo62@spamex.com> wrote:
>
> >Is a loop antenna a way to get a "long" antenna in limited space? I
am
> >having a hard time finding detailed information on loop antennas. I
> >have seen some references to using a long wire, but making several
> >loops which requires much less space.
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> Hi OM,
>
> That is one way, but if you mean making several turns (loops?) the
> topic will become muddied by what is meant by "loops."
>
> >And the second question is about feed lines. Could I connect 450 ohm
> >ladder line to the ends of the loop(s) and then run it to a balanced
> >tuner in my shack?
>
> Sure, no big deal, you run the same assortment of difficulties and
> benefits, just at different frequencies.
>
> >Most references I have seen about loop antennas talk
> >about capacitors installed at the loop.
>
> Ah! Now we are back in the mud of discussion. Those are SMALL
loops.
> You know, like 1M across.
>
> So, to avoid further difficulties, just what size of a loop are you
> thinking? Loop OR dipole, offering the prospective size makes a
> considerable difference to the accuracy of responses.
>
> 73's
> Richard Clark, KB7QHC

2703. Antenna spacing?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 01:38:29 UTC
From: Harry <hgk@centurytel.net>
Message-ID: <Qr2dnV-sM-iPd4rfRVn-jw@centurytel.net>
Source record: 81740

I have three yagi's that I want to mount on one tower.
1)Hy-Gain TH3-MK3 three element HF tribander
2)Cushcraft 32-19 nineteen element Two meter yagi
3)Cushcraft A50-3S three element six meter beam
I installed a 40' Glen Martin with hazier last fall and I want to place these three antennas on a mast at the top of this tower. My question is, How far above the tower should the first antenna be, is there any particular order to mounting, how far apart should these antennas be from each other? I'm using Kevlar guys, so they shouldn't cause any problems. The tower is grounded at all three legs.
TIA
Harry

2704. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 01:46:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <h4pf11pf8583evup2natg02ev5nqofvk33@4ax.com>
Source record: 81741

On Sun, 20 Feb 2005 00:42:21 GMT, "Tom Donaly"
<dtdonaly@sbcglobal.net> wrote:

>>> How do you feel about the sacking of Constanople?
>> Most cultures have advanced in the last 800 years.
>Yes, but there are some Christian-Muslim-Hindu-Jewish fanatics
>who want to regress to a pre-scientific age because they think
>their people were better off back then.

Hi Tom,

Most of our (make that all) problems do not come from religious
simpletons who have THE answer (usually involving genocide).

No, we have big time problems with administration clowns who want to
poke a stick in their eye, and then spout reams of denial about how
well they are "defending" us from their inflamed passion.

The latest news out of the white house Big Top press briefing room is
the administration's planted "reporter," "Jeff Gannon," who worked for
the fake news organization "Talon News." Hired by the ministry of
information he has the unique qualifications of being a $200-an-hour
gay prostitute.

Should we visit "Family Values" now?

73's
Richard Clark, KB7QHC

2705. Re: HF Loop Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 01:56:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <e2rf111tp05lnm1iv4364cp2on1o9hed9n@4ax.com>
Source record: 81742

On 19 Feb 2005 17:33:29 -0800, "jimbo" <jimbo62@spamex.com> wrote:

>Well, for example, if I wanted a chance on 40-160 meters, I would need
>a fairly long dipole, maybe 80 feet on each "wing". But maybe a square
>"loop" with four turns only 10 feet on a side would also work?

Hi OM,

Anything will work, if only to boil an egg. Your problem with a small loop (and for 160M this so constitutes one) is in the proportion of losses. If you do your absolute best, you may enjoy 20dB down from a full size design. If you do better, the loss may not be that bad. Nearly every successful 160M design that has been crowed about here was a vertical.

Efficiency is correlated to area, not windings. We've had design contests here in attempts to crush as much wire into the smallest footprint to achieve parity with a full size design. As I recall, a half sized antenna was about as good as it got before you went over the cliff of diminishing returns.

73's
Richard Clark, KB7QHC

2706. *post 101* >> GOOD NEWS! - Over 2000 years ago Jesus Christ suffered and died on a cross and rose from the dead so that we can be forgiven of our sins(misdeeds) and have a home in Heaven when this life has ended. Most people just don't know how to ask Jesus Christ into their hearts. Heres how...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 02:28:22 UTC
From: RL_Grossi_2005@sbcglobal.net
Message-ID: <1108866502.955823.94660@z14g2000cwz.googlegroups.com>
Source record: 81743

Good News!

Do you know how simple it is to go to Heaven after this life has ended?

The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel supernaturally to a virgin Jewish woman named Mary. He lived a sinless life for thirty-three years and then sacrificed His sinless blood and died on a cross to pay the death penalty for our sins.

After Jesus died He rose from the dead three days later as He said He would. The Holy Bible also tells us that Jesus Christ ascended into Heaven and that all who accept Him as their Lord and Saviour will live forever with Him in Heaven where there is no more death, sorrow, sickness and pain.

The Holy Bible very clearly explains how simple it is to be saved and on your way to Heaven, "For if you confess with your mouth, "Jesus is Lord," and believe in your heart that God raised him from the dead, you WILL BE SAVED." (Romans 10:9)

You can be saved right now and on your way to Heaven if you will open your heart to Jesus and pray the following prayer:

Dear Jesus Christ, I want to be saved so that I can have a home in Heaven when I die. I agree with You that I am a sinner. I believe You love me and want to save me. I believe that You bled and died on the cross to pay the penalty for my sins. I believe that You rose from the dead. Please forgive my sins and come into my heart and be my Lord and Saviour. Thank You Lord Jesus Christ for forgiving me and saving me through Your merciful grace. Amen.

You are now a Christian if you said the prayer and allowed God to save you. Welcome to the family of God.

If you decide to wait till later you may die before you get another chance to be saved because none of us knows exactly when we will die.

This means that if we die without trusting in Jesus Christ as our Lord and Saviour we will be forever separated from the love of God in a place called Hell. This place called Hell is a place of eternal torment, suffering, pain and agony for all those who reject Jesus Christ.

Choose Jesus Christ today and you will have peace in your life now and forever.

Have a great day!
Internet Evangelist R.L. Grossi

Free Online Bible
http://www.biblegateway.com

Free Online Movies
http://www.tbn.org/index.php/8/1.html

Animation
http://www.gieson.com/Library/projects/animations/walk/index.html

The Passion Of The Christ
http://www.ThePassionOfTheChrist.ch.tt

Beware Of Cults
http://www.carm.org/cults/cultlist.htm

About Hell
http://www.equip.org/free/DH198.htm

Is Jesus God?
http://www.powertochange.com/questions/qna2.html

2707. Re: Installed M2 Horizontal Loop today - PHOTOS

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 02:40:52 UTC
From: Dan <starkenburg.remove@this.sio.midco.net>
Message-ID: <hO-dnfVjbLAsZYrfRVn-tw@midco.net>
Source record: 81745
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

David,

No, I don't have stock in Cushcraft, nor would I want to. Cushcraft seems to be the MFJ of antenna companies - they make an inexpensive product and, unfortunately, they have their share of flops. I guess we have differing opinions as to whether the ARX2B is a flop or not.

I used the same rooftop tripod, same mast, and same feedline for the antenna comparisons. Like I said, the antenna has only been up for a couple days now but all indications at this time are that it is performing well.

If cost were not a factor, I would've gone with a DB224, beam/rotor assembly, or perhaps even a Hustler G7-144, and I'm sure performance would be better. However, for the $60 I paid for antenna I can't complain.

Interesting enough, if you check out the reviews of the antenna on eHam (http://www.eham.net/reviews/detail/4437), you'll see that it earned a respectible 4.0/5 rating. Of those that didn't give it a perfect score, one cited poor instructions, one cited a problem with the phasing cable (which appeared to be related to an installation issue), and only one person cited issues with the actual performance of the antenna (out of eight reviews).

73,
Dan

"David 01" <ifiwantspam@illask.org> wrote in message
news:111f972e81s9ke9@corp.supernews.com...
> It was a miracle that I even looked at this post given the topic, but I
did
> and found that you were replying to me under a subject to which I didn't
> post (i.e. you changed it).
>
> It's good that you're satisfied with the Ringo Ranger II and that they
have
> a defender somewhere (you don't own stock in the company, do you?). But I
> know that my experience was not from a bad install (37 years of
> communications experience now) and I doubt that so many others all did it
> wrong. Maybe you messed up with your other antennas and that made the
ringo
> look better.
>
> I stated facts to you and no matter your likes or dislikes what I stated
> shall remain fact.
>
> 73

>
> David
>
> "Dan" <starkenburg.remove@this.sio.midco.net> wrote in message
> news:7JqdnWgM0erwBYrfRVn-ug@midco.net...
> > I installed a Cushcraft ARX2B Ringo Ranger II yesterday. It's on a 10'
> mast
> > on a rooftop tripod. The measurements given in the manual for
assembling
> > the antenna for a specific frequency were right on the mark. I used the
> > dimensions for 147MHz and my MFJ-259B showed the "sweet spot" to be
> > 146.88MHz. SWR bandwidth is a bit narrower than I'd prefer, but it is a
> > very usable antenna for the 2M FM application.
> >
> > As far as performance.... I cannot complain at this point. I am able to
> > bring up a repeater 80 miles away half scale. My wife and I tried out
> > simplex today and it performed well. Previously I've owned the Diamond
> X50A
> > and CP22E antennas, as well as a slew of groundplane and J-Pole
antennas.
> > Based on the performance I've experienced so far, it appears the ARX2B
is
> > better than most, as it should be because it's a 5/8 wave x 3 (vs. a 1/4
> > wave x 3 for the X50A and a 5/8 wave x 2 for the CP22E).
> >
> > I'd suggest you have the guys in your area double check their assembly
as
> > I'd tend to think they did something wrong if they're comparing the
> > performance to a dummy load. The antenna has something like 40 pieces
out
> > of the box.... plus a few different adjustment points (middle and bottom
> > coils, plus the length of the antenna between coils).... so there is a
lot
> > that could be done wrong with the antenna. Also, I'd tend to think the
> > "weak point" of the antenna would be the run of coax that connects the
> > radials to the bottom coil, so that would also be a good place to look.
> >
> > 73,
> > Dan
> >
> >
> >
> >
> >
> > "David 01" <ifiwantspam@illask.org> wrote in message
> > news:1115p7dheu0ai31@corp.supernews.com...
> > > No offense, but where I live live the guys joke that they use the
ringo
> > > ranger II as a fishing pole or dummy load. We haven't experienced a
good

> > one
> > > here. Anything else is far better in our experience and I know of no
one
> > > actually using one now, but they say there's a stack of them
avsailable
> > for
> > > free behind a certain store.
> > >
> > > "Charlie" <charlie@earthlink.com> wrote in message
> > > news:1108njbbertjqcc@news.supernews.com...
> > > > 1. http://www.ad5th.com/VHF.html
> > > >
> > > > Also shown my Ringo Ranger II - ARX-2B. Links to technical data for
> each
> > > > antenna also.
> > > >
> > > > --
> > > >
> > > > Charlie
> > > > Ham Radio - AD5TH
> > > > www.ad5th.com
> > > > Live Blues Music
> > > > www.492acousticblues.com
> > > >
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2708. Re: Doublet Length: More is better?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 04:13:49 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42180f40$1_1@127.0.0.1>
Source record: 81748

Dan wrote:
> More is not always better. As far as performance goes, some have suggested
> that your antenna pattern can have more lobes (a bad thing) if you went with
> the 100' of wire vs. the 88'. Having a very lobey pattern makes it hard to
> determine where your signal is actually going, whereas having less lobes
> usually means your signal will radiate at 90 degree angles to the doublet
> antenna.

EZNEC predicts the pattern very well. And the reason Mr. Varney,
G5RV, chose 102 ft. for his 20m antenna was to take advantage
of the beautiful cloverleaf pattern that allows me to hit
Europe, Central/South America, New Zealand and the Far East
with 10 dBi lobes without rotating my antenna. Quite often,
my fixed G5RV beats my rotatable dipole.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2709. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 04:14:05 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <h8URd.1748$DC6.922@newssvr14.news.prodigy.com>
Source record: 81747

Richard Clark wrote:
> On Sun, 20 Feb 2005 00:42:21 GMT, "Tom Donaly"
> <dtdonaly@sbcglobal.net> wrote:
>
>
>>>>How do you feel about the sacking of Constanople?
>>>
>>>Most cultures have advanced in the last 800 years.
>>
>>Yes, but there are some Christian-Muslim-Hindu-Jewish fanatics
>>who want to regress to a pre-scientific age because they think
>>their people were better off back then.
>
>
> Hi Tom,
>
> Most of our (make that all) problems do not come from religious
> simpletons who have THE answer (usually involving genocide).
>
> No, we have big time problems with administration clowns who want to
> poke a stick in their eye, and then spout reams of denial about how
> well they are "defending" us from their inflamed passion.
>
> The latest news out of the white house Big Top press briefing room is
> the administration's planted "reporter," "Jeff Gannon," who worked for
> the fake news organization "Talon News." Hired by the ministry of
> information he has the unique qualifications of being a $200-an-hour
> gay prostitute.
>
> Should we visit "Family Values" now?
>
> 73's
> Richard Clark, KB7QHC

Hi Richard,
truth is, indeed, stranger than fiction.
73,
Tom Donaly, KA6RUH

2710. Re: vert antenna construction

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 04:14:35 UTC
From: Buck <iam@this.site>
Message-ID: <fj3g1190jtvem5kbl2t89vhc6ctf44omq3@4ax.com>
Source record: 81751

On Sat, 19 Feb 2005 13:14:55 -0800, Angela & Gary
<gmbelcas@charter.net> wrote:

>I am looking to use a piece of PVC as the center insulator of a vertical
>dipole I'm planning to put up. Anyone know the insulating
>characteristics of this stuff? It's not going to conduct significantly
>@ hf when wet?? Thanks for the help.
>
>gary

It will work great. If you want to test it, microwave a piece of the
material for 1 minute. IF it gets very warm, you may want a different
material. The white pvc should work as well as you need and then
some.

--
73 for now
Buck
N4PGW

2711. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 04:36:20 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_421815ec@fidonet.org>
Source record: 81755

"Cecil Moore" bravely wrote to "All" (19 Feb 05 13:18:09)
--- on the heady topic of "Re: Angle of Radiation"

CM> From: Cecil Moore <w5dxp@hotmail.com>
CM> UNCENSORED Newsgroups. Xref: aeinews rec.radio.amateur.antenna:5441

CM> Jack Painter wrote:
> Read the whole thing. It's eye opening.

CM> Stirring up hatred for Islam is just as evil as stirring
CM> up hatred for Christianity, Judaism, or any other religion.
CM> It is definitely NOT what Jesus taught so you are not
CM> following your religious teachings any better than
CM> the Islamic terrorists are following their religious
CM> teachings. Shame on you.

Isn't it getting just a bit lame, after all this time, that people are
still going around killing, in the name of a made up invisible Deity, so
that they can live in a mythical unseen paradise in happiness forever?
They would lock us up if we were trying to sell a product like that!
People who force others to accept their God are primitive barbarians,
still beating their bones on skulls, at the bidding of their power mad
witchdoctor shamans. The God myth delusion is doing serious damage to
our brains and it must end soon. God doesn't like it any better either!

A*s*i*m*o*v

... God is worse: ever seen "Act of Satan" in an insurance policy?

2712. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 04:41:10 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421815a8$1_1@127.0.0.1>
Source record: 81749

Jack Painter wrote:
> I am still a Christian, ...

So am I, but unlike some people, I recognize the fact that
ALL religions are potentially dangerous to my inalienable
rights and political freedoms and very strongly believe in
complete and absolute separation of religion and state. The
Crusades were a bad idea and the state sponsored Holy War
that you are advocating is, IMO, a very bad idea. The Moslems
with whom I worked at Intel were good people.
--
73, Cecil http://www.qsl.net/w5dxp

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2713. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 04:46:47 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421816f9$1_2@127.0.0.1>
Source record: 81752

Tom Donaly wrote:
> Yes, but there are some Christian-Muslim-Hindu-Jewish fanatics
> who want to regress to a pre-scientific age because they think
> their people were better off back then.

People who want to use countries with nukes to fight
Holy Wars scare the liver out of me.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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2714. Re: HF Loop Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 04:54:12 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421818b6$1_2@127.0.0.1>
Source record: 81750

jimbo wrote:
> Well, for example, if I wanted a chance on 40-160 meters, I would need
> a fairly long dipole, maybe 80 feet on each "wing". But maybe a square
> "loop" with four turns only 10 feet on a side would also work?

Single turn loops are more popular than multi-turn loops
because they are more efficient. Small loops are about
0.1 wavelength long usually resonated with a vacuum
capacitor.
--
73, Cecil http://www.qsl.net/w5dxp

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2715. *post 101* >> GOOD NEWS! - Over 2000 years ago Jesus Christ suffered and died on a cross and rose from the dead so that we can be forgiven of our sins(misdeeds) and have a home in Heaven when this life has ended. Most people just don't know how to ask Jesus Christ into their hearts. Heres how...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 05:17:49 UTC
From: RL_Grossi_2005@sbcglobal.net
Message-ID: <1108876669.844706.183860@l41g2000cwc.googlegroups.com>
Source record: 81753

Good News!

Do you know how simple it is to go to Heaven after this life has ended?

The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel supernaturally to a virgin Jewish woman named Mary. He lived a sinless life for thirty-three years and then sacrificed His sinless blood and died on a cross to pay the death penalty for our sins.

After Jesus died He rose from the dead three days later as He said He would. The Holy Bible also tells us that Jesus Christ ascended into Heaven and that all who accept Him as their Lord and Saviour will live forever with Him in Heaven where there is no more death, sorrow, sickness and pain.

The Holy Bible very clearly explains how simple it is to be saved and on your way to Heaven, "For if you confess with your mouth, "Jesus is Lord," and believe in your heart that God raised him from the dead, you WILL BE SAVED." (Romans 10:9)

You can be saved right now and on your way to Heaven if you will open your heart to Jesus and pray the following prayer:

Dear Jesus Christ, I want to be saved so that I can have a home in Heaven when I die. I agree with You that I am a sinner. I believe You love me and want to save me. I believe that You bled and died on the cross to pay the penalty for my sins. I believe that You rose from the dead. Please forgive my sins and come into my heart and be my Lord and Saviour. Thank You Lord Jesus Christ for forgiving me and saving me through Your merciful grace. Amen.

You are now a Christian if you said the prayer and allowed God to save you. Welcome to the family of God.

If you decide to wait till later you may die before you get another chance to be saved because none of us knows exactly when we will die.

This means that if we die without trusting in Jesus Christ as our Lord and Saviour we will be forever separated from the love of God in a place called Hell. This place called Hell is a place of eternal torment, suffering, pain and agony for all those who reject Jesus Christ.

Choose Jesus Christ today and you will have peace in your life now and forever.

Have a great day!
Internet Evangelist R.L. Grossi

Free Online Bible
http://www.biblegateway.com

Free Online Movies
http://www.tbn.org/index.php/8/1.html

Animation
http://www.gieson.com/Library/projects/animations/walk/index.html

The Passion Of The Christ
http://www.ThePassionOfTheChrist.ch.tt

Beware Of Cults
http://www.carm.org/cults/cultlist.htm

About Hell
http://www.equip.org/free/DH198.htm

Is Jesus God?
http://www.powertochange.com/questions/qna2.html

2716. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 05:26:25 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <5cVRd.1757$DC6.1017@newssvr14.news.prodigy.com>
Source record: 81754

Cecil Moore wrote:
> Tom Donaly wrote:
>
>> Yes, but there are some Christian-Muslim-Hindu-Jewish fanatics
>> who want to regress to a pre-scientific age because they think
>> their people were better off back then.
>
>
> People who want to use countries with nukes to fight
> Holy Wars scare the liver out of me.

Hi Cecil,
me too. And we've got a lot to be scared of.
All it takes is for a religious nut to take over the
government of the U.S., or India, or Pakistan, or
North Korea, or Israel, etc., and we'd be in for it.
73,
Tom Donaly, KA6RUH

2717. *post 101* >> GOOD NEWS! - Over 2000 years ago Jesus Christ suffered and died on a cross and rose from the dead so that we can be forgiven of our sins(misdeeds) and have a home in Heaven when this life has ended. Most people just don't know how to ask Jesus Christ into their hearts. Heres how...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 08:07:15 UTC
From: RL_Grossi_2005@sbcglobal.net
Message-ID: <1108886835.402361.36170@c13g2000cwb.googlegroups.com>
Source record: 81756

Good News!

Do you know how simple it is to go to Heaven after this life has ended?

The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel supernaturally to a virgin Jewish woman named Mary. He lived a sinless life for thirty-three years and then sacrificed His sinless blood and died on a cross to pay the death penalty for our sins.

After Jesus died He rose from the dead three days later as He said He would. The Holy Bible also tells us that Jesus Christ ascended into Heaven and that all who accept Him as their Lord and Saviour will live forever with Him in Heaven where there is no more death, sorrow, sickness and pain.

The Holy Bible very clearly explains how simple it is to be saved and on your way to Heaven, "For if you confess with your mouth, "Jesus is Lord," and believe in your heart that God raised him from the dead, you WILL BE SAVED." (Romans 10:9)

You can be saved right now and on your way to Heaven if you will open your heart to Jesus and pray the following prayer:

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You are now a Christian if you said the prayer and allowed God to save you. Welcome to the family of God.

If you decide to wait till later you may die before you get another chance to be saved because none of us knows exactly when we will die.

This means that if we die without trusting in Jesus Christ as our Lord and Saviour we will be forever separated from the love of God in a place called Hell. This place called Hell is a place of eternal torment, suffering, pain and agony for all those who reject Jesus Christ.

Choose Jesus Christ today and you will have peace in your life now and forever.

Have a great day!
Internet Evangelist R.L. Grossi

Free Online Bible
http://www.biblegateway.com

Free Online Movies
http://www.tbn.org/index.php/8/1.html

Animation
http://www.gieson.com/Library/projects/animations/walk/index.html

The Passion Of The Christ
http://www.ThePassionOfTheChrist.ch.tt

Beware Of Cults
http://www.carm.org/cults/cultlist.htm

About Hell
http://www.equip.org/free/DH198.htm

Is Jesus God?
http://www.powertochange.com/questions/qna2.html

2718. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 08:33:25 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <qovvK9FVtEGCFwk8@g3ohx.demon.co.uk>
Source record: 81757

In message <qf3c1156ludc03i7o48c1lk9dhilil970m@4ax.com>, J. Teske
<jdteske@comcast.net> writes
>Intellgence agencies when they did HFDF used huge antenna arrays
>called CDAAs (Circular Disposed Antenna Arrays). They were also known
>as Wollenwebbers (presumably after an inventor).

Is 'Wollenwebber' really 'Wollenweber', which I reckon could be
translated as 'wool weaver'? Possibly a graphic description of the
antennas.
Ian.

--

2719. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 08:33:55 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <QIGhSXGztEGCFwg0@g3ohx.demon.co.uk>
Source record: 81759

In message <421689ce_1@news1.prserv.net>, Crazy George
<munsch@atglobal.net> writes
>Wullenweber: German for wool weaver. Germans had several in WW2, none
>existed elsewhere. Sites were stripped and
>burned and the big iron goniometers buried during the closing days of
>the war. Took quite a bit of effort by ONR and
>OSS to retrieve enough material to reconstruct the concept. And a lot
>of work at U of Ill. and ITT/FTR to make one
>work. Beamformers, not TOA. That came a lot later.
>
>The initial question was set in the WW2 time period, I believe.
>
>Crazy George
>the ATTGlobal.net extension is a SPAM trap. Use att dot biz instead.
>
>
>

--

2720. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 08:34:54 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <bYxjm2GuuEGCFwBM@g3ohx.demon.co.uk>
Source record: 81758

In message <421689ce_1@news1.prserv.net>, Crazy George
<munsch@atglobal.net> writes
>Wullenweber: German for wool weaver. Germans had several in WW2, none
>existed elsewhere. Sites were stripped and
>burned and the big iron goniometers buried during the closing days of
>the war. Took quite a bit of effort by ONR and
>OSS to retrieve enough material to reconstruct the concept. And a lot
>of work at U of Ill. and ITT/FTR to make one
>work. Beamformers, not TOA. That came a lot later.
>
>The initial question was set in the WW2 time period, I believe.
>
>Crazy George
>the ATTGlobal.net extension is a SPAM trap. Use att dot biz instead.
>
>
>
Ah, Crazy, you got in first!
Ian.
--

2721. portable HF antenna for the FT-817

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 09:33:47 UTC
From: Manitou <nospam@netbel.be>
Message-ID: <%PYRd.16036$6W1.1299502@phobos.telenet-ops.be>
Source record: 81760

Hello,

Search for a good working portable HF antenna 40-10m
for field work with the FT-817.
(plus 80m + 6m +VHF and UHF????)

Witch models give good results?
TNX,
Ds

2722. *post 101* >> GOOD NEWS! - Over 2000 years ago Jesus Christ suffered and died on a cross and rose from the dead so that we can be forgiven of our sins(misdeeds) and have a home in Heaven when this life has ended. Most people just don't know how to ask Jesus Christ into their hearts. Heres how...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 10:56:42 UTC
From: RL_Grossi_2005@sbcglobal.net
Message-ID: <1108897002.806043.317570@c13g2000cwb.googlegroups.com>
Source record: 81761

Good News!

Do you know how simple it is to go to Heaven after this life has ended?

The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel supernaturally to a virgin Jewish woman named Mary. He lived a sinless life for thirty-three years and then sacrificed His sinless blood and died on a cross to pay the death penalty for our sins.

After Jesus died He rose from the dead three days later as He said He would. The Holy Bible also tells us that Jesus Christ ascended into Heaven and that all who accept Him as their Lord and Saviour will live forever with Him in Heaven where there is no more death, sorrow, sickness and pain.

The Holy Bible very clearly explains how simple it is to be saved and on your way to Heaven, "For if you confess with your mouth, "Jesus is Lord," and believe in your heart that God raised him from the dead, you WILL BE SAVED." (Romans 10:9)

You can be saved right now and on your way to Heaven if you will open your heart to Jesus and pray the following prayer:

Dear Jesus Christ, I want to be saved so that I can have a home in Heaven when I die. I agree with You that I am a sinner. I believe You love me and want to save me. I believe that You bled and died on the cross to pay the penalty for my sins. I believe that You rose from the dead. Please forgive my sins and come into my heart and be my Lord and Saviour. Thank You Lord Jesus Christ for forgiving me and saving me through Your merciful grace. Amen.

You are now a Christian if you said the prayer and allowed God to save you. Welcome to the family of God.

If you decide to wait till later you may die before you get another chance to be saved because none of us knows exactly when we will die.

This means that if we die without trusting in Jesus Christ as our Lord and Saviour we will be forever separated from the love of God in a place called Hell. This place called Hell is a place of eternal torment, suffering, pain and agony for all those who reject Jesus Christ.

Choose Jesus Christ today and you will have peace in your life now and forever.

Have a great day!
Internet Evangelist R.L. Grossi

Free Online Bible
http://www.biblegateway.com

Free Online Movies
http://www.tbn.org/index.php/8/1.html

Animation
http://www.gieson.com/Library/projects/animations/walk/index.html

The Passion Of The Christ
http://www.ThePassionOfTheChrist.ch.tt

Beware Of Cults
http://www.carm.org/cults/cultlist.htm

About Hell
http://www.equip.org/free/DH198.htm

Is Jesus God?
http://www.powertochange.com/questions/qna2.html

2723. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 13:32:23 UTC
From: richardharrison@webtv.net
Message-ID: <13123-42189167-195@storefull-3255.bay.webtv.net>
Source record: 81762

Reg, G4FGQ wrote:
"It`s purely a matter of Spherical Geometry."
The ARRL agrees with Reg. The 19th edition of the ARRL Antenna Book on page 23-24 gives path distance versus vertical wave angle for a one-hop transmission using the F2 layer in Fig 23. Of course these are only based on a variable reflecting layer height.

For 500 miles, 40 to 70 degrees.

For 1000 miles, 20 to 35 degrees.

For 1500 miles, 10 to 22 degrees.

For 2000 miles, 4 to 15 degrees.

For 2500 miles, less than 8 degrees.

Neither elevation nor azimuth angles are exact as the wave is subject to detours but it helps to have an idea of the usual best angles.

Best regards, Richard Harrison, KB5WZI

2724. Re: Antenna spacing?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 13:41:33 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <hs0Sd.96881$qB6.79186@tornado.tampabay.rr.com>
Source record: 81763

hey harry
i recently put up 3 long boomed yagis
a M2 6M7 which is 7eles on a 27ft boom 6 meters
KLM 16LBX 16ele on a 28ft boom 2 meters
KLM 30LBX 30ele 70cm on a 22ft boom
and what i did is mounted the 6 meters at the top of the tower 40ft and
stacked the others 5ft apart
and they work fine i do get into the front end of the differnt radios
when i transmit so i think i got them a bit close together but it hasnt
hurt the performance or the SWR of any of the antennas
in your case i think i would put the HF tribander at the bottom of the
stack then 5ft above that i would mount the long boomed 2 meter yagi
then 5ft from it the 6 meter antenna
usually i would stack them the higher in freq the higher on the mast but
since the 2 meter yagi has a lot longer boom i would put it in the
middle to you have room for the boom supports
good luck
Harry wrote:
> I have three yagi's that I want to mount on one tower.
> 1)Hy-Gain TH3-MK3 three element HF tribander
> 2)Cushcraft 32-19 nineteen element Two meter yagi
> 3)Cushcraft A50-3S three element six meter beam
> I installed a 40' Glen Martin with hazier last fall and I want to place
> these three antennas on a mast at the top of this tower. My question is,
> How far above the tower should the first antenna be, is there any
> particular order to mounting, how far apart should these antennas be
> from each other? I'm using Kevlar guys, so they shouldn't cause any
> problems. The tower is grounded at all three legs.
> TIA
> Harry
>

2725. Re: portable HF antenna for the FT-817

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 14:45:36 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <ko1Sd.1916$Ba3.1205@newsread2.news.atl.earthlink.net>
Source record: 81764

I have been using the MP-1 with pretty good results. Even using the 2.5 watt setting I have had many contacts with my FT-817. HAVE FUN!

73,
WB7FFI

2726. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 15:18:25 UTC
From: Buck <iam@this.site>
Message-ID: <adah11pvfcedtuac0sd2tvtmjnsb5041au@4ax.com>
Source record: 81767

On Fri, 18 Feb 2005 18:21:07 -0600, "Crazy George"
<munsch@atglobal.net> wrote:

>The initial question was set in the WW2 time period, I believe.

I started the topic. It was set in WW2 because I see so much about
RDF at that time. i realize it has to have improved by now but the
heart of the question is 'since it was possible to be accurate then,
why can't hams accurately do it today?'

I am thoroughly enjoying this thread.

Thank you to ALL that have replied.

Buck
N4PGW

--
73 for now
Buck
N4PGW

2727. Re: portable HF antenna for the FT-817

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 15:43:34 UTC
From: Buck <iam@this.site>
Message-ID: <opah11licp722o0ljuj0n877j64d9t5lc6@4ax.com>
Source record: 81766

On Sun, 20 Feb 2005 09:33:47 GMT, "Manitou" <nospam@netbel.be> wrote:

>Hello,
>
>Search for a good working portable HF antenna 40-10m
>for field work with the FT-817.
>(plus 80m + 6m +VHF and UHF????)
>
>Witch models give good results?
>TNX,
>Ds
>

http://www.buddipole.com/
http://www.tomochka.com/ks7j/buddipole/
http://www.qsl.net/w3ff/
http://www.qsl.net/w3ff/antenna_design.htm

One of the favorite portable antennas of the HFPack group
(http://www.qsl.net/hfpack/freq.html#REGIONAL) is the BuddiPole
antenna. There are commercial and home-brew versions (see above
links). I built one. The homebrew is pretty flimsy, but fun to build
and play with.

Good luck and have fun. Hope to see you on the HFPack frequencies.

Buck
N4PGW

--
73 for now
Buck
N4PGW

2728. Re: Antenna spacing?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 16:03:23 UTC
From: Crazy George <munsch@atglobal.net>
Message-ID: <4218b7f8_1@news1.prserv.net>
Source record: 81765

Harry:

Here is the general rule of thumb way to approach this requirement. With the booms aligned, each antenna only "sees" a
lower frequency (larger) antenna. So start at the top with the 2 meter antenna. It needs to be a half wavelength at 2
(~40 inches) from the next thing. And so on to the others. The 6 meter should be about 100 inches from the tribander,
and the tribander doesn't care. It looks mechanically clumsy, but putting the 2 meter half way between the tribander on
the bottom and the six meter on top with the 6 and triband 100 inches apart is close to the best compact arrangement.

--
Crazy George
the ATTGlobal.net address is a SPAM trap. Use the att dot biz extension to reach me.

2729. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 16:55:10 UTC
From: "J. Teske" <jdteske@comcast.net>
Message-ID: <o8eh111kq09lo2d63dndi6fn6vequuongv@4ax.com>
Source record: 81768

On Sun, 20 Feb 2005 10:18:25 -0500, Buck <iam@this.site> wrote:

>On Fri, 18 Feb 2005 18:21:07 -0600, "Crazy George"
><munsch@atglobal.net> wrote:
>
>>The initial question was set in the WW2 time period, I believe.
>
>I started the topic. It was set in WW2 because I see so much about
>RDF at that time. i realize it has to have improved by now but the
>heart of the question is 'since it was possible to be accurate then,
>why can't hams accurately do it today?'
>
>I am thoroughly enjoying this thread.

There is really two types of DF. Long haul and close in. The close in type which generally uses some sort of null loop from a mobile platform (such as a car or on foot) is what is generally used in "fox hunting" types of transmitter hunts by hams and other hobbists. By extension, the military also use some of this close in technique from tactical aircraft although the technology is different.

Long haul, such as was employed in WW II for sub hunting in the Atlantic was done from fixed shore facilities for the most part which exchanged their lines of bearings via a dedicated secure network.

Close in DF is accurate only in the sense that the hunter can usually move in close to the target to the point that they can actually see the antenna.

Long Haul DF cannot pinpoint a target. Long haul DF stations have known error tolerances and so-call "fixes" are stated with circular or elliptical errors of probabilities. So one might DF a transmitter operating in the Atlantic from shore stations around the perimeter of the Atlantic. The fix will be stated with some degree of tolerance such as there is a 90% chance the target is within an ellipse 100 miles long and 50 miles wide and a 10% chance it is within a 15 by 5 miles area within that larger circle. This is of course still many hundreds or even thousands of sqare miles to hunt for a target. I do not know what technology the Allies used during WW II for their HFDF or what sort of accuracy they achieved.

In a WW II scenario, it would be an important intelligence fact if one could discern if a target was near Bermuda or if it was near the Azores. Then a destroyer or subchaser or small carrier with aircraft would have to be dispatched to try to find it if it were on the

surface. Allied sub hunting was successful because German doctrine called for frequent situation reports from submarines to shore commands in France and Germany.

US submarine operations in the Pacific were more successful in a defensive perspective since they usually operated with a doctrine of radio silence and only rarely sent messages to shore station or to each other. It must be remembered that WW II era subs generally operated on the surface and submerged mostly for attack or self protection. The German sub commanders were in essence victims of Doenitz' tendency to micromanage and they sustained casualty rates of 70% or greater. US sub forces by comparison had casualty rates of 15% which was still among the highest among US forces. Germany had roughly four or five times as many submarines as did the US.

[Folks unfamiliar with WW II history must also note that the US had almost no sub forces in the Atlantic since Germany had only a very small surface Navy and almost no coastal or open ocean shipping. A sub of that era was a poor platform to wage war against another submarine. Japan, being an island, was dependant upon ocean shipping for supplies and so was more of a natural target for anti-shipping submarine operations. US subs of course also attacked combatants, but many of those combatants were escorts for shipping convoys. Virtually all US submarines operated in the Pacific Theater. The Brits did have some submarine operations in the Atlantic.]
>

Jon W3JT
>Thank you to ALL that have replied.
>
>Buck
>N4PGW

2730. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 17:33:26 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <4218c9d3.2290503@News.Individual.NET>
Source record: 81769

On Sun, 20 Feb 2005 05:26:25 GMT, "Tom Donaly"
<dtdonaly@sbcglobal.net> wrote:

> me too. And we've got a lot to be scared of.
>All it takes is for a religious nut to take over the
>government of the U.S.,

But you already have one in charge!!!!

2731. Re: Antenna spacing?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 17:52:57 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd1hjjp.2oq6.bit-bucket@shell.config.com>
Source record: 81770

On Sun, 20 Feb 2005 10:03:23 -0600, Crazy George wrote:

> It looks mechanically clumsy,

I don't think so! HI!HI!

> but putting the 2 meter half way between the tribander on
> the bottom and the six meter on top with the 6 and triband 100
> inches apart is close to the best compact arrangement.

Because that's the assembly I have here.

A low res JPEG showing my 40' Rohn just that-a-way:

http://jonz.net/Home.html

Seems to work quite nicely --- compared to leaving it stacked in the
corner of the garage while anguishing over finding The Perfect Solution.

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

2732. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 17:59:31 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37s1mfF5hr01hU1@individual.net>
Source record: 81771

You behave like a 5-year-old.

Any of the security services monitoring this can contact
the person below by virtue of his Ham Radio Call, G3PHO.

"Peter" <microwaves@blueyonder.co.uk> wrote in message
news:4218c9d3.2290503@News.Individual.NET...
> On Sun, 20 Feb 2005 05:26:25 GMT, "Tom Donaly"
> <dtdonaly@sbcglobal.net> wrote:
> > me too. And we've got a lot to be scared of.
> >All it takes is for a religious nut to take over the
> >government of the U.S.,
>
> But you already have one in charge!!!!

2733. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 18:16:37 UTC
From: richardharrison@webtv.net
Message-ID: <24492-4218D405-244@storefull-3253.bay.webtv.net>
Source record: 81674

Jon, W3JT wrote:
"Folks unfamiliar with WW II history must also note that the US had almost no sub forces in the Atlantic since Germany had only a very small surface Navy amd no coastal or open shipping."

The emphasis should be on the "almost"!
Germamy began the war with 3 formidable "pocket battleships" as I recall. There were American submarines in the Atlantic. Headquarters are at New London, CT. My brother was a WW-2 U.S. Navy submarine officer. His boat was stationed in the Atlantic operating from the U.S. Virgin Islands. He managed a leave home by snagging rides on Catalina flying boats conducting anti-submarine patrols in the Atlantic. He observed real anti-submarine actions while a passenger aboard the Catalinas. My brother was assigned to a new ship from its keel laying. He took it through the Panama Canal to the Pacific where after several missions it became a craft on permanent patrol as the result of enemy action with no known surviors. His family misses him.

Best regards, Richard Harrison, KB5WZI

2734. Re: Several questions about mobile HF antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 18:25:12 UTC
From: nm5k@wt.net
Message-ID: <1108923912.020732.209380@o13g2000cwo.googlegroups.com>
Source record: 81672

'Doc wrote:
lol, as in forget the drive-
> through windows, low trees, etc. (more or less typical for the
> average 80 meter mobile'er).

I use a hustler quick disconnect. When I go through a drive through, I take my antenna off, and lay it on the roof until I get through, and then I get out and stick it back on. That disconnect also makes it much faster to change bands...My coil is so high, there is no way you can reach it without taking the antenna off.. Without the disconnect, you have to screw em in and out...Takes a lot more time. MK

2735. Re: vert antenna construction

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 18:28:56 UTC
From: nm5k@wt.net
Message-ID: <1108924136.650167.12380@z14g2000cwz.googlegroups.com>
Source record: 81673

I'd also add a glass of water in the microwave when you do
that...I'm not sure if they are still that way, but it used
to be bad for them to run with no load...IE: food...MK

2736. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 18:31:25 UTC
From: "aunwin@insightbb.com"
Message-ID: <1l4Sd.31533$tl3.22342@attbi_s02>
Source record: 81675

Now back to angle of radiation, yes ?
"Airy R.Bean" <Me@privacy.net> wrote in message
news:37s1mfF5hr01hU1@individual.net...
> You behave like a 5-year-old.
>
> Any of the security services monitoring this can contact
> the person below by virtue of his Ham Radio Call, G3PHO.
>
> "Peter" <microwaves@blueyonder.co.uk> wrote in message
> news:4218c9d3.2290503@News.Individual.NET...
>> On Sun, 20 Feb 2005 05:26:25 GMT, "Tom Donaly"
>> <dtdonaly@sbcglobal.net> wrote:
>> > me too. And we've got a lot to be scared of.
>> >All it takes is for a religious nut to take over the
>> >government of the U.S.,
>>
>> But you already have one in charge!!!!
>
>

2737. Re: Antenna spacing?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 19:30:55 UTC
From: nospam@nouce.bellatlantic.net
Message-ID: <emnh11hbmnk46768vtm9n79ibpirukqhp3@4ax.com>
Source record: 81676

On Sat, 19 Feb 2005 20:38:29 -0500, Harry <hgk@centurytel.net> wrote:

>I have three yagi's that I want to mount on one tower.
>1)Hy-Gain TH3-MK3 three element HF tribander
>2)Cushcraft 32-19 nineteen element Two meter yagi
>3)Cushcraft A50-3S three element six meter beam
>I installed a 40' Glen Martin with hazier last fall and I want to place
>these three antennas on a mast at the top of this tower. My question is,
>.............................>snipped<.....................

I have 28Ft (from ground level) Rohn 25. My set up for all modes on
6/2/70cm is as follows.

Top going down:

Top Arrow OSJ146/440 Jpole
Just below is a 215WB (15element CC)
41" below that is a 5Element UHF (horizontal Arrow 440-5s)
42" below the UHF is the Arrow 52-4s (6m 4 element beam)
(total distance between the 2m and 6m beams is 81".)

The combined tower and mast height puts the 6m beam more than
14ft higher than the roof of the house and exactly 30ft above ground.
My tower is bracketed to the side of a low ranch house.

At the 25ft level of the tower is a lanyard for raising and lowering
the tower end of wire antennas. Those wires extend to trees and poles
elsewhere on the property. I set up two of these on two of the legs
of the tower. One carries my 24ft EDZ for 6m aimed SW
and the other has a general use wire running NNW for HF listening.

I also have vertical dipole for 6m on the south leg at about 20ft
(center of the antenna) of of the tower for local 6m FM use and on the
north leg a CuCactus for 2m/70cm (15ft to the base of it) for local
use.

This arrangement is optimal for the 2m and 6m and appears effective
for the UHF as well. The goal was to keep the mast extending above
the tapered section (25AG) to under 8ft as I only had an 11ft mast.

Seems to be effective for F2 and Es and to the limits of 4elements
on 6m for tropo. The other effect is the J at the top is both
effective due to height and also not having radials doesn't interfere
with the 215WB just below it. The UHF was installed for later use
as I only have limited UHF capability and I expect to replace it with
something in the 11-15 element range when capability expands.

Allison
KB1GMX FN42

2738. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 20:08:08 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <I66Sd.32461$xt.31039@fed1read07>
Source record: 81677

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:24492-4218D405-244@storefull-3253.bay.webtv.net...
> Jon, W3JT wrote:
> "Folks unfamiliar with WW II history must also note that the US had
> almost no sub forces in the Atlantic since Germany had only a very small
> surface Navy amd no coastal or open shipping."
>
> The emphasis should be on the "almost"!
> Germamy began the war with 3 formidable "pocket battleships" as I
> recall. There were American submarines in the Atlantic. Headquarters are
> at New London, CT. My brother was a WW-2 U.S. Navy submarine officer.
> His boat was stationed in the Atlantic operating from the U.S. Virgin
> Islands. He managed a leave home by snagging rides on Catalina flying
> boats conducting anti-submarine patrols in the Atlantic. He observed
> real anti-submarine actions while a passenger aboard the Catalinas. My
> brother was assigned to a new ship from its keel laying. He took it
> through the Panama Canal to the Pacific where after several missions it
> became a craft on permanent patrol as the result of enemy action with no
> known surviors. His family misses him.
>
> Best regards, Richard Harrison, KB5WZI

A great book on German submarine warfare off the US coast -- is "Operation
Drumbeat" by Michael Gannon

I too lost fanily members at Normandy and Anzio
We do remember

--
Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?

>

2739. Stacking 5/8th-wave 2-meter elements x4

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 21:15:44 UTC
From: Kim & Steve Merrill <buck0@comcast.net>
Message-ID: <KJCdnVDh3vGVYIXfRVn-3A@comcast.com>
Source record: 81678

Sometimes it's just fun to see how far...
http://home.comcast.net/~buck0/outpvccm.html
This link brings you to a collection of e-mail exchanges outlining the construction of a collinear 5/8th-wave 2-meter vertical. Insights, discussions and inovations on 2, 3, and 4 stacked elements. Several great images too.

Special thanks to Paul Anderson N8CVW /7. He took some ideas I played around with (and posted on the WWWeb over 6 years ago) and really went hog-wild!!
http://home.comcast.net/~buck0/5-8thx2j.htm

Hope you'll see there is still some fun to be had in the hobby, in the ways of antenna modeling!

73
Steve KB1DIG

2740. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 21:30:31 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <42190205.BD9941BA@shaw.ca>
Source record: 81679

Ian Jackson wrote:
>
> In message <qf3c1156ludc03i7o48c1lk9dhilil970m@4ax.com>, J. Teske
> <jdteske@comcast.net> writes
> >Intellgence agencies when they did HFDF used huge antenna arrays
> >called CDAAs (Circular Disposed Antenna Arrays). They were also known
> >as Wollenwebbers (presumably after an inventor).
>
> Is 'Wollenwebber' really 'Wollenweber', which I reckon could be
> translated as 'wool weaver'? Possibly a graphic description of the
> antennas.
> Ian.
>
> --

The actual spelling is Wullenweber. I have a photo of the HFDF Station in Masset, BC where I was Operations Officer at one time -- you can find it if you go to my website at http://members.shaw.ca/finkirv4/links.htm

If you include all the masts, guys, antenna elements, and such it could be construed as a masterpiece of weaving.

Irv VE6BP
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/index.html
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/index.htm
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/index.htm
---
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2741. Re: Stacking 5/8th-wave 2-meter elements x4

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 21:38:25 UTC
From: Dan Richardson <dwr@mailinator.net>
Message-ID: <fm0i111al9mg0gla3db8auf2js2d4p5sp9@4ax.com>
Source record: 81680

On Sun, 20 Feb 2005 16:15:44 -0500, "Kim & Steve Merrill"
<buck0@comcast.net> wrote:

>Special thanks to Paul Anderson N8CVW /7. He took some ideas I played
>around with (and posted on the WWWeb over 6 years ago) and really went
>hog-wild!!
>http://home.comcast.net/~buck0/5-8thx2j.htm

I wonder what his 6dB gain reference is?

Danny, K6MHE

2742. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 21:52:08 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4219074c$1_1@127.0.0.1>
Source record: 81681

Peter wrote:
> "Tom Donaly" <dtdonaly@sbcglobal.net> wrote:
>> me too. And we've got a lot to be scared of.
>>All it takes is for a religious nut to take over the
>>government of the U.S.,
>
> But you already have one in charge!!!!

It's OK to pray to God as long as one doesn't
actually hear an answer. :-)
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2743. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 22:04:50 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <WPqQTgKCmQGCFwBZ@g3ohx.demon.co.uk>
Source record: 81682

In message <42190205.BD9941BA@shaw.ca>, Irv Finkleman <finkirv@shaw.ca>
writes
>Ian Jackson wrote:
>>
>> In message <qf3c1156ludc03i7o48c1lk9dhilil970m@4ax.com>, J. Teske
>> <jdteske@comcast.net> writes
>> >Intellgence agencies when they did HFDF used huge antenna arrays
>> >called CDAAs (Circular Disposed Antenna Arrays). They were also known
>> >as Wollenwebbers (presumably after an inventor).
>>
>> Is 'Wollenwebber' really 'Wollenweber', which I reckon could be
>> translated as 'wool weaver'? Possibly a graphic description of the
>> antennas.
>> Ian.
>>
>> --
>
>The actual spelling is Wullenweber. I have a photo of the HFDF Station in
>Masset, BC where I was Operations Officer at one time -- you can find it
>if you go to my website at http://members.shaw.ca/finkirv4/links.htm
>
>If you include all the masts, guys, antenna elements, and such it could
>be construed as a masterpiece of weaving.
>
>Irv VE6BP

Yes, Crazy George had already come up with that before I stuck my nose
in. I was having a bit of a guess.
Unfortunately, Irv, I can't see the picture. It's one of those few
occasions where all I get is a red 'X'. I must find out how to overcome
this some day!
Cheers,
Ian.
--

2744. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 22:32:19 UTC
From: Crazy George <munsch@atglobal.net>
Message-ID: <42191673_1@news1.prserv.net>
Source record: 81685

Here's a related curiosity:

Dr. David Woolweaver is the Assistant Director of the West Gulf Div. of the ARRL. I discussed the name at length with
him several years ago, although he was previously unaware of the antenna design connotation. He told me there is also a
small town in Germany named Wullenweber. You will find no authoritative information on the derivation of the name for
the CDAA. Anyone who tells you different is lying. The few Germans still living at the end of the war who could be
identified as having been associated with the project either didn't know or refused to say. But that never stopped
speculation.

--
Crazy George
the ATTGlobal.net is a SPAM trap. Use the att dot biz account.

2745. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 22:36:29 UTC
From: David Ryeburn <ryeburn@sfu.caz>
Message-ID: <ryeburn-35B6DE.14362920022005@news.telus.net>
Source record: 81683

In article <42190205.BD9941BA@shaw.ca>, Irv Finkleman <finkirv@shaw.ca>
wrote:

> The actual spelling is Wullenweber. I have a photo of the HFDF Station in
> Masset, BC where I was Operations Officer at one time -- you can find it
> if you go to my website at http://members.shaw.ca/finkirv4/links.htm

When I try that URL I get a blank where the picture of the Masset
Operations Site is supposed to be. Clicking on that blank picture to try
to force it to load I get:

> PAGE NOT FOUND
>
> The web page you are trying to access doesn't exist on members.shaw.ca

The link below, under Jim Troyanek's Historical Links. "Canadian Forces
Station Masset", works.

David, ex-W8EZE

--
David Ryeburn
ryeburn@sfu.caz
To send e-mail, use "ca" instead of "caz".

2746. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 22:46:33 UTC
From: Crazy George <munsch@atglobal.net>
Message-ID: <42191674_1@news1.prserv.net>
Source record: 81684

Buck:

A difficult to find but accurate book which answers your question about WW2 is "Secret Weapon" by Kathleen Broome
Williams published by Naval Institute Press. I no longer have a copy at hand, so I cannot quote figures for claimed
accuracy.

The reason Hams can't do this are two-fold:
1. Space
2. Money.

A good HF Adcock of WW2 design requires 10 or more acres to be accurate and is expensive to build because of the
mechanical accuracy involved. The 1960s vintage CDAA systems discussed typically require 40 acres, and the last
replacement cost figure I saw was over $100 million. The smaller "Pusher" systems are difficult to pin down price wise,
as they are out of production, but are still in the million dollar range for a prepared site, which for them is still
several acres. Measured sensitivity of the Pusher is 9 or 10 dB poorer than the full size CDAA, and the accuracy tends
to be less, although in both cases instantaneous accuracy is dependent on propagation and not system accuracy. Mobile
systems can be much less expensive, but to deploy one, you need to already know where the target is, more or less. By
the way, the last FCC mobile system I saw was in an unmarked Chrysler sedan with NO obvious external antennas.

And, even with the best equipment, a one degree accuracy (rare) still produces a large area of uncertainty at the target
distance. That is the key to understanding this. At a mile or a few blocks distance, a one degree accuracy will get
you to the target. At 2,000 miles, it just tells you which ocean the target is in.

--
Crazy George
the ATTGlobal.net is a SPAM trap. Use the att dot biz account.
"Buck" <iam@this.site> wrote in message news:jgj8115010fbt155obg1uvoogkpbqqlo5j@4ax.com...
> In WWII the allies were able to pinpoint the locations of German HF
> transmissions very accurately. They were able to pinpoint the
> locations of U-boats, etc. when they transmitted. (or so I have been
> led to believe).
>
> What methods did they use to do this? Is it something duplicatable
> with Radio Amateurs in general or does it require some special type

> equipment?
>
>
> I hear lots of amateurs describing interference and other problems on
> HF, but no one seems to be triangulating the offending stations. I am
> guessing that the real secret was in their communications with the
> 'spotters' to triangulate the positions.
>
> Any suggestions?
>
> Thanks
>
> --
> 73 for now
> Buck
> N4PGW
>

2747. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 22:55:42 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <111i5cck39vk31@corp.supernews.com>
Source record: 81686

Richard Harrison wrote:
> Jon, W3JT wrote:
> "Folks unfamiliar with WW II history must also note that the US had
> almost no sub forces in the Atlantic since Germany had only a very small
> surface Navy amd no coastal or open shipping."
>
> The emphasis should be on the "almost"!
> Germamy began the war with 3 formidable "pocket battleships" as I
> recall. There were American submarines in the Atlantic. Headquarters are
> at New London, CT. My brother was a WW-2 U.S. Navy submarine officer.
> His boat was stationed in the Atlantic operating from the U.S. Virgin
> Islands. He managed a leave home by snagging rides on Catalina flying
> boats conducting anti-submarine patrols in the Atlantic. He observed
> real anti-submarine actions while a passenger aboard the Catalinas. My
> brother was assigned to a new ship from its keel laying. He took it
> through the Panama Canal to the Pacific where after several missions it
> became a craft on permanent patrol as the result of enemy action with no
> known surviors. His family misses him.
>
> Best regards, Richard Harrison, KB5WZI
>
Richard;

All of us are grateful for your brother's dedication to his country.

Dave WD9BDZ

2748. Re: Icom AH-4 mobile users: radiating element?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 23:13:32 UTC
From: SideBand <AINO8SPAMW@cac.net>
Message-ID: <wQ8Sd.2132$DW.140@newssvr17.news.prodigy.com>
Source record: 81687
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

=K=5=D=H= wrote:
> Icom AH-4 mobile users:
>
> I recently installed an AH-4 antenna tuner in my mobile
> station, connected to my IC-706Mk2G. I'm using a 9 foot
> stainless steel CB whip as my radiating element, fed by
> about 2 feet of wire from the tuner to the base of the
> whip. What kind of radiating element are you using, and
> what kind of success do you have with it on 40m and 75m?
> I also have an Outbacker Perth antenna that I've used
> for many years, but I got tired of being unable to jump
> from band to band easily. I've thought about using the
> Outbacker with the AH-4, and just omitting the Wander
> Lead and matching transformer connection (in other words,
> use the Outbacker in its "raw" 75m state). I'm a bit
> concerned that the AH-4 won't handle this on 40m because
> the AH-4 manual says to avoid odd multiples of 1/2 wave,
> and that would be the case using the 75m antenna on 40m.
>
> Let's hear your thoughts and experiences!
>
> 73,
> Dean K5DH
>

http://www.ai8w.dyndns.org/~ai8w/

Click the TruckPics link.. says it all.

2749. Re: Antenna spacing?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-20 23:35:04 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd1i7l8.12i.bit-bucket@shell.config.com>
Source record: 81688

On 20 Feb 2005 17:52:57 GMT, Allodoxaphobia wrote:
> On Sun, 20 Feb 2005 10:03:23 -0600, Crazy George wrote:
>
>> It looks mechanically clumsy,
>
> I don't think so! HI!HI!
>
>> but putting the 2 meter half way between the tribander on
>> the bottom and the six meter on top with the 6 and triband 100
>> inches apart is close to the best compact arrangement.
>
> Because that's the assembly I have here.
>
> A low res JPEG showing my 40' Rohn just that-a-way:
>
> http://jonz.net/Home.html

I knew I had a better JPEG of it around here somewhere:

http://jonz.net/W3DHJ/images/W3DHJ_Tower.jpeg

From the top - down: CC A50-3S , an old CC 215WB , and the CC A3S.
That's a home-brew 2M vertical on the forward boom of the A3S.

Sigh... It all comes down in a couple of months.
Moving to a new Grid Square....

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

2750. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 00:07:45 UTC
From: richardharrison@webtv.net
Message-ID: <22526-42192651-262@storefull-3258.bay.webtv.net>
Source record: 81689

Crazy George wrote:
"The reason Hams can`t do this are two-fold:
1. Space
2. Money."

That`s usually true.

I don`e think anyone has mentioned Doppler or Quasi-Doppler DF systems yet. I`ve seen hams using them but I have no experience with them.

Servo Corporation of America claims to have supplied over 350 Quasi-Doppler radio direction finding systems to the U.S. FAA and they are used in airports throughout the U.S.A.

The angle at which a VHF signal wavefront passes over a small forest of antenna elements is determined to give a bearing toward the transmitter.

It has been generally found that for radio direction finding that the larger the antenna, the better the performance.. But, in the case of two spaced antennas, the spacing must not exceed 1/2-wavelength to avoid ambiguities. Peak error from an Adcocvk Array is 11.4 degrees, says Servo Corp. Their Doppler Systems, they say, are much better.

I see what I suppose are Doppler antenna systems on the trunk lids of police cars.

Best regards, Richard Harrison, KB5WZI

2751. F to B and F to rear

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 01:48:05 UTC
From: "aunwin@insightbb.com"
Message-ID: <p5bSd.33636$tl3.9146@attbi_s02>
Source record: 81690

Regarding antenners, thats right,antennas.
Plenty of listings for various gains achieved with antennas
but I have not seen any similar listings for F/R and F/B.
Is there any around so I can see what can be or has been attained or
is blocking of rear signals of little consequence for todays hams. I can see
that being true
for when the band has just opened and propagation has not opened to the rear
or
with net operations so perhaps gain is every thing after all.
It is my opinion that if interest/efforts are increased first in deflecting
the rear action to the
front first and thereby INCREASING the front lobe width there will be more
opportunities
for increasing gains without the side lobes and narrow forward lobes that
accompany Yagi's.
as well as shorter booms. (more deflectors/reflectors perhaps)
(no religeous, porno or genocide preaching please, fighting to see which is
best
could take place on boat anchor nets to see which has taken position of the
lowest level)
Regards
Art

2752. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 02:48:16 UTC
From: Crazy George <munsch@atglobal.net>
Message-ID: <42194f2d_3@news1.prserv.net>
Source record: 81691

Actually, we have been skating around the real answer to all this. HF systems which are presently being deployed are
true mathematical interferometers, and if anyone has the computer expertise to write the computer programs to build one,
I can supply the RF design information. For 40 meters and down, this would require only a minimal antenna footprint,
local reradiators can be calculated out, and the rf and processing hardware would be surprisingly simple. I would be
happy to collaborate with anyone seriously interested in constructing one, but you better be ready to convince me you
can do high level programming. And based on previous designs, expect to invest about 4,000 hours in programming.

--
Crazy George
The attglobal.net address is a SPAM trap. Please change that part to: att<dot>biz properly formatted.

2753. Re: HF Direction Finding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 02:53:33 UTC
From: munterlap@hotmail.com
Message-ID: <cvbifp$o36$1@news7.svr.pol.co.uk>
Source record: 81692

And your problem is?

we ain't got one,,, we won!
So I hear?

2754. Re: Stacking 5/8th-wave 2-meter elements x4

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 03:01:33 UTC
From: richardharrison@webtv.net
Message-ID: <13123-42194F0D-306@storefull-3255.bay.webtv.net>
Source record: 81693

Danny, K6MHE wrote:
"I wonder what his 6 dB gain is"

There is a "Super J" antenna on page 16-27 of the 19th edition of the "ARRL Antenna Book". The book says the two stacked 1/2-wave collinear elements provide about 6 dB gain over a 1/4-wave whip antenna and about 3 dB gain over a 5/8-wave antenna.

I won`t speculate that you actually get more gain from (2) stacked 5/8-wave sections, but it`s possible. Maybe 3 dB more, like a single 5/8-wave over a single 1/4-wave.

6 dB over a 1/4-wave whip is 8.14 dBi.
The 1/4-wave whip has a gain of 2.14 dBi

Best regards, Richard Harrison, KB5WZI

2755. Re: portable HF antenna for the FT-817

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 04:22:08 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <QldSd.7353$x53.7071@newsread3.news.atl.earthlink.net>
Source record: 81694

> Good luck and have fun. Hope to see you on the HFPack frequencies.
>
> Buck
> N4PGW

What are those freqs?

John

2756. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 04:40:04 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cvbon4jic1@hercules.btinternet.com>
Source record: 81695

> How do the battles to contain muslims then differ from now?
>
==========

They didn't have oil-wells and pipe lines in those days.

And they still don't have any weapons of mass destruction.

Reg.

2757. Re: F to B and F to rear

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 05:57:02 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <gq9oe2-e44.ln1@p400bob.lse.com.au>
Source record: 81697

Hi Art

In my experience (or maybe its just anecdotal) F/B ratios are very
frequency dependent for high dB numbers. You might for example get 28dB
F/B on 14.100 but it may drop to 15dB 100kHz away. The forward gain in
this case doesnt change much at all. How would you then advertise this
except by a graph?

Keep in mind also that F/B is expressed in a specific direction. 5-10
degrees off that and you will see the numbers fall off.

Max F/B rarely occurs at max forward gain...

Front to side is also good for attenuating signals you dont want.
(Assuming horiz polarisation)

If I was tackling this as a project I'd start defining some parameters
like 3dB beamwidth and the maximum unwanted lobe figures. Then plug it
into a modeling program (like 4nec2) I havent played much with modelling
but I assume that the optimising tools could do the trial and error
calcs for you. You are aiming for an antenna with moderate forward gain
but as low as possible radiation/reception in other directions..

In fact if you havent tried modelling it is well worth it just to see
the effect on the patterns.

You can also tune a (yagi/quad) reflector remotely if you want to peak
the F/B

Probably not what you were after sorry...

Cheers Bob VK2YQA (In Oz...)

aunwin@insightbb.com wrote:
> Regarding antenners, thats right,antennas.
> Plenty of listings for various gains achieved with antennas
> but I have not seen any similar listings for F/R and F/B.
> Is there any around so I can see what can be or has been attained or
> is blocking of rear signals of little consequence for todays hams. I can see
> that being true
> for when the band has just opened and propagation has not opened to the rear
> or
> with net operations so perhaps gain is every thing after all.
> It is my opinion that if interest/efforts are increased first in deflecting
> the rear action to the
> front first and thereby INCREASING the front lobe width there will be more
> opportunities

> for increasing gains without the side lobes and narrow forward lobes that
> accompany Yagi's.
> as well as shorter booms. (more deflectors/reflectors perhaps)
> (no religeous, porno or genocide preaching please, fighting to see which is
> best
> could take place on boat anchor nets to see which has taken position of the
> lowest level)
> Regards
> Art
>
>

2758. 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 06:09:15 UTC
From: yahdjt@bigfoot.com
Message-ID: <ac89760f.0502202209.e0bb47e@posting.google.com>
Source record: 81696
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Hi
I am building an rf transmitter for a short range data link at 433MHZ
and am almost done, but I would like to understand better exactly what
I am seeing with regard to antenna performance.

All technical notes I have read recommend a 1/4 wave whip over ground
plane as offering the best performance, statements like: "Best range
is achieved with either a straight piece of wire, rod or PCB track @
1/4 wavelength over a ground plane", I understand many factors effect
performance however I have found that a "bent" 1/2 wavelength length
of wire offers better performance.

If I use a 1/4 wavelength I need (due to case requirements) to have
two 90 degree bends in it (feed -> up, across, up).
If I use a 1/2 wavelength I need to run it once around the (plastic)
case (feed -> up, around the case, up).

I hope this makes some sense, anyway I have found the 1/2 wave is less
effected by polarisation and offers generally better performance.
However while more ground plane may help a 1/4 wave it seems to hinder
the 1/2 wave, I guess because it shields the loop around the case?

Regards

2759. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 08:07:06 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <421996ab$0$19163$cc9e4d1f@news-text.dial.pipex.com>
Source record: 81703
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Nug" <yahdjt@bigfoot.com> wrote in message
news:ac89760f.0502202209.e0bb47e@posting.google.com...
> Hi
> I am building an rf transmitter for a short range data link at 433MHZ
> and am almost done, but I would like to understand better exactly what
> I am seeing with regard to antenna performance.
>
> All technical notes I have read recommend a 1/4 wave whip over ground
> plane as offering the best performance, statements like: "Best range
> is achieved with either a straight piece of wire, rod or PCB track @
> 1/4 wavelength over a ground plane", I understand many factors effect
> performance however I have found that a "bent" 1/2 wavelength length
> of wire offers better performance.
>
> If I use a 1/4 wavelength I need (due to case requirements) to have
> two 90 degree bends in it (feed -> up, across, up).
> If I use a 1/2 wavelength I need to run it once around the (plastic)
> case (feed -> up, around the case, up).
>
> I hope this makes some sense, anyway I have found the 1/2 wave is less
> effected by polarisation and offers generally better performance.
> However while more ground plane may help a 1/4 wave it seems to hinder
> the 1/2 wave, I guess because it shields the loop around the case?

A 1/4 wavelength antenna really needs to be straight and at right angles to
the ground plane. That is probably why the 1/2 wavelength antenna works
better in your case.

Leon
--
Leon Heller, G1HSM
http://www.geocities.com/leon_heller

2760. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 09:12:51 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <j9loe2-u86.ln1@p400bob.lse.com.au>
Source record: 81700
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

I would make the grandiose statement that since you are bending the wire
it no longer exhibits the performance of a "standard" 1/4 or 1/2 wave
antenna. I would suggest that if you indeed made a 1/4 wave GP that
protruded from the box surface (with a suitable counterpoise) it would
outperform the 1/2 wave bent one..

Assuming you have to put the antenna inside the box or wrapped around it
I suggest you look into tuning it with some C and/or L. In that case you
would construct the antenna to fit your case parameters and adjust the
matching for best radiation. Keep in mind that the C/L tuning components
could be lengths of coax and open feeder/wire. (because of the high
operating freq)

Cheers Bob VK2YQA (Sydney Australia)

Nug wrote:
> Hi
> I am building an rf transmitter for a short range data link at 433MHZ
> and am almost done, but I would like to understand better exactly what
> I am seeing with regard to antenna performance.
>
> All technical notes I have read recommend a 1/4 wave whip over ground
> plane as offering the best performance, statements like: "Best range
> is achieved with either a straight piece of wire, rod or PCB track @
> 1/4 wavelength over a ground plane", I understand many factors effect
> performance however I have found that a "bent" 1/2 wavelength length
> of wire offers better performance.
>
> If I use a 1/4 wavelength I need (due to case requirements) to have
> two 90 degree bends in it (feed -> up, across, up).
> If I use a 1/2 wavelength I need to run it once around the (plastic)
> case (feed -> up, around the case, up).
>
> I hope this makes some sense, anyway I have found the 1/2 wave is less
> effected by polarisation and offers generally better performance.
> However while more ground plane may help a 1/4 wave it seems to hinder
> the 1/2 wave, I guess because it shields the loop around the case?
>
> Regards

2761. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 09:37:26 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.02.21.09.37.28.898926@example.net>
Source record: 81701
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Sun, 20 Feb 2005 22:09:15 -0800, Nug wrote:

> Hi
> I am building an rf transmitter for a short range data link at 433MHZ
> and am almost done, but I would like to understand better exactly what
> I am seeing with regard to antenna performance.
>
> All technical notes I have read recommend a 1/4 wave whip over ground
> plane as offering the best performance, statements like: "Best range
> is achieved with either a straight piece of wire, rod or PCB track @
> 1/4 wavelength over a ground plane", I understand many factors effect
> performance however I have found that a "bent" 1/2 wavelength length
> of wire offers better performance.
>
> If I use a 1/4 wavelength I need (due to case requirements) to have
> two 90 degree bends in it (feed -> up, across, up).
> If I use a 1/2 wavelength I need to run it once around the (plastic)
> case (feed -> up, around the case, up).
>
> I hope this makes some sense, anyway I have found the 1/2 wave is less
> effected by polarisation and offers generally better performance.
> However while more ground plane may help a 1/4 wave it seems to hinder
> the 1/2 wave, I guess because it shields the loop around the case?
>

A 1/4 wave antenna will match to a low impedance, unbalanced. A 1/2 wave
dipole will match to a low impedance, balanced. A 1/2 wave piece of wire
fed at the end will match to a high impedance.

What kind of circuit are you using for your output?

Thanks,
Rich

2762. Re: F to B and F to rear

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 11:53:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <111jiumpu6mhk0d@corp.supernews.com>
Source record: 81706

It should also be mentioned that the front/back ratio is different at various elevation angles. You won't get the free-space f/b ratio in practice at most elevation angles. This is easily seen with modeling software.

Good nulls also depend on a precise balance of strong fields, which all have to be just right in order to add to zero. If any of the various fields is just a little off, the null won't be what you expect -- it'll be shallower and/or in a different direction. It takes only a small difference to change the depth of a deep null by 20 dB or more. That means you can't expect deep nulls to be exactly what a computer program or other calculations predict, because there will inevitably be small differences between the model and the real antenna. Or, for that matter, from one antenna to the next one of the same type, even when built as close to exactly the same as possible. You have the best chance of achieving deep and repeatble nulls with the simplest antennas, like a carefully built and balanced small loop. The larger the number of elements, the larger the number of fields which all have to add together to a value of zero, and the more opportunity there is for variation.

Roy Lewallen, W7EL

Bob Bob wrote:
> Hi Art
>
> In my experience (or maybe its just anecdotal) F/B ratios are very
> frequency dependent for high dB numbers. You might for example get 28dB
> F/B on 14.100 but it may drop to 15dB 100kHz away. The forward gain in
> this case doesnt change much at all. How would you then advertise this
> except by a graph?
>
> Keep in mind also that F/B is expressed in a specific direction. 5-10
> degrees off that and you will see the numbers fall off.
>
> Max F/B rarely occurs at max forward gain...
>
> Front to side is also good for attenuating signals you dont want.
> (Assuming horiz polarisation)
>
> If I was tackling this as a project I'd start defining some parameters
> like 3dB beamwidth and the maximum unwanted lobe figures. Then plug it
> into a modeling program (like 4nec2) I havent played much with modelling
> but I assume that the optimising tools could do the trial and error
> calcs for you. You are aiming for an antenna with moderate forward gain
> but as low as possible radiation/reception in other directions..

>
> In fact if you havent tried modelling it is well worth it just to see
> the effect on the patterns.
>
> You can also tune a (yagi/quad) reflector remotely if you want to peak
> the F/B
>
> Probably not what you were after sorry...
>
> Cheers Bob VK2YQA (In Oz...)
>
>
> aunwin@insightbb.com wrote:
>
>> Regarding antenners, thats right,antennas.
>> Plenty of listings for various gains achieved with antennas
>> but I have not seen any similar listings for F/R and F/B.
>> Is there any around so I can see what can be or has been attained or
>> is blocking of rear signals of little consequence for todays hams. I
>> can see that being true
>> for when the band has just opened and propagation has not opened to
>> the rear or
>> with net operations so perhaps gain is every thing after all.
>> It is my opinion that if interest/efforts are increased first in
>> deflecting the rear action to the
>> front first and thereby INCREASING the front lobe width there will be
>> more opportunities
>> for increasing gains without the side lobes and narrow forward lobes
>> that accompany Yagi's.
>> as well as shorter booms. (more deflectors/reflectors perhaps)
>> (no religeous, porno or genocide preaching please, fighting to see
>> which is best
>> could take place on boat anchor nets to see which has taken position
>> of the lowest level)
>> Regards
>> Art
>>

2763. Re: vert antenna construction

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 11:55:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <111jj24aoneoqb1@corp.supernews.com>
Source record: 81704

It's not clear to me how you correlate how warm something gets in the microwave oven with how much loss it'll incur at the end of an HF antenna. Maybe someone can explain this.

Roy Lewallen, W7EL

nm5k@wt.net wrote:
> I'd also add a glass of water in the microwave when you do
> that...I'm not sure if they are still that way, but it used
> to be bad for them to run with no load...IE: food...MK
>

2764. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 14:13:43 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4219ed5d$1_2@127.0.0.1>
Source record: 81698

Jack Painter wrote:
> ... the Lord Jesus Christ, the one and only Savior.

If we had a sample of Jesus' DNA to analyze,
what secrets do you think it would reveal?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

2765. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 14:37:26 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37ua7gF5hvm9kU1@individual.net>
Source record: 81705

That Joseph shagged Mary out of wedlock, and a large part
of the Western World were shown to be gullible fools by swallowing
the excuse that was hurriedly thought up?

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:4219ed5d$1_2@127.0.0.1...
> Jack Painter wrote:
> > ... the Lord Jesus Christ, the one and only Savior.
>
> If we had a sample of Jesus' DNA to analyze,
> what secrets do you think it would reveal?

2766. DPDT Coax Switch (sort of)?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 14:46:22 UTC
From: "William M. Bickley" <bickley@dmv.com>
Message-ID: <111jt1opv69ppc2@corp.supernews.com>
Source record: 81699
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Does anyone know of a source for a switch which accepts two incoming PL-259's (A/B) and spits out either A/B or B/A, depending on switch setting. The object is to switch the feedpoints of a rhombic antenna from one end to the other. The two "incoming" lines to the switch are from either end of the rhombic. The two outgoing (from the switch) go to a dummy load and the tuner/transceiver.

TIA.

Bill W2ET

2767. Re: Mobile HF antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 15:17:12 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <HTmSd.2933$Q47.2467@bignews5.bellsouth.net>
Source record: 81702

"Joe S." <nobody@nowhere.net> wrote in message
news:cv3k9202ggm@news4.newsguy.com...
>I am considering purchasing a Yaseu FT-857 with the associated FC-40
>antenna
> tuner and YA-007 8-ft whip for HF mobile use.
>
> What is your experience with:
> -- the FT-857
> -- the FC-40 and YA-007 combination
> -- other mobile antennas
>
> Thanks.
>
>
> --
>
> -----
> Joe
> W4HH

Joe,

Your best bet is the screwdriver antenna for mobile work. In addition to its ability to cover ALL frequencies, it is more efficient than most all others. A tuner is a bad choice because it doesn't "tune" the antenna. No matter what you do, you will still have a non-resonant radiator sticking up there. The tuner will probably do fine from 10M down to 20M, but it will fall flat on its face on 40 and 80M. JMHO, but if I'm going to spend $200+ for an antenna system, I would want the best-performing antenna system I can get for the money. Tuner/whip combos fall near the bottom of the heap; even the dreaded hamstick (dummy load on a stick) outperforms a tuner on 40/80 Meters.

73

Jerry
K4KWH
>
>

2768. Re: Stacking 5/8th-wave 2-meter elements x4

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 15:20:00 UTC
From: nm5k@wt.net
Message-ID: <1108999200.579321.283420@o13g2000cwo.googlegroups.com>
Source record: 81707

6 dB over a 1/4-wave whip is 8.14 dBi.
The 1/4-wave whip has a gain of 2.14 dBi ....

The half wave vertical should have that 2.14 dbi gain.
A 1/4 wave ground plane should show about .3 db less...
Or when modeled anyway....

In general, a properly designed dual 5/8 collinear should
have appx 5.1 dbi gain. Or appx 3 dbd.... And yes, that
is slightly more than the dual 1/2 collinear should do.
If a single half wave shows 2.15 dbi, I wonder how adding
a second element can add another 3.85 db gain...???
Myself, I think their gain numbers are a little happy...
Also, in that super J article, the 1/4 wave and 5/8's they
compare to are mobile whips...This would greatly skew any
comparisons with the super J, being it's not a mobile antenna.
IE: make it look better than it really is...
An average elevated 1/4 GP will show appx
1.8 dbi or so...Only about .3 db difference from a 1/2 wave
that is elevated.
Of course, in the real world, the results can vary greatly
due to decoupling, or the lack of, etc...
I'd have to check/model the gain of the super J, but I'm
almost sure it would be less than 5.1 dbi...I'll take a wild
guess and say maybe .6 db less??? MK

2769. Re: DPDT Coax Switch (sort of)?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 15:30:35 UTC
From: dt <SPAMMENOT@HOTMAIL.COM>
Message-ID: <vivj11dmbbforok8frea25e81tvff1s4ld@4ax.com>
Source record: 81622

Waters made a DPDT coax switch, typically used to bypass an amplifier.
Sorry, don't remember the model #. They can be found FS and FA at the
typical places.
GL es 73
Dan (K0DAN)

On Mon, 21 Feb 2005 09:46:22 -0500, "William M. Bickley"
<bickley@dmv.com> wrote:

>Does anyone know of a source for a switch which accepts two incoming
>PL-259's (A/B) and spits out either A/B or B/A, depending on switch setting.
>The object is to switch the feedpoints of a rhombic antenna from one end to
>the other. The two "incoming" lines to the switch are from either end of
>the rhombic. The two outgoing (from the switch) go to a dummy load and the
>tuner/transceiver.
>
>TIA.
>
>Bill W2ET
>

2770. Re: portable HF antenna for the FT-817

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 15:39:45 UTC
From: nm5k@wt.net
Message-ID: <1109000385.013410.264020@c13g2000cwb.googlegroups.com>
Source record: 81712

You are not going to work all bands portable very well,
unless you are not so portable...IE: the best overall
single antenna for 40-10 would be a 40 meter dipole fed
with ladder line to a tuner.
But you have to drag a tuner around...
Add 80m? Make that a 80m dipole...VHF/UHF? Add a dual
band antenna for those....Again, less portable...
I guess it depends how portable you really wanna be...
I assume that is sort of a backpack rig...
If I were toting a backpack rig, I decide on what bands
I wanted, "within reason", and concentrate on those...
Probably the lightest dipole to cover all bands would
be a 80 dipole, that has insulators to break up the
antenna for all the higher bands..You would have to
manually change jumpers to switch bands, but the antenna
would be very efficient on each band. You could feed it
with rg-58 to save weight. That can be rolled up and
thrown into a pack no problem.
Of course, you would need some trees to throw
it over, or string it between...Myself, I'd be avoiding
verticals running portable QRP...You don't have time to
lay out radials, etc, to avoid ground losses...
For VHF/UHF, hummm, maybe some kind of roll up dual
band J pole or something...??? It's hard to say,
without knowing what level of "portable" you will be...
IE: my level of portable is sitting in/beside a truck,
with the various available facilities I have with it...
IE: I have drive on mast ramps,masts, etc, etc...
I can put up a VHF GP at 20 ft, piece of cake...
If you are packing it, you won't have all that...
I'd keep it simple and low loss being you are QRP...
MK

2771. Re: vert antenna construction

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 15:40:19 UTC
From: Buck <iam@this.site>
Message-ID: <eovj119fdn6dkpeuu87q1hmusdu9l5r6a0@4ax.com>
Source record: 81710

On Mon, 21 Feb 2005 03:55:43 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>It's not clear to me how you correlate how warm something gets in the
>microwave oven with how much loss it'll incur at the end of an HF
>antenna. Maybe someone can explain this.
>
>Roy Lewallen, W7EL

The microwave works with RF to heat the 'food'. If an object absorbs
RF, it does so as heat, therefore, if you subject it to intense RF by
using a microwave oven, it will heat up. If it heats up, it is
affecting the antenna's radiation.

Depending on how it is connected to the antenna and type of antenna,
it may not make a noticeable difference on the signal, but in many
cases, especially where the wire is running along with or inside of a
material such as PVC, the material may have a detrimental impact on
the signal or SWR.

Not being aware of this a long time ago, I built a two meter half-wave
vertical dipole by dropping a line of wire into a piece of CPVC and
capping it off. My mobile 5/8 wave whip on the car, twelve feet below
it, using the same rig has much much better reception and signal than
the dipole. I plan to replace that antenna with a similar dipole using
1/2 inch copper tubing.

When I nuke the cpvc for one minute, it gets warm to the touch. I
don't expect to melt it using my 706, but I do have a couple of
repeaters I can't hear from that antenna that I would like to reach.

73 for now
Buck
N4PGW

--
73 for now
Buck
N4PGW

2772. Re: portable HF antenna for the FT-817

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 15:42:41 UTC
From: Buck <iam@this.site>
Message-ID: <ka0k111h6jan1csvo0i0iiovsui2dqkku3@4ax.com>
Source record: 81718

On Mon, 21 Feb 2005 04:22:08 GMT, "John Franklin"
<jpfrank@peoplepc.com> wrote:

>> Good luck and have fun. Hope to see you on the HFPack frequencies.
>>
>> Buck
>> N4PGW
>
> What are those freqs?
>
>
>John

OOPS, I apologize. I must have been in a hurry.

http://www.qsl.net/hfpack/freq.html

73

--
73 for now
Buck
N4PGW

2773. Re: Icom AH-4 mobile users: radiating element?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 15:48:57 UTC
From: nm5k@wt.net
Message-ID: <1109000937.512173.200100@l41g2000cwc.googlegroups.com>
Source record: 81623
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Hamsticks have a nasty characteristic. A 75m Hamstick is
self-resonant before it gets to 40m. A 40m Hamstick is
self-resonant (~9 MHz) before it gets to 30m. Self-resonance
is the frequency at which the inductive reactance equals the
stray capacitive reactance and results in heavy losses. I
don't know the self-resonant frequency for a 30m Hamstick
but I'll bet it's lower than 14 MHz. ....

Yea, you never want to use a low band stick, for upper
bands...Those sticks *must* have a decent stinger whip
to do any good. No capacitance, no worky....
But using a upper band stick on lower bands, by adding
more stinger works great. The antenna gets better and
better, as you drop bands, and add stinger length...
IE: a 10m stick tuned to 20m, by adding 2 more ft of
stinger works very well. Better on 20, than 10, if the
stinger on 10m, is a short stub..
Ditto for 20 to 40, etc...
When I ran a 6 ft 20m stick on 40m, using a 5 ft
stinger, that antenna was nearly as good as the
average bugcatcher. No joke. It kicked butt...
But that stick had the coil windings at the top, and
not evenly wound over the whole height, so current
distribution was real good. Much like a lumped coil
antenna. Just a thinner coil....MK

2774. Re: vert antenna construction

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 15:50:00 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <421a02d7.7825782@news.crosslink.net>
Source record: 81715

On Mon, 21 Feb 2005 03:55:43 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>It's not clear to me how you correlate how warm something gets in the
>microwave oven with how much loss it'll incur at the end of an HF
>antenna. Maybe someone can explain this.
>

Dear Roy,
Perhaps that is not the objective, Roy - maybe the rationale' is
simply to decide whether or not a particular sample of material is a
"high loss" dielectric or not.

Regards,

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

2775. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 15:52:57 UTC
From: kensmith@green.rahul.net
Message-ID: <cvd04p$q0b$1@blue.rahul.net>
Source record: 81713
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <ac89760f.0502202209.e0bb47e@posting.google.com>,
Nug <yahdjt@bigfoot.com> wrote:
>Hi
>I am building an rf transmitter for a short range data link at 433MHZ
>and am almost done, but I would like to understand better exactly what
>I am seeing with regard to antenna performance.

[.. 1/4 wave and 1/2 wave ...]

An antenna looks like an LC tuned circuit loaded by the radiation resistance. Your output stage has some impedance that correctly matches to it (there are exceptions we will ignore) and it is this impedance you want the antenna system to have. When the correct matching is done, the antenna works as an impedance mathcing network that matches the output stages impedance to the radiation resistance.

The normal (90 degrees to) 1/4 wave whip over a ground plane is one half of a dipole that is 1/2 wave length. The ground plane operates like a mirror. The electrostatic lines of force follow the same path with the mirroring as they would if the other 1/2 of the dipole was there. This lets you use a smaller (1/4 wave) antenna to get the same effect as the 1/2 wave.

In your case, you are not using a whip antenna. If I've read what you wrote correctly, the antenna spends more of its length parallel to the surface of the PCB than it does running 90 degrees away from it. You have some circuit with a ground plane and a limitted sized box to work with, so the mechanical shape is constained by the box and not the ideal electronics.

Since the box is small: If you have the equipment to do so, I suggest you measure (estimate) the impedance of the longest single loop of wire that will fit within the case. ie: connect to both ends. You have to have the electronics PCB in the case when you do this. If you are very lucky, its impedance will not be too hard to match to the output stage.

--
--
kensmith@rahul.net forging knowledge

2776. Re: portable HF antenna for the FT-817

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 15:55:34 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <WvnSd.7585$x53.5748@newsread3.news.atl.earthlink.net>
Source record: 81708

Cool!! I will try to make some contacts on these freqs. Where abouts in 4
land are you located? I am in middle Tenn.

73,
WB7FFI

> http://www.qsl.net/hfpack/freq.html

2777. Re: portable HF antenna for the FT-817

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 15:59:55 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <%znSd.7589$x53.71@newsread3.news.atl.earthlink.net>
Source record: 81711

<nm5k@wt.net> wrote in message
news:1109000385.013410.264020@c13g2000cwb.googlegroups.com...
> I guess it depends how portable you really wanna be...
> I assume that is sort of a backpack rig...
> If I were toting a backpack rig, I decide on what bands
> I wanted, "within reason", and concentrate on those...

You aren't familiar with the FT-817? Only the neatest little 5
watt rig to ever come out. That is MY opinion of course. All mode 160 thru
70 CM, I have had more fun with this rig than any others I have ever owned.

73,
WB7FFI

2778. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 16:13:22 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421a0a5c$1_1@127.0.0.1>
Source record: 81720

Airy R.Bean wrote:
> That Joseph shagged Mary out of wedlock, and a large part
> of the Western World were shown to be gullible fools by swallowing
> the excuse that was hurriedly thought up?

Angels using artificial insemmination? Does Jehovah
possess DNA?

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

2779. Re: DPDT Coax Switch (sort of)?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 16:19:07 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <32vj115u41mahsnbgastu1u9csocieru15@4ax.com>
Source record: 81716
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Mon, 21 Feb 2005 09:46:22 -0500, "William M. Bickley"
<bickley@dmv.com> wrote:

>Does anyone know of a source for a switch which accepts two incoming
>PL-259's (A/B) and spits out either A/B or B/A, depending on switch setting.
>The object is to switch the feedpoints of a rhombic antenna from one end to
>the other. The two "incoming" lines to the switch are from either end of
>the rhombic. The two outgoing (from the switch) go to a dummy load and the
>tuner/transceiver.

What you are looking for is called a "transfer switch". You may want
to look for a surplus one. Transco made such a thing, both as relays
and as motor-driven switches.

None of these will be found with SO-239's tho.

2780. Re: DPDT Coax Switch (sort of)?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 16:29:31 UTC
From: Crazy George <munsch@atglobal.net>
Message-ID: <421a0fb6_3@news1.prserv.net>
Source record: 81709
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Bill:

Some many years ago I needed such a switch for some experiments on 2 meters. Since it was the weekend and I was in a
hurry, I took one of the old A. H. & H. DPDT toggle switches, some bus wire and 4 N connectors and made one with leads
as short as I could make them. It is still in use, and makes a surprisingly small impedance bump in the line. I
suspect at HF, it would be invisible.

--
Crazy George
The attglobal.net address is a SPAM trap. Please change that part to: att<dot>biz properly formatted.
"William M. Bickley" <bickley@dmv.com> wrote in message
news:111jt1opv69ppc2@corp.supernews.com...
> Does anyone know of a source for a switch which accepts two incoming
> PL-259's (A/B) and spits out either A/B or B/A, depending on switch setting.
> The object is to switch the feedpoints of a rhombic antenna from one end to
> the other. The two "incoming" lines to the switch are from either end of
> the rhombic. The two outgoing (from the switch) go to a dummy load and the
> tuner/transceiver.
>
> TIA.
>
> Bill W2ET
>
>

2781. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 16:50:07 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <37ui0uF5hbf50U1@individual.net>
Source record: 81717

Angels haven't been seen since we started educating everybody
in the scientific method.

Strange that.

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:421a0a5c$1_1@127.0.0.1...
> Airy R.Bean wrote:
> > That Joseph shagged Mary out of wedlock, and a large part
> > of the Western World were shown to be gullible fools by swallowing
> > the excuse that was hurriedly thought up?
> Angels using artificial insemmination? Does Jehovah
> possess DNA?

2782. Re: DPDT Coax Switch (sort of)?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 16:54:42 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <KI2dndDLtfOgj4ffRVn-2g@comcast.com>
Source record: 81714
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

"Crazy George" <munsch@atglobal.net> wrote in message
news:421a0fb6_3@news1.prserv.net...
> Bill:
>
> Some many years ago I needed such a switch for some experiments on 2
> meters. Since it was the weekend and I was in a
> hurry, I took one of the old A. H. & H. DPDT toggle switches, some bus
> wire and 4 N connectors and made one with leads
> as short as I could make them. It is still in use, and makes a
> surprisingly small impedance bump in the line. I
> suspect at HF, it would be invisible.
>
> --
> Crazy George

That will work. If you are running high power, you may also want to consider
a wide spaced rotary wafer switch.

Tam/WB2TT

> The attglobal.net address is a SPAM trap. Please change that part to:
> att<dot>biz properly formatted.
> "William M. Bickley" <bickley@dmv.com> wrote in message
> news:111jt1opv69ppc2@corp.supernews.com...
>> Does anyone know of a source for a switch which accepts two incoming
>> PL-259's (A/B) and spits out either A/B or B/A, depending on switch
>> setting.
>> The object is to switch the feedpoints of a rhombic antenna from one end
>> to
>> the other. The two "incoming" lines to the switch are from either end of
>> the rhombic. The two outgoing (from the switch) go to a dummy load and
>> the
>> tuner/transceiver.
>>
>> TIA.
>>
>> Bill W2ET
>>
>>
>
>

2783. Re: F to B and F to rear

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 17:10:00 UTC
From: "aunwin@insightbb.com"
Message-ID: <IBoSd.14602$kS6.6740@attbi_s52>
Source record: 81719

Roy allow me to be a bit more directive regarding my pursuit.
I am trying to see what methods that can be used for maximum gain.
Having made many a long boom yagi 80 feet and 13 elements I have
come to the cinclusion that thinking must move away from Yagi's.
If one starts with a balloon squeezed in the center we get the figure 8
pattern.
I think we all can agree on that
My logic is that we must find a way to move all the volume at the rear to
the front thus increasing
the front diameter before we begin to massage it. The present thinking is
one sqeeze at the rear
is the best that one can do. It is here that I part company with the norm.
If we move all the volume to the front then talk of gain/boom length becomes
moot.
There are other points that I am not happy with regarding antennas in that
if we have reprocity
how is it that radio rays can arrive at angles as low as 3 degrees?
Deflection of radio waves jump right out at you
I model quite a bit but models tend to follow the input thinking so I
intentially put Yagis aside and mainly revolve around close coupling and
clustering of elements
but at the same time I am interested in what
aproaches have been made with the yagi in removing the rear volume as it
were.
I am aware that antennas have been studied to death over the years but it is
my belief
that all these studies started around yagi phillosophy which made them all
interdependent.
I believe I have arrived at a turning point in my quest and should know in a
few days
when the weather has cleared up.and I can get on the air for trials.
There we have it , no deviation from antennas just one hams thinking

who is loathe to follow others.
Regards
Art

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:111jiumpu6mhk0d@corp.supernews.com...
> It should also be mentioned that the front/back ratio is different at
snip

2784. Just say NO to Bin Ladin!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 17:43:20 UTC
From: angelonmyshoulder61@yahoo.com
Message-ID: <1109007800.509090.313890@z14g2000cwz.googlegroups.com>
Source record: 81721

Hi all I am helping a friend promote a web site. You see a childhood friend of hers lost her husband at the World Trade Center on Sept. 11, 2001. She has run into some hard times and my freind wants to help her. So she came up with the idea to market Just say NO to Bin Ladin dartboards and punching bag covers. Not only is she going to donate part of the proceeds to her freind but an additional part of the proceeds will go to the Firemans Fund. If you could take the time to check out the web site it would be much appreciated!! The web site addy is:

http://www.angelonmyshoulder.4t.com

Thanks so much everyone!!

2785. Re: vert antenna construction

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 17:44:46 UTC
From: richardharrison@webtv.net
Message-ID: <24492-421A1E0E-436@storefull-3253.bay.webtv.net>
Source record: 81624

Bob, W9DMK wrote:
"-maybe the rationale is simply to decide whether or not a particular sample of material is a "high loss" or not."

I think that`s it. The properties of dielectrics are functions of temperature and frequency. My CRC Handbook of Chemistry and Physics shows PVC`s dielectric constant is definitely a function of frequency, unlike polystyrene and some other pastics.

I`ve seen PVC used as a base insulator for vertical elements of a HF antenna array, and it worked OK.

I think low power factor and dissipation are desirable for an insulator. My 1987 edition of the ARRL Handbook has a table 47 on pages 35-36 and 35-37 titled "Properties of Common Thermoplastics. Maybe later editions have expanded tables.

Best regards, Richard Harrison, KB5WZI

2786. Re: portable HF antenna for the FT-817

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 18:23:43 UTC
From: Buck <iam@this.site>
Message-ID: <pf9k11plkseectq7r5vaf9ej97tlefifon@4ax.com>
Source record: 81625

On Mon, 21 Feb 2005 15:55:34 GMT, "John Franklin"
<jpfrank@peoplepc.com> wrote:

> Cool!! I will try to make some contacts on these freqs. Where abouts in 4
>land are you located? I am in middle Tenn.
>
>73,
>WB7FFI
>
>> http://www.qsl.net/hfpack/freq.html
>
I am in Augusta. There is also an HFPack and HFNow reflector that is
for discussing backpacking and QRP or telling each other when someone
is on the air and where. Every once in a while I find a frequency and
send a message to HFNow to say I am there and try to make qsos. You
don't have to be QRP or backpack, but the QRP ops love to try to make
contact when someone announces when and where they are. They know
someone is listening for them.

i haven't been very successful just calling CQ HFPack QRP from those
frequencies unless I announce it first. But there are is a fine group
of people from around the world that love QRP.

Go to Yahoo Groups and search for HFPack, HFNow, and QRP. I am
subscribed to several of them.

72 for now.

(72 is a little less than 73, just as a QRP is a little less power) :)

Buck
N4PGW

--
73 for now
Buck
N4PGW

2787. Re: F to B and F to rear

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 18:26:18 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <111k9ue7pk3a19f@corp.supernews.com>
Source record: 81626

Art, all you need to do in order to convince me is to produce
quantitative evidence that supports your theories.

Roy Lewallen, W7EL

aunwin@insightbb.com wrote:
> Roy allow me to be a bit more directive regarding my pursuit.
> I am trying to see what methods that can be used for maximum gain.
> Having made many a long boom yagi 80 feet and 13 elements I have
> come to the cinclusion that thinking must move away from Yagi's.
> If one starts with a balloon squeezed in the center we get the figure 8
> pattern.
> I think we all can agree on that
> My logic is that we must find a way to move all the volume at the rear to
> the front thus increasing
> the front diameter before we begin to massage it. The present thinking is
> one sqeeze at the rear
> is the best that one can do. It is here that I part company with the norm.
> If we move all the volume to the front then talk of gain/boom length becomes
> moot.
> There are other points that I am not happy with regarding antennas in that
> if we have reprocity
> how is it that radio rays can arrive at angles as low as 3 degrees?
> Deflection of radio waves jump right out at you
> I model quite a bit but models tend to follow the input thinking so I
> intentially put Yagis aside and mainly revolve around close coupling and
> clustering of elements
> but at the same time I am interested in what
> aproaches have been made with the yagi in removing the rear volume as it
> were.
> I am aware that antennas have been studied to death over the years but it is
> my belief
> that all these studies started around yagi phillosophy which made them all
> interdependent.
> I believe I have arrived at a turning point in my quest and should know in a
> few days
> when the weather has cleared up.and I can get on the air for trials.
> There we have it , no deviation from antennas just one hams thinking
>
> who is loathe to follow others.
> Regards
> Art
>
>
>

> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:111jiumpu6mhk0d@corp.supernews.com...
>
>>It should also be mentioned that the front/back ratio is different at
>
> snip
>
>

2788. Re: vert antenna construction

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 18:30:57 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <111ka765qqc7lc4@corp.supernews.com>
Source record: 81627

Buck wrote:
> On Mon, 21 Feb 2005 03:55:43 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
>
>>It's not clear to me how you correlate how warm something gets in the
>>microwave oven with how much loss it'll incur at the end of an HF
>>antenna. Maybe someone can explain this.
>>
>>Roy Lewallen, W7EL
>
>
> The microwave works with RF to heat the 'food'. If an object absorbs
> RF, it does so as heat, therefore, if you subject it to intense RF by
> using a microwave oven, it will heat up. If it heats up, it is
> affecting the antenna's radiation.

No, that's not correct. If you heat up an object in the microwave oven, it indicates that an object of that material, size, and shape absorbs some fraction (how large a fraction, you have no idea) of energy when an intense microwave field is applied. It says nothing about what that object will do when put at the end of an HF antenna, where it isn't exposed to an intense microwave field.

> Depending on how it is connected to the antenna and type of antenna,
> it may not make a noticeable difference on the signal, but in many
> cases, especially where the wire is running along with or inside of a
> material such as PVC, the material may have a detrimental impact on
> the signal or SWR.

Why yes, it might, or it might not. This can be said of any material.

> Not being aware of this a long time ago, I built a two meter half-wave
> vertical dipole by dropping a line of wire into a piece of CPVC and
> capping it off. My mobile 5/8 wave whip on the car, twelve feet below
> it, using the same rig has much much better reception and signal than
> the dipole. I plan to replace that antenna with a similar dipole using
> 1/2 inch copper tubing.
>
> When I nuke the cpvc for one minute, it gets warm to the touch. I
> don't expect to melt it using my 706, but I do have a couple of
> repeaters I can't hear from that antenna that I would like to reach.

That's an interesting anecdode, but it hardly supports the contention that there's a direct correlation between heating in a microwave oven

and detraction of performance of an HF antenna when used as an end insulator.

Roy Lewallen, W7EL

2789. Re: vert antenna construction

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 18:33:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <111kabtahgg4b6e@corp.supernews.com>
Source record: 81629

W9DMK (Robert Lay) wrote:
> On Mon, 21 Feb 2005 03:55:43 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
>
>>It's not clear to me how you correlate how warm something gets in the
>>microwave oven with how much loss it'll incur at the end of an HF
>>antenna. Maybe someone can explain this.
>>
>
>
> Dear Roy,
> Perhaps that is not the objective, Roy - maybe the rationale' is
> simply to decide whether or not a particular sample of material is a
> "high loss" dielectric or not.

Is a material that is "high loss" at microwave frequencies always "high loss" at HF? How "high" does the loss have to be in order to detract from an HF antenna's performance when used as an end insulator? When you put an object in the microwave oven for a minute with a glass of water and the temperature rises 10 degrees C, how "high" is the loss? How "high" is the loss at HF?

Roy Lewallen, W7EL

2790. Re: F to B and F to rear

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 18:33:46 UTC
From: Buck <iam@this.site>
Message-ID: <rv9k11hj9rcjc55cue5mlfqooaamup0jp4@4ax.com>
Source record: 81628

On Mon, 21 Feb 2005 17:10:00 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>Roy allow me to be a bit more directive regarding my pursuit.
>I am trying to see what methods that can be used for maximum gain.
>Having made many a long boom yagi 80 feet and 13 elements I have
>come to the cinclusion that thinking must move away from Yagi's.
>If one starts with a balloon squeezed in the center we get the figure 8
>pattern.
>I think we all can agree on that
>My logic is that we must find a way to move all the volume at the rear to
>the front thus increasing
>the front diameter before we begin to massage it. The present thinking is
>one sqeeze at the rear
>is the best that one can do. It is here that I part company with the norm.
>If we move all the volume to the front then talk of gain/boom length becomes
>moot.

This sounds like a place for the horn antenna similar to what we use
in microwave communications.

You have an interesting approach.

I am sure you have considered this, but how well do the multiple
reflectors work with the yagi? not so much those in line with the
elements as those that form a wall behind the driven element or the
first reflector.

Buck

--
73 for now
Buck
N4PGW

2791. Re: Stacking 5/8th-wave 2-meter elements x4

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 18:43:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <111kavgp4p0j013@corp.supernews.com>
Source record: 81630

nm5k@wt.net wrote:
> 6 dB over a 1/4-wave whip is 8.14 dBi.
> The 1/4-wave whip has a gain of 2.14 dBi ....
>
>
> The half wave vertical should have that 2.14 dbi gain.
> A 1/4 wave ground plane should show about .3 db less...
> Or when modeled anyway....
>. . .

What modeling program are you using that gives those results? A half wave vertical over perfect ground has about 5.15 dBi gain at the horizon. The gain when mounted over real ground has zero dBi gain at the horizon, and much less than 5.15 dBi at any elevation angle above that, with the value depending on the qualit of ground.

>. . .

> If a single half wave shows 2.15 dbi, I wonder how adding
> a second element can add another 3.85 db gain...???
>. . .

A two element array can have more or less than 3 dB gain relative to a single element by means of mutual coupling. The theoretical limit is 6 dB, which would require impossibly low loss and narrow bandwidth, but 4 or 5 is readily achievable in practice. An increase of much over 3 dB does require attention to losses and nearly always results in a pretty narrowbanded antenna. In general, the mutual coupling between collinear elements doesn't favor high gain, and most collinears have gain increase of less than 3 dB for a second element. You can learn more about this topic in Chapter 8 of the _ARRL Antenna Book_.

Roy Lewallen, W7EL

2792. Re: F to B and F to rear

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 18:52:47 UTC
From: "aunwin@insightbb.com"
Message-ID: <36qSd.38140$tl3.25933@attbi_s02>
Source record: 81631

Understood and that is what I am trying to do but I do not want to go thru
the
same rigor remole that happened last time
where I could not open any minds to even start thinking of it
Regards
Art

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:111k9ue7pk3a19f@corp.supernews.com...
> Art, all you need to do in order to convince me is to produce quantitative
> evidence that supports your theories.
>
> Roy Lewallen, W7EL
>
> aunwin@insightbb.com wrote:
>> Roy allow me to be a bit more directive regarding my pursuit.
>> I am trying to see what methods that can be used for maximum gain.
>> Having made many a long boom yagi 80 feet and 13 elements I have
>> come to the cinclusion that thinking must move away from Yagi's.
>> If one starts with a balloon squeezed in the center we get the figure 8
>> pattern.
>> I think we all can agree on that
>> My logic is that we must find a way to move all the volume at the rear to
>> the front thus increasing
>> the front diameter before we begin to massage it. The present thinking is
>> one sqeeze at the rear
>> is the best that one can do. It is here that I part company with the
>> norm.
>> If we move all the volume to the front then talk of gain/boom length
>> becomes moot.
>> There are other points that I am not happy with regarding antennas in
>> that if we have reprocity
>> how is it that radio rays can arrive at angles as low as 3 degrees?
>> Deflection of radio waves jump right out at you
>> I model quite a bit but models tend to follow the input thinking so I
>> intentially put Yagis aside and mainly revolve around close coupling and
>> clustering of elements
>> but at the same time I am interested in what
>> aproaches have been made with the yagi in removing the rear volume as it
>> were.
>> I am aware that antennas have been studied to death over the years but it
>> is my belief
>> that all these studies started around yagi phillosophy which made them
>> all interdependent.

>> I believe I have arrived at a turning point in my quest and should know
>> in a few days
>> when the weather has cleared up.and I can get on the air for trials.
>> There we have it , no deviation from antennas just one hams thinking
>>
>> who is loathe to follow others.
>> Regards
>> Art
>>
>>
>>
>> "Roy Lewallen" <w7el@eznec.com> wrote in message
>> news:111jiumpu6mhk0d@corp.supernews.com...
>>
>>>It should also be mentioned that the front/back ratio is different at
>>
>> snip

2793. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 19:13:04 UTC
From: richardharrison@webtv.net
Message-ID: <18484-421A32C0-165@storefull-3254.bay.webtv.net>
Source record: 81634

Nug wrote:
"I am building an rf transmitter for a short range data link at 433 MHz and am almost done, but I would like to understand better exactly what I am seeing with regard to antenna performance."

Your wavelength is about 0.69 meter or about 2.3 feet. In antennas everything depends on wavelength. If you use a transmitter housing as the ground plane for your antenna, it needs to be a sizeable part of a wavelength or the salient part of your antenna must be longer to compensate for the small ground plane.

If you had an infinite ground plane, a 1/2-wave wire perpendicular to it would produce up to 50% more volts per meter field strength than a 1/4-wave wire perpendicular to the ground plane. It`s not something for nothing. Total radiation is the same in both cases. More of the radiation is perpendicular to the wire in the 1/2-wave and less goes off at some other angle to the wire.

50% more field in some particular direction is realy not very significant in most cases, and there are other consequences of using a 1/2-wave wire instead of a 1/4-wave wire.

An end-driven 1/2-wave wire presents a very high impedance. It is equivalent to a parallel-resonant circuit. It would match a direct connection to a parallel resonant tank circuit perhaps.

An end-driven 1/4-wave wire presents a very low impedance when worked against a ground plane, maybe about 30 ohms.

How well you are able to radiate a signal from a wire is likely to depend on how well it is matched to the transmitter and less about the bends in the wire. In any case the complete antenna must be resonant to eliminate reactance which opposes the signal`s entry into the wire.

For a small transmitter operating at a very short wavelength, the size of the antenna is not onerous and it would be possible to use a center-fed 1/2-wave antenna. Each half would be just a little over a half foot in length. Drivepoint impedance is in the 70-ohm range. Another possibility is a full-wave loop, about 2.3 feet in perimeter with a drivepoint impedance of about 120 ohms.

Performance of all the suggestions is probably about the same. You can find the best by trying them.

Best regards, Richard Harrison, KB5WZI

2794. Re: F to B and F to rear

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 19:20:16 UTC
From: "aunwin@insightbb.com"
Message-ID: <QvqSd.38276$tl3.17207@attbi_s02>
Source record: 81632

The idea of 'reflectors' is perhaps the wrong approach, I prefer the term deflectors
as one sees when rays hit a knife edge. Also close coupling enables elements to
be current heavy and others voltage heavy such that it would appear that a element was doing nothing when in fact it is the link for more current loaded elements
in cluster form. A wall that you suggest can indeed reflect and absorb radio waves but a
wall is beyond my means thus resonance remains a important function of change.
But then close coupling of elements together with the deflection aproach has been
dissed many times over the years with me and always ends in derision of the author
Time will tell but experimentation can be enjoyable especially when a trail of past results
suggests that my rubicon is at hand and close to submission to RADCOM where experimentation is still valued.

Heh, no politics here or religeon so all can join in without fear especially those who are willing
to consider and pursue 'outside of the box' ideas that others distain., in order to gain better
understanding
Regards
Art

"Buck" <iam@this.site> wrote in message
news:rv9k11hj9rcjc55cue5mlfqooaamup0jp4@4ax.com...
> On Mon, 21 Feb 2005 17:10:00 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>>Roy allow me to be a bit more directive regarding my pursuit.
>>I am trying to see what methods that can be used for maximum gain.
>>Having made many a long boom yagi 80 feet and 13 elements I have
>>come to the cinclusion that thinking must move away from Yagi's.
>>If one starts with a balloon squeezed in the center we get the figure 8
>>pattern.
>>I think we all can agree on that
>>My logic is that we must find a way to move all the volume at the rear to
>>the front thus increasing
>>the front diameter before we begin to massage it. The present thinking is
>>one sqeeze at the rear
>>is the best that one can do. It is here that I part company with the norm.

>>If we move all the volume to the front then talk of gain/boom length
>>becomes
>>moot.
>
> This sounds like a place for the horn antenna similar to what we use
> in microwave communications.
>
> You have an interesting approach.
>
> I am sure you have considered this, but how well do the multiple
> reflectors work with the yagi? not so much those in line with the
> elements as those that form a wall behind the driven element or the
> first reflector.

If you look at current flow in a corner reflector antenna you will note
that rear elements individually carry little current! Food for thought
Art

>
> Buck
>
>
>
> --
> 73 for now
> Buck
> N4PGW
>

2795. Re: vert antenna construction

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 19:29:46 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <421a367b.21046373@news.crosslink.net>
Source record: 81633

On Mon, 21 Feb 2005 10:33:29 -0800, Roy Lewallen <w7el@eznec.com>
wrote:
>Is a material that is "high loss" at microwave frequencies always "high
>loss" at HF? How "high" does the loss have to be in order to detract
>from an HF antenna's performance when used as an end insulator? When you
>put an object in the microwave oven for a minute with a glass of water
>and the temperature rises 10 degrees C, how "high" is the loss? How
>"high" is the loss at HF?

You're right, it doesn't even qualify as a SWAG! Hi!

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

2796. Re: F to B and F to rear

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 19:35:19 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <XJqSd.17298$uc.14470@trnddc01>
Source record: 81635

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:p5bSd.33636$tl3.9146@attbi_s02...
> Regarding antenners, thats right,antennas.
> Plenty of listings for various gains achieved with antennas
> but I have not seen any similar listings for F/R and F/B.
> Is there any around so I can see what can be or has been attained or
> is blocking of rear signals of little consequence for todays hams. I can
> see that being true
> for when the band has just opened and propagation has not opened to the
> rear or
> with net operations so perhaps gain is every thing after all.
> It is my opinion that if interest/efforts are increased first in
> deflecting the rear action to the
> front first and thereby INCREASING the front lobe width there will be more
> opportunities
> for increasing gains without the side lobes and narrow forward lobes that
> accompany Yagi's.
> as well as shorter booms. (more deflectors/reflectors perhaps)
> (no religeous, porno or genocide preaching please, fighting to see which
> is best
> could take place on boat anchor nets to see which has taken position of
> the lowest level)
> Regards
> Art
>

Art

Excuse me if I misunderstand your post above. It reads to me that you
have an interest in building an antenna that minimizes "side lobes" to the
rear of the main beam.
In my experience with directional antennas I have not been able to
corelate minimum side lobes with maximum gain.
I'd suggest that the sidelobes will probably never be held lower than the
same level as the forward gain. That is a 20 db gain antenna will have
side lobes no lower than - 20 db with respect to the main lobe. Or, another
way to put it is; there will always be a side lobe that gets up to or above
isotropic level somewhere in the pattern.

I think I'm misreading your post because I read it to say that main lobe
could be increased in width while increasing the antenna sensitivity. That
doesnt make sense, so I guess I'm not understanding.

And, I submit that, with yagis, there is so little energy radiated in the
sidelobes of a 15 db gain Yagi antenna that *all* the sidelobe radiation

redirrected to be included in the main lobe wont add significantly to the Practical Useability of the antenna. I write Practical Useability because I want to distinguish that from scientific exploration of antenna gain, which accounts for fractions of one db.

Jerry

2797. Re: Just say NO to Bin Ladin!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 20:04:59 UTC
From: whoever <whoever@wherever>
Message-ID: <k_2dnTZpwKV_o4ffRVn-vA@centurytel.net>
Source record: 81636

whatascam61@yahoo.com wrote:

> Hi all I am helping a friend promote a web site. You see a childhood
> friend of hers lost her husband at the World Trade Center on Sept. 11,
> 2001. She has run into some hard times and my freind wants to help her.
> So she came up with the idea to market Just say NO to Bin Ladin
> dartboards and punching bag covers. Not only is she going to donate
> part of the proceeds to her freind but an additional part of the
> proceeds will go to the Firemans Fund. If you could take the time to
> check out the web site it would be much appreciated!! The web site addy
> is:
>
> http://www.whatascam.4t.com
>
> Thanks so much everyone!!
>

2798. Re: Stacking 5/8th-wave 2-meter elements x4

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 20:34:48 UTC
From: nm5k@wt.net
Message-ID: <1109018088.779867.158070@l41g2000cwc.googlegroups.com>
Source record: 81637

I was using elnec in that example. But I was using "free space".
I was trying to leave the ground out of it...
Also those models were all elevated at 40 ft at the base.
At that height using real ground/average, it had about 3.8 dbi
at 8 degrees.
In comparison, the 1/4 GP with sloping radials did about 1.8 dbi
free space. Real ground at 40ft, was about 3.0 dbi at 9 degrees.
So about .8 db difference using real ground.

The main reason I was sort of skeptical about the 3.85 db
increase was due to your next to the last statement.
I didn't think the close spacing would give that much gain.
As I quick test, I just tried adding another element above
the original, in that model. I used 2 sources to feed.
With the very close spacing of the two elements, the free
space gain was 3.59 dbi...A tad less than I expected...
The real ground numbers were 5.53 dbi, at 7 degrees.
So almost a perfect 2 db increase in that model over
real ground. As a comparison, with about a 1/2 wave
spacing, I got 7.23 dbi using the same real ground.
About 3.4 db increase...Could probably get more
with a wider spacing...
It's this spacing thing that made me dubious...
I couldn't see 3.85 extra, being the elements were
very close using the stub.

BTW...all the models I had were for 10m, at 40 ft....
MK

2799. Re: F to B and F to rear

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 20:42:35 UTC
From: "aunwin@insightbb.com"
Message-ID: <_IrSd.38654$tl3.18012@attbi_s02>
Source record: 81638

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:XJqSd.17298$uc.14470@trnddc01...
>
>
>
> "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in
> message news:p5bSd.33636$tl3.9146@attbi_s02...
>> Regarding antenners, thats right,antennas.
>> Plenty of listings for various gains achieved with antennas
>> but I have not seen any similar listings for F/R and F/B.
>> Is there any around so I can see what can be or has been attained or
>> is blocking of rear signals of little consequence for todays hams. I can
>> see that being true
>> for when the band has just opened and propagation has not opened to the
>> rear or
>> with net operations so perhaps gain is every thing after all.
>> It is my opinion that if interest/efforts are increased first in
>> deflecting the rear action to the
>> front first and thereby INCREASING the front lobe width there will be
>> more opportunities
>> for increasing gains without the side lobes and narrow forward lobes that
>> accompany Yagi's.
>> as well as shorter booms. (more deflectors/reflectors perhaps)
>> (no religeous, porno or genocide preaching please, fighting to see which
>> is best
>> could take place on boat anchor nets to see which has taken position of
>> the lowest level)
>> Regards
>> Art
>>
>
> Art
>
> Excuse me if I misunderstand your post above. It reads to me that you
> have an interest in building an antenna that minimizes "side lobes" to the
> rear of the main beam.

Correct..minimise or remove
.
> In my experience with directional antennas I have not been able to
> corelate minimum side lobes with maximum gain.

Oh I fully agree with that observation and that is another part of my
thinking
as it should never be so UNLESS you are captive to Yagi thinking.

> I'd suggest that the sidelobes will probably never be held lower than the
> same level as the forward gain. That is a 20 db gain antenna will have
> side lobes no lower than - 20 db with respect to the main lobe.

20 db gain would not be rotatable at HF which represents a huge drawback,
better to stay with a rombic thinking and cancel the energy complely to the
rear of the
feed point.

Again that is true if you are captive to the Yagi
Make no mistake the Yagi is as about as simple a thing to make that works
well,
it is doubtfull with respect to simplicity it can be beat.

Or, another
> way to put it is; there will always be a side lobe that gets up to or
> above isotropic level somewhere in the pattern.

Then think what actualy generates a lobe whether directional(frontal)
or at the rear.

>
> I think I'm misreading your post because I read it to say that main lobe
> could be increased in width while increasing the antenna sensitivity.
> That doesnt make sense, so I guess I'm not understanding.

Yes you misunderstood. Bank to the ballon if all the volume to the rear
of the figure 8 ahat the new diameternd placed in the front of the feed
point it is obvious will be wider and with more gain and if I might adde NO
sidelob.
You have to return to basics to understand that it is energy to the rear
that
generates side lobes at the rear.

>
> And, I submit that, with yagis, there is so little energy radiated in the
> sidelobes of a 15 db gain Yagi antenna that *all* the sidelobe radiation
> redirrected to be included in the main lobe wont add significantly to the
> Practical Useability of the antenna. I write Practical Useability
> because I want to distinguish that from scientific exploration of antenna
> gain, which accounts for fractions of one db.

Well that is the essence of my disagreement with the masses which I admit
I have not yet released my findings. Think about it, I could have a single
directive lobe
that has twice the energy of a standard dipole in unidirectional form
and with a broader lobe.and I have yet to discuss yagi type manipulations
that
narrow the lobe ,which can be unhelpful, and start from a new datum line if
one
wants to determine gain per unit length type thinking that goes with
Yagi,s.
.Maybe some experts can add some view points, after all it is a general
discussion group on antennas where many believe all is already known

and in a book..... grin
Regards
Art KB9MZ
>
> Jerry
>

2800. Re: vert antenna construction

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 20:57:12 UTC
From: nm5k@wt.net
Message-ID: <1109019431.972547.133580@l41g2000cwc.googlegroups.com>
Source record: 81639

It probably doesn't. I had just heard it was a way
to tell if the PVC had some kind of metal particals,
or whatever. I'm not that much up on PVC, but the rumor
I had heard was the "grey" PVC was better for HF rf use
compared to the white stuff. But I don't really know.
I've tried both, and never had any problems. The loading
coil on my shorter mobile antenna is wound on grey PVC,
and so far, I've never noticed any adverse effects.
My 2nd antenna uses a thin plastic tube, about like what
you would see on a sidewalk blower, or whatever...
Never noticed any problems with it either. I seem to have
about the same performance as an open frame coil, as far
as I can tell, and I've never noticed any heating, or
melting, etc..
My comment was more to protect the microwave, rather
than endorse the value of PVC nuking...:/ I have
tried it though...The grey stuff does stay cold when
nuked...Whatever thats worth..I didn't try the white
though...I've never had trouble with any material as far
as end insulators...I've run legal limit through plastic
coathangar insulators 3 inches long, and didn't arc...
That I could tell anyway...Same for PVC or wood...
The only time I've ever arced, was when the bare wire was
actually rubbing a tree branch...I started to burn it
up...Probably had been that way 2 weeks before I noticed
it..
MK

2801. Dipole vs. Delta loop vs. Quad loop -pratical experience

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 21:04:54 UTC
From: Jim Leder <k8cxm@spam.fuse.net>
Message-ID: <W1sSd.4576$Bo3.1452@fe37.usenetserver.com>
Source record: 81640

I have modeled a 30 meter dipole, a Delta loop and a Quad loop (the loops 'hung' in a vertical plane). I have also spent hours reading various posts and web articles on the 2 loop antennas. I am trying to better my situation on 30 meters, my favorite band. Currently I have a dipole at about 38 feet, which is as high as I can go with the top wire and the trees that I use are no more than 48 feet apart (the dipole fits comfortably). I also have a wire vertical with 16 radials which gets dismantled when grass cutting season starts, it probably will go back up next fall. According to EZNEC, the Quad loop is a little better than the Delta loop which is a bit better than the dipole, but not by much. I did try a half square, and it seemed to work well on transmit, but it was as noisy as the vertical on receive. The dipole is nice and quite on receive, as it should be. The HS lasted 3 days before the dipole went back up.
I've never used either loop but I did at one time use the inverted L loop. It worked OK, but was also noisy on receive and I probably lost an S unit due to low gain. The dipole seems to be the best antenna I've tried under my circumstances so far, but I sure would like some opinions on the 2 mentioned loops: Is either noticeable better than a dipole? Which one and why? Are both nosier (important) than a dipole (both vertical hung,bottom fed apex down on the Delta loop and the Quad loop fed in the center of the bottom wire)? Should I just stick with the dipole and spend my efforts elsewhere? With the 48 feet between trees and my maximum height of 38 feet, is there anything better I could try?
I KNOW what the modeling programs say, but I don't always believe them and I am looking for PRACTICAL experience and personal opinions on the above 3 antennas. As it sits, I'm inclined to let well enough alone and stick with the simple dipole, unless I can be convinced otherwise.

Thanks...
--

***** Jim Leder *****
IBM retiree since 1999
http://home.fuse.net/k8cxm

2802. Re: F to B and F to rear

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 21:06:40 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <A3sSd.6493$EL5.2370@trnddc05>
Source record: 81641

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:_IrSd.38654$tl3.18012@attbi_s02...
>
> "Jerry Martes" <j.jmartes@verizon.net> wrote in message
> news:XJqSd.17298$uc.14470@trnddc01...
>>
>>
>>
>> "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in
>> message news:p5bSd.33636$tl3.9146@attbi_s02...
>>> Regarding antenners, thats right,antennas.
>>> Plenty of listings for various gains achieved with antennas
>>> but I have not seen any similar listings for F/R and F/B.
>>> Is there any around so I can see what can be or has been attained or
>>> is blocking of rear signals of little consequence for todays hams. I can
>>> see that being true
>>> for when the band has just opened and propagation has not opened to the
>>> rear or
>>> with net operations so perhaps gain is every thing after all.
>>> It is my opinion that if interest/efforts are increased first in
>>> deflecting the rear action to the
>>> front first and thereby INCREASING the front lobe width there will be
>>> more opportunities
>>> for increasing gains without the side lobes and narrow forward lobes
>>> that accompany Yagi's.
>>> as well as shorter booms. (more deflectors/reflectors perhaps)
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>>> which is best
>>> could take place on boat anchor nets to see which has taken position of
>>> the lowest level)
>>> Regards
>>> Art
>>>
>>
>> Art
>>
>> Excuse me if I misunderstand your post above. It reads to me that you
>> have an interest in building an antenna that minimizes "side lobes" to
>> the rear of the main beam.
>
> Correct..minimise or remove
> .
>> In my experience with directional antennas I have not been able to
>> corelate minimum side lobes with maximum gain.

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> Oh I fully agree with that observation and that is another part of my
> thinking
> as it should never be so UNLESS you are captive to Yagi thinking.
>
>> I'd suggest that the sidelobes will probably never be held lower than
>> the same level as the forward gain. That is a 20 db gain antenna will
>> have side lobes no lower than - 20 db with respect to the main lobe.
>
>
> 20 db gain would not be rotatable at HF which represents a huge drawback,
> better to stay with a rombic thinking and cancel the energy complely to
> the rear of the
> feed point.
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> Again that is true if you are captive to the Yagi
> Make no mistake the Yagi is as about as simple a thing to make that works
> well,
> it is doubtfull with respect to simplicity it can be beat.
>
> Or, another
>> way to put it is; there will always be a side lobe that gets up to or
>> above isotropic level somewhere in the pattern.
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> Then think what actualy generates a lobe whether directional(frontal)
> or at the rear.
>
>
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>> I think I'm misreading your post because I read it to say that main lobe
>> could be increased in width while increasing the antenna sensitivity.
>> That doesnt make sense, so I guess I'm not understanding.
>
> Yes you misunderstood. Bank to the ballon if all the volume to the rear
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> point it is obvious will be wider and with more gain and if I might adde
> NO sidelob.
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> generates side lobes at the rear.
>
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>> And, I submit that, with yagis, there is so little energy radiated in
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>> radiation redirrected to be included in the main lobe wont add
>> significantly to the Practical Useability of the antenna. I write
>> Practical Useability because I want to distinguish that from scientific
>> exploration of antenna gain, which accounts for fractions of one db.
>
> Well that is the essence of my disagreement with the masses which I admit

> I have not yet released my findings. Think about it, I could have a single
> directive lobe
> that has twice the energy of a standard dipole in unidirectional form
> and with a broader lobe.and I have yet to discuss yagi type manipulations
> that
> narrow the lobe ,which can be unhelpful, and start from a new datum line
> if one
> wants to determine gain per unit length type thinking that goes with
> Yagi,s.
> .Maybe some experts can add some view points, after all it is a general
> discussion group on antennas where many believe all is already known
> and in a book..... grin
> Regards
> Art KB9MZ
>>
>> Jerry

Art

You obviously understand antenna patterns, I have a little professional
experience with antenna design. But, I am an old guy who wouldnt even
qualify as an antenna engineer by today's standards. So, I have very litle
to add to your threories on antenna pattern shaping.
I would suggest to you that all antena pattern terminology uses the
pattern width to identify gain (or dirrectivity). So, to be consistant,
higher gain antenna patterns will produce a narrower main beam angle.
Again, I dont suspect that you dispute the validity of my statement on
pattern width. I do suspect I am (again) misunderstanding.

Jerry

2803. Re: Angle of Radiation

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 21:38:30 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421a559d$1_2@127.0.0.1>
Source record: 81642

Airy R.Bean wrote:
> Angels haven't been seen since we started educating everybody
> in the scientific method. Strange that.

Maybe not so strange. Today we might recognize that
halo as a plastic helmet and those wings as oxygen
tanks (thus avoiding our germ-filled environment).
Everything that was reported in the Bible is possible
today except maybe for the raising of the dead but
CPR on individuals drowned in cold water comes close.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

2804. Does a 5/8 wave antenna need a metal ground plane?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 21:39:02 UTC
From: bbnn <jl@fnn.gfd>
Message-ID: <cvdk7i02t79@enews4.newsguy.com>
Source record: 81644

I know that a 1/4 antenna needs one to work but do 1/2 and 5/8 ant. need
a metal gnd plane.
Or will they work on a wooden building?

2805. Re: vert antenna construction

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 21:53:28 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421a591f$1_2@127.0.0.1>
Source record: 81643

Roy Lewallen wrote:
> Is a material that is "high loss" at microwave frequencies
> always "high loss" at HF?

Roy, we know you are into quantitative stuff but some
of us are into qualitative stuff. We know not to put
our hands into a flame even though we have no idea what
is the temperature of the flame or what temperature our
hands reach when put into a flame. If the exact temperature
of a flame Vs a blister on your skin is important to you,
why not experiment and report? :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

2806. Re: Dipole vs. Delta loop vs. Quad loop -pratical experience

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 22:00:35 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421a5aca$1_2@127.0.0.1>
Source record: 81645

Jim Leder wrote:
> Currently I have a dipole at about 38 feet,
> which is as high as I can go with the top wire and the trees that I use are
> no more than 48 feet apart (the dipole fits comfortably).

Install a center pole that keeps the angle between the
wires more than 90 degrees and keeps the ends at 38 ft.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

2807. Re: vert antenna construction

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 22:07:12 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <38mk11158phqcc4ja0f9099tsb0buhnmli@4ax.com>
Source record: 81646

On Mon, 21 Feb 2005 03:55:43 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>It's not clear to me how you correlate how warm something gets in the
>microwave oven with how much loss it'll incur at the end of an HF
>antenna. Maybe someone can explain this.
>
>Roy Lewallen, W7EL

The microwave test was written up in Hints & Kinks, 13th edition, page
6-6, although no scientific explanation was given as to why warmed
plastic would be worse than cool, after 2-3 minutes nuking on "high"
with a cup of water also present. (Author was E.R. Berg, KZ9Y.)

bob
k5qwg

>
>nm5k@wt.net wrote:
>> I'd also add a glass of water in the microwave when you do
>> that...I'm not sure if they are still that way, but it used
>> to be bad for them to run with no load...IE: food...MK
>>

2808. Re: portable HF antenna for the FT-817

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 22:18:09 UTC
From: Manitou <nospam@netbel.be>
Message-ID: <B6tSd.17728$FW.1376357@phobos.telenet-ops.be>
Source record: 81647

Thanks for the Reply's.

What about the ATAS 25 ?

2809. Re: Dipole vs. Delta loop vs. Quad loop -pratical experience

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 22:38:18 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <vp-dnYobsZVZ_4ffRVn-3g@comcast.com>
Source record: 81648

"Jim Leder" <k8cxm@spam.fuse.net> wrote in message
news:W1sSd.4576$Bo3.1452@fe37.usenetserver.com...
> I have modeled a 30 meter dipole, a Delta loop and a Quad loop (the loops
> 'hung' in a vertical plane). I have also spent hours reading various posts
> and web articles on the 2 loop antennas. I am trying to better my
> situation on 30 meters, my favorite band. Currently I have a dipole at
> about 38 feet, which is as high as I can go with the top wire and the
> trees that I use are no more than 48 feet apart (the dipole fits
> comfortably). I also have a wire vertical with 16 radials which gets
> dismantled when grass cutting season starts, it probably will go back up
> next fall. According to EZNEC, the Quad loop is a little better than the
> Delta loop which is a bit better than the dipole, but not by much. I did
> try a half square, and it seemed to work well on transmit, but it was as
> noisy as the vertical on receive. The dipole is nice and quite on receive,
> as it should be. The HS lasted 3 days before the dipole went back up.
> I've never used either loop but I did at one time use the inverted L loop.
> It worked OK, but was also noisy on receive and I probably lost an S unit
> due to low gain. The dipole seems to be the best antenna I've tried under
> my circumstances so far, but I sure would like some opinions on the 2
> mentioned loops: Is either noticeable better than a dipole? Which one and
> why? Are both nosier (important) than a dipole (both vertical hung,bottom
> fed apex down on the Delta loop and the Quad loop fed in the center of the
> bottom wire)? Should I just stick with the dipole and spend my efforts
> elsewhere? With the 48 feet between trees and my maximum height of 38
> feet, is there anything better I could try?
> I KNOW what the modeling programs say, but I don't always believe them
> and I am looking for PRACTICAL experience and personal opinions on the
> above 3 antennas. As it sits, I'm inclined to let well enough alone and
> stick with the simple dipole, unless I can be convinced otherwise.
>
> Thanks...
> --
>
> ***** Jim Leder *****
> IBM retiree since 1999
> http://home.fuse.net/k8cxm
>
>
>
Jim,

If you want to mess with EZNEC some more, try feeding the quad loop at one
corner. Also at the top center. I have a sort of quad loop, actually a
trapazoid, hung vertically for 75 meters. My two 90 foot tree,

unfortunately, are only about 65 feet apart. So, to get all that wire up there the bottom horizontal wire is longer than the top horizontal wire. I am feeding it in one corner, per EZNEC calculations, with the center conductor of the RG11 going to the vertical wire. This gives a combination of vertical and horizontal polarization. Works quite well.

Haven't tried a delta loop, but seems to me you might want it upside down, with the horizontal wire as high as possible. Feed the bottom apex. If I sound contradictory, it is because I put up what fit, not what I wanted.

Tam/WB2TT

2810. Re: Dipole vs. Delta loop vs. Quad loop -pratical experience

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 23:22:45 UTC
From: Rob <robert.hurd4@verizon.net>
Message-ID: <93uSd.6549$EL5.6474@trnddc05>
Source record: 81649

Jim,

I run a 40m inverted Delta Loop QRP and have worked (from
Annapolis, MD) most of Europe, several South American Countries,
a couple in the Middle East and all of the US (except Hawaii).
I use it on 40m, 30, 20m (probably best performance) 15m and
12m.... sometimes on 80m it will work "ok". I got N Carolina
on 80m one time.

The top of the loop is (roughly) 25-30 Feet up with the bottom
of the triangle only about 8 feet off the ground. That's one of the
big advantages of the DL over a dipole, i.e., height above ground
isn't as big a deal.

Short answer... I love it.

good luck
rob
n3hu

Jim Leder wrote:
> I have modeled a 30 meter dipole, a Delta loop and a Quad loop (the loops
> 'hung' in a vertical plane). I have also spent hours reading various posts
> and web articles on the 2 loop antennas. I am trying to better my situation
> on 30 meters, my favorite band. Currently I have a dipole at about 38 feet,
> which is as high as I can go with the top wire and the trees that I use are
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> both nosier (important) than a dipole (both vertical hung,bottom fed apex
> down on the Delta loop and the Quad loop fed in the center of the bottom
> wire)? Should I just stick with the dipole and spend my efforts elsewhere?
> With the 48 feet between trees and my maximum height of 38 feet, is there
> anything better I could try?
> I KNOW what the modeling programs say, but I don't always believe them and
> I am looking for PRACTICAL experience and personal opinions on the above 3

> antennas. As it sits, I'm inclined to let well enough alone and stick with
> the simple dipole, unless I can be convinced otherwise.
>
> Thanks...

2811. Re: Antenna spacing?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 23:33:34 UTC
From: Harry <hgk@centurytel.net>
Message-ID: <QdydnaqQit5V8offRVn-gA@centurytel.net>
Source record: 81651

George, Dennis, Jonesy and Nospam
Thanks for all the info. Being that the CC 32-19 has a brace that will hang down about three feet, I'll put that antenna in the center. Since the hazier is about eight feet and my mast is only about fifteen feet, I'll have to get a longer mast, maybe a thick wall metal instead of aluminum.

Cushcraft A50-3S +++

Cushcraft 32-19 ++++++++++++++++++
_____/

Hy-Gain TH3-MK3 +++

Looks like this will have to wait until next month, just got six inches of snow with more on the way! Also still a few more trees to take down!

Thanks again
Harry

2812. Question Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 23:33:37 UTC
From: wizard12342002@yahoo.com
Message-ID: <1109028817.416352.97590@f14g2000cwb.googlegroups.com>
Source record: 81650

I am in the process of trying to gain a better understanding of amateur radio antennas and transmission line issues.

I am mulling-over the issues associated with driving a dipole. Let's say I have a (resonant) dipole close to ground, but perfectly symmetrical. If I were to drive the dipole from a grounded radio transmitter through some length of coaxial cable, I would expect that the drive voltages at the driving point of each wire (measured with respect to ground) would be far from equal and opposite. As a result, I would expect that some current would need to return to the ground terminal at the transmitter through some means other than the inner surface of the coax shield. This spurious current could return on the outside of the shield and/or through the ground itself, leading to line radfiation and/or power loss. Of course, I would not expect a ladder line to solve the basic problem.

So, it would seem that driving a dipole directly with coax is not the best way to do things. Is that correct?

I suppose one needs a so-called "current balun" to ensure that the antenna currents are equal and opposite, avoiding a spurious return current. My simplistic way of understanding why all of the return current flows along the inside of the braid is that the outside of the braid is shielded from the center conductor, resulting in a huge outer-braid loop inductance. And current takes the path of least impedance, which is the low-inductance loop formed by the center conductor and inner-braid.

That's it for now. Any comments will be appreciated.

73
-JJ

2813. Re: HF Loop Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-21 23:40:45 UTC
From: wizard12342002@yahoo.com
Message-ID: <1109029245.017779.152500@g14g2000cwa.googlegroups.com>
Source record: 81652

Small transmitting loops can work fairly well above a few MHz, but they are expensive to make. They need very low loss (because the radiation resistance is almost nil) and a very high-voltage (10's of kV) motor-driven capacitor arrangement. You can easily buy them commercially covering 10 MHz - 30 MHz. They are an option if you don't have space for a large antenna, don't mind shelling-out $380+ bucks, and don't mind re-tuning whenever you change operating frequency.

I understand the H-fields are huge close-in, so one needs to be careful.

73
-JJ

2814. Re: portable HF antenna for the FT-817

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 00:09:52 UTC
From: Jon <jon@portlandbill.co.uk>
Message-ID: <cvdt8f$5o3$2@news6.svr.pol.co.uk>
Source record: 81653

I don't think you can beat the Buddipole with the 817. I have been using one in various configurations for a couple of years now and have had more fun with it than any other antenna. I often use a random length wire with the ZM-2 mini ATU as well, which is great if you need a light weight set up.

I often use half the buddipole mounted on the car as a vertical with my Yaesu FT-857 and 100W. It is far more efficient than a short mobile whip but obviously it can't be used when mobile. The Buddipole can be used on 80m if both coils are used with both arms as a vertical whip with an earth or radials.

Jon G2FHF

"Manitou" <nospam@netbel.be> wrote in message
news:%PYRd.16036$6W1.1299502@phobos.telenet-ops.be...
> Hello,
>
> Search for a good working portable HF antenna 40-10m
> for field work with the FT-817.
> (plus 80m + 6m +VHF and UHF????)
>
> Witch models give good results?
> TNX,
> Ds
>
>

2815. Re: Several questions about mobile HF antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 00:15:54 UTC
From: Jon <jon@portlandbill.co.uk>
Message-ID: <cvdtoa$5o3$3@news6.svr.pol.co.uk>
Source record: 81654

Joe

I can deffinately recommend the ATAS-120, I use one with my 857 and am very impressed. Have a look at the reviews on www.eham.net as it should help you make your mind up. The ATAS is not the biggest screwdriver antenna around but it does work, even on 40m. I have no problems working all around Europe from the south coast of England on 40m. It is more efficient on the higher bands like all mobile antennas, but like you I love the convenience of quick band changes. I am able to work all that I hear on mine, I worked VK on Saturday morning on it with a 5/9 report on 20m.

Jon G2FHF

"Joe S." <nobody@nowhere.net> wrote in message
news:cv7bga022ik@news1.newsguy.com...
>I am considering purchasing an FT-857D and mobile antenna to install in/on
> my old Nissan pickup. My work shift is 0400-1300 or 0500-1400 M-F with a
> 35-minute commute along an interstate highway and I would like to spend
> the
> time operating HF from the Mississippi Gulf Coast.
>
> While the rig is no problem, the antenna is. I have been reading the
> postings to this NG about mobile HF antennas and the opinions and
> experience
> are all over the map.
>
> For simplicity, I'm looking at the Yaesu ATAS-120 -- I think that's the
> model number -- screwdriver antenna for the 857D. I read a lot of
> references to adding a whip to the top of the screwdriver antenna. Am I
> correct that I will need to add a whip to the ATAS-120, or, am I
> misreading
> something here?
>
> If 75-meter operation results in an antenna that whips trees and bangs
> into
> the overhead at gas stations, I would simply forego 75 and operate 40 and
> up.
>
> Would you folks be so kinds as to explain:
> -- Your experience with the ATAS-120.
> -- How did you mount your ATAS-120 or similar screwdriver antenna?
> -- What's this business about a whip on top of the screwdriver antenna?
>
> I am not the sharpest knife in the drawer so use simple sentences and
> short

> words.
>
> Thanks.
>
> --
>
> -----
> Joe
>
>

2816. Re: Stacking 5/8th-wave 2-meter elements x4

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 01:19:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <111l249qa33e7eb@corp.supernews.com>
Source record: 81655

Roy Lewallen wrote:
>
> What modeling program are you using that gives those results? A half
> wave vertical over perfect ground has about 5.15 dBi gain at the
> horizon. . .

Correction -- a *quarter* wavelength ground-mounted vertical has the gain I quoted. A half wavelength ground-mounted vertical has a slightly narrower pattern, resulting in a little more gain over perfect ground. It's about 6.9 dBi at the horizon.

Roy Lewallen, W7EL

2817. Re: Question Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 01:25:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <111l2fnboqvm02e@corp.supernews.com>
Source record: 81656

If you can find the publications, I recommend that you read "Some Aspects of the Balun Problem" by Walt Maxwell, W2DU, in March 1983 QST, and "Baluns: What They Do and How They Do It" in the ARRL Antenna Compendium, Vol. 1.

Roy Lewallen, W7EL

wizard12342002@yahoo.com wrote:
> I am in the process of trying to gain a better understanding of amateur
> radio antennas and transmission line issues.
>
> I am mulling-over the issues associated with driving a dipole. Let's
> say I have a (resonant) dipole close to ground, but perfectly
> symmetrical. If I were to drive the dipole from a grounded radio
> transmitter through some length of coaxial cable, I would expect that
> the drive voltages at the driving point of each wire (measured with
> respect to ground) would be far from equal and opposite. As a result,
> I would expect that some current would need to return to the ground
> terminal at the transmitter through some means other than the inner
> surface of the coax shield. This spurious current could return on the
> outside of the shield and/or through the ground itself, leading to line
> radfiation and/or power loss. Of course, I would not expect a ladder
> line to solve the basic problem.
>
> So, it would seem that driving a dipole directly with coax is not the
> best way to do things. Is that correct?
>
> I suppose one needs a so-called "current balun" to ensure that the
> antenna currents are equal and opposite, avoiding a spurious return
> current. My simplistic way of understanding why all of the return
> current flows along the inside of the braid is that the outside of the
> braid is shielded from the center conductor, resulting in a huge
> outer-braid loop inductance. And current takes the path of least
> impedance, which is the low-inductance loop formed by the center
> conductor and inner-braid.
>
> That's it for now. Any comments will be appreciated.
>
> 73
> -JJ
>

2818. Re: Question Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 01:30:35 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <%WvSd.4527$QQ3.4392@trnddc02>
Source record: 81657

Roy

Do you have any suggestions for my locating Walter Maxwell's publication
on baluns? Also, where can I buy the ARRL Antenna Compendium Vol. 1?
I'll go to Google right now to try to locate the ARRL publication on
antennas.

Jerry

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:111l2fnboqvm02e@corp.supernews.com...
> If you can find the publications, I recommend that you read "Some Aspects
> of the Balun Problem" by Walt Maxwell, W2DU, in March 1983 QST, and
> "Baluns: What They Do and How They Do It" in the ARRL Antenna Compendium,
> Vol. 1.
>
> Roy Lewallen, W7EL
>
> wizard12342002@yahoo.com wrote:
>> I am in the process of trying to gain a better understanding of amateur
>> radio antennas and transmission line issues.
>>
>> I am mulling-over the issues associated with driving a dipole. Let's
>> say I have a (resonant) dipole close to ground, but perfectly
>> symmetrical. If I were to drive the dipole from a grounded radio
>> transmitter through some length of coaxial cable, I would expect that
>> the drive voltages at the driving point of each wire (measured with
>> respect to ground) would be far from equal and opposite. As a result,
>> I would expect that some current would need to return to the ground
>> terminal at the transmitter through some means other than the inner
>> surface of the coax shield. This spurious current could return on the
>> outside of the shield and/or through the ground itself, leading to line
>> radfiation and/or power loss. Of course, I would not expect a ladder
>> line to solve the basic problem.
>>
>> So, it would seem that driving a dipole directly with coax is not the
>> best way to do things. Is that correct?
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>> I suppose one needs a so-called "current balun" to ensure that the
>> antenna currents are equal and opposite, avoiding a spurious return
>> current. My simplistic way of understanding why all of the return
>> current flows along the inside of the braid is that the outside of the
>> braid is shielded from the center conductor, resulting in a huge
>> outer-braid loop inductance. And current takes the path of least
>> impedance, which is the low-inductance loop formed by the center

>> conductor and inner-braid.
>>
>> That's it for now. Any comments will be appreciated.
>>
>> 73
>> -JJ
>>

2819. Re: Question Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 01:37:31 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <g13l11d2p65o1iqjfrsaen6di5f8tkuoh0@4ax.com>
Source record: 81658

On Tue, 22 Feb 2005 01:30:35 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

> Roy
>
> Do you have any suggestions for my locating Walter Maxwell's publication
>on baluns? Also, where can I buy the ARRL Antenna Compendium Vol. 1?
>I'll go to Google right now to try to locate the ARRL publication on
>antennas.
>
> Jerry

Maxwell's home page is at http://home.iag.net/~w2du/ where you'll find
his article on baluns.

For the Antenna Compendium(s), go to www.arrl.org and then to their
bookstore where all of their antenna books are for sale.

bob
k5qwg

>
>
>
>"Roy Lewallen" <w7el@eznec.com> wrote in message
>news:111l2fnboqvm02e@corp.supernews.com...
>> If you can find the publications, I recommend that you read "Some Aspects
>> of the Balun Problem" by Walt Maxwell, W2DU, in March 1983 QST, and
>> "Baluns: What They Do and How They Do It" in the ARRL Antenna Compendium,
>> Vol. 1.
>>
>> Roy Lewallen, W7EL
>>
>> wizard12342002@yahoo.com wrote:
>>> I am in the process of trying to gain a better understanding of amateur
>>> radio antennas and transmission line issues.
>>>
>>> I am mulling-over the issues associated with driving a dipole. Let's
>>> say I have a (resonant) dipole close to ground, but perfectly
>>> symmetrical. If I were to drive the dipole from a grounded radio
>>> transmitter through some length of coaxial cable, I would expect that
>>> the drive voltages at the driving point of each wire (measured with
>>> respect to ground) would be far from equal and opposite. As a result,
>>> I would expect that some current would need to return to the ground
>>> terminal at the transmitter through some means other than the inner
>>> surface of the coax shield. This spurious current could return on the

>>> outside of the shield and/or through the ground itself, leading to line
>>> radfiation and/or power loss. Of course, I would not expect a ladder
>>> line to solve the basic problem.
>>>
>>> So, it would seem that driving a dipole directly with coax is not the
>>> best way to do things. Is that correct?
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>>> I suppose one needs a so-called "current balun" to ensure that the
>>> antenna currents are equal and opposite, avoiding a spurious return
>>> current. My simplistic way of understanding why all of the return
>>> current flows along the inside of the braid is that the outside of the
>>> braid is shielded from the center conductor, resulting in a huge
>>> outer-braid loop inductance. And current takes the path of least
>>> impedance, which is the low-inductance loop formed by the center
>>> conductor and inner-braid.
>>>
>>> That's it for now. Any comments will be appreciated.
>>>
>>> 73
>>> -JJ
>>>
>

2820. dipole extension?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 02:01:45 UTC
From: ml <m@di.net>
Message-ID: <m-946F79.21014121022005@news.verizon.net>
Source record: 81659

Hoping someone might have a idea as to what's best in this situation...

My set up

a sgc237 tuner at bottom of a (center support) 5' pvc mast, feeding 5' 450ohm ladder line to a horizontal center fd dipole

Issue:
unfortunately i don 't have too much horizantal roof space seems i'll have about 40ft on one side maybe 20ft on the other

the ends will be supported by tv mast and clamped onto the sewer (cast iron?) vent pipe on each far end

The far end masts are 10ft tall (making entire dipole 20ft off roof surface)

3 questions:

a) would it be better just to leave the dipole as is horizonal(and kinda short for multiband dreams) or

b) extend it by adding a 10ft verticle wire along the mast (using plastic spacers?)drooping down

c)attach my dipole to the mast making it part of the dipole (this presumes the cast iron sewer pipe makes too poor a connection to matter i don't know , suppose i can rap it w/duct tape)

2821. Re: Does a 5/8 wave antenna need a metal ground plane?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 02:12:28 UTC
From: richardharrison@webtv.net
Message-ID: <18484-421A950C-198@storefull-3254.bay.webtv.net>
Source record: 81660

bbnn wrote:
"I know that a 1/4 antenna needs one to work but do the 1/2 and 5/8 ant need a metal ground plane?"

A radio has a pair of RF signal connections. It isn`t the length of the antenna which determines the need for a counterpoise. Balanced antennas have a pair of connectors. These are interchangeable and may be connected to the radio`s pair of RF connections. If the transmission line wires are close-spaced, they don`t tend to radiate much.

An unbalanced antenna works against the earth, a ground plane, or a counterpoise. It may have only one insulated connector. But the radio requires two RF connections to make a complete circuit. The unbalanced antenna needs a connection between the grounded side of the radio, or one of the ungrounded RF terminals if there is no grounded terminal, and the side of the antenna meant for a ground connection, such as its ground-plane. This connection frequently is made by a coax`s external shield.

If you have an unbalanced antenna, it needs something like a ground plane so that you have something to connect the grounded side of your radio to for a complete circuit. Otherwise the transmission line becomes part of your radiator.

A balanced antenna, such as a dipole or a loop, has interchangeable terminals and needs no connection to the earth for a complete RF signal path. A ground plane would be superfluous.

Best regards, Richard Harrison, KB5WZI

2822. Re: dipole extension?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 02:30:08 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <QOwSd.59$7z6.41@lakeread04>
Source record: 81661

In the continuing saga of the 12 or 14 story roof antenna,
"ml" <m@di.net> wrote

> Hoping someone might have a idea as to what's best in this situation...
>
>
> My set up
>
> a sgc237 tuner at bottom of a (center support) 5' pvc mast, feeding 5'
> 450ohm ladder line to a horizontal center fd dipole
>
>
> Issue:
> unfortunately i don 't have too much horizantal roof space seems i'll
> have about 40ft on one side maybe 20ft on the other
>
> the ends will be supported by tv mast and clamped onto the sewer (cast
> iron?) vent pipe on each far end
>
> The far end masts are 10ft tall (making entire dipole 20ft off roof
> surface)
>
> 3 questions:
>
> a) would it be better just to leave the dipole as is horizonal(and
> kinda short for multiband dreams) or
>
> b) extend it by adding a 10ft verticle wire along the mast (using
> plastic spacers?)drooping down
>
> c)attach my dipole to the mast making it part of the dipole (this
> presumes the cast iron sewer pipe makes too poor a connection to matter
> i don't know , suppose i can rap it w/duct tape)

Recall from previous replies that:

1. Cast iron roof vents are supported by and grounded to building structural steel. They will probably not be a good choice to terminate an antenna right next to. Then again you could be improving SWL reception in all the lavatories of the building ;-)

2. The building's t.v. antenna (and thus tenant's televisions) is may be a pretty good receiver for anything you transmit right next to it. Using the t.v. mast as part of your antenna? I would stay as far away from it as possible.

Why don't you consider one of those toaster-oven (Isotrons?)? At your high elevation they probably work as well a their design ever allows. For at least 23 hams who made the reviews on eHam, the things do work at least marginally well, and take up practically no space at all. Just my 2 cents, since a dipole seems such a challenge for your conditions.

73,
Jack Painter
Virginia Beach, Virginia

2823. Re: Question Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 02:37:28 UTC
From: Dan Richardson <dwr@mailinator.net>
Message-ID: <ck6l119hdngm73nbdfko4a5ljjbc4avolj@4ax.com>
Source record: 81662

On Mon, 21 Feb 2005 17:25:06 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>If you can find the publications, I recommend that you read "Some
>Aspects of the Balun Problem" by Walt Maxwell, W2DU, in March 1983 QST,
>and "Baluns: What They Do and How They Do It" in the ARRL Antenna
>Compendium, Vol. 1.
>
Excellent advise!

You can find Walter's article here:
http://home.iag.net/~w2du/Reflections2Chapter21SomeAspectsoftheBalunProblem.pdf

Danny, K6MHE

2824. Re: dipole extension?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 03:23:57 UTC
From: ml <m@di.net>
Message-ID: <m-AE6776.22235221022005@news.verizon.net>
Source record: 81663

thanks for the responce

by tv mast i ment tv style 1 1/4" pipe not the actual mast with the
building antenna

the isotron was a interesting idea but a dipole is what i will have to
surfice with it's not much of a challange, but some of the 'details'
are a bit more difficult than thought

i do hope someone will be able o answer the questions i posted (other
than your reply to "c" being n/g)

tnx

In article <QOwSd.59$7z6.41@lakeread04>,
"Jack Painter" <223bthp@cox.net> wrote:

> In the continuing saga of the 12 or 14 story roof antenna,
> "ml" <m@di.net> wrote
>
> > Hoping someone might have a idea as to what's best in this situation...
> > >
> > >
> > > My set up
> > >
> > > a sgc237 tuner at bottom of a (center support) 5' pvc mast, feeding 5'
> > > 450ohm ladder line to a horizontal center fd dipole
> > >
> > >
> > > Issue:
> > > unfortunately i don 't have too much horizantal roof space seems i'll
> > > have about 40ft on one side maybe 20ft on the other
> > >
> > > the ends will be supported by tv mast and clamped onto the sewer (cast
> > > iron?) vent pipe on each far end
> > >
> > > The far end masts are 10ft tall (making entire dipole 20ft off roof
> > > surface)
> > >
> > > 3 questions:
> > >
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> > > kinda short for multiband dreams) or
> > >
> > > b) extend it by adding a 10ft verticle wire along the mast (using
> > > plastic spacers?)drooping down

> >
> > c)attach my dipole to the mast making it part of the dipole (this
> > presumes the cast iron sewer pipe makes too poor a connection to matter
> > i don't know , suppose i can rap it w/duct tape)
>
> Recall from previous replies that:
>
> 1. Cast iron roof vents are supported by and grounded to building structural
> steel. They will probably not be a good choice to terminate an antenna right
> next to. Then again you could be improving SWL reception in all the
> lavatories of the building ;-)
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> 2. The building's t.v. antenna (and thus tenant's televisions) is may be a
> pretty good receiver for anything you transmit right next to it. Using the
> t.v. mast as part of your antenna? I would stay as far away from it as
> possible.
>
> Why don't you consider one of those toaster-oven (Isotrons?)? At your high
> elevation they probably work as well a their design ever allows. For at
> least 23 hams who made the reviews on eHam, the things do work at least
> marginally well, and take up practically no space at all. Just my 2 cents,
> since a dipole seems such a challenge for your conditions.
>
> 73,
> Jack Painter
> Virginia Beach, Virginia

2825. Re: Question Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 03:30:01 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <ZGxSd.4958$QQ3.4209@trnddc02>
Source record: 81664

Thanks Bob I printed the balun article. I see a whole lot of other stuff
at that site. Walter Maxwell has to be as good as it gets for any info on
things that interest me. You did me a favor by leading me to that info.

Thanks again
Jerry

"Bob Miller" <NOSPAM@neosoft.com> wrote in message
news:g13l11d2p65o1iqjfrsaen6di5f8tkuoh0@4ax.com...
> On Tue, 22 Feb 2005 01:30:35 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
>> Roy
>>
>> Do you have any suggestions for my locating Walter Maxwell's publication
>>on baluns? Also, where can I buy the ARRL Antenna Compendium Vol. 1?
>>I'll go to Google right now to try to locate the ARRL publication on
>>antennas.
>>
>> Jerry
>
> Maxwell's home page is at http://home.iag.net/~w2du/ where you'll find
> his article on baluns.
>
> For the Antenna Compendium(s), go to www.arrl.org and then to their
> bookstore where all of their antenna books are for sale.
>
> bob
> k5qwg
>
>>
>>
>>
>>"Roy Lewallen" <w7el@eznec.com> wrote in message
>>news:111l2fnboqvm02e@corp.supernews.com...
>>> If you can find the publications, I recommend that you read "Some
>>> Aspects
>>> of the Balun Problem" by Walt Maxwell, W2DU, in March 1983 QST, and
>>> "Baluns: What They Do and How They Do It" in the ARRL Antenna
>>> Compendium,
>>> Vol. 1.
>>>
>>> Roy Lewallen, W7EL
>>>
>>> wizard12342002@yahoo.com wrote:

>>>> I am in the process of trying to gain a better understanding of amateur
>>>> radio antennas and transmission line issues.
>>>>
>>>> I am mulling-over the issues associated with driving a dipole. Let's
>>>> say I have a (resonant) dipole close to ground, but perfectly
>>>> symmetrical. If I were to drive the dipole from a grounded radio
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>>>> the drive voltages at the driving point of each wire (measured with
>>>> respect to ground) would be far from equal and opposite. As a result,
>>>> I would expect that some current would need to return to the ground
>>>> terminal at the transmitter through some means other than the inner
>>>> surface of the coax shield. This spurious current could return on the
>>>> outside of the shield and/or through the ground itself, leading to line
>>>> radfiation and/or power loss. Of course, I would not expect a ladder
>>>> line to solve the basic problem.
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>>>> So, it would seem that driving a dipole directly with coax is not the
>>>> best way to do things. Is that correct?
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>>>> I suppose one needs a so-called "current balun" to ensure that the
>>>> antenna currents are equal and opposite, avoiding a spurious return
>>>> current. My simplistic way of understanding why all of the return
>>>> current flows along the inside of the braid is that the outside of the
>>>> braid is shielded from the center conductor, resulting in a huge
>>>> outer-braid loop inductance. And current takes the path of least
>>>> impedance, which is the low-inductance loop formed by the center
>>>> conductor and inner-braid.
>>>>
>>>> That's it for now. Any comments will be appreciated.
>>>>
>>>> 73
>>>> -JJ
>>>>
>>
>

2826. Re: F to B and F to rear

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 04:36:40 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_421ab7c4@fidonet.org>
Source record: 81667

"aunwin@insightbb.com" bravely wrote to "All" (21 Feb 05 19:20:16)
--- on the heady topic of "Re: F to B and F to rear"

How about stuffing a dielectric type material between the elements so
that the antenna can be made a lot shorter though it still remains
electrically resonnant? How about making antennas 3 dimensional
instead of on a single plane? How about using newly discovered
materials exploiting their strange new properties.?

I don't mean to upset any apple carts but this stuff has been done for
almost 200 years and no really new ideas have been introduced since
the past half century.

A*s*i*m*o*v

au> From: "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com>
au> Xref: aeinews rec.radio.amateur.antenna:5555

au> The idea of 'reflectors' is perhaps the wrong approach, I prefer the
au> term deflectors
au> as one sees when rays hit a knife edge. Also close coupling enables
au> elements to
au> be current heavy and others voltage heavy such that it would appear
au> that a element was doing nothing when in fact it is the link for more
au> current loaded elements
au> in cluster form. A wall that you suggest can indeed reflect and absorb
au> radio waves but a
au> wall is beyond my means thus resonance remains a important function of
au> change.
au> But then close coupling of elements together with the deflection
au> aproach has been
au> dissed many times over the years with me and always ends in derision
au> of the author
au> Time will tell but experimentation can be enjoyable especially when a
au> trail of past results
au> suggests that my rubicon is at hand and close to submission to RADCOM
au> where experimentation is still valued.

au> Heh, no politics here or religeon so all can join in without fear
au> especially those who are willing
au> to consider and pursue 'outside of the box' ideas that others
au> distain., in order to gain better
au> understanding
au> Regards
au> Art

au> "Buck" <iam@this.site> wrote in message
au> news:rv9k11hj9rcjc55cue5mlfqooaamup0jp4@4ax.com...
> On Mon, 21 Feb 2005 17:10:00 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>>Roy allow me to be a bit more directive regarding my pursuit.
>>I am trying to see what methods that can be used for maximum gain.
>>Having made many a long boom yagi 80 feet and 13 elements I have
>>come to the cinclusion that thinking must move away from Yagi's.
>>If one starts with a balloon squeezed in the center we get the figure 8
>>pattern.
>>I think we all can agree on that
>>My logic is that we must find a way to move all the volume at the rear to
>>the front thus increasing
>>the front diameter before we begin to massage it. The present thinking is
>>one sqeeze at the rear
>>is the best that one can do. It is here that I part company with the norm.
>>If we move all the volume to the front then talk of gain/boom length
>>becomes
>>moot.

... Acme Corp: Unlimited credit for disadvantaged coyotes.

2827. Re: Installed M2 Horizontal Loop today - PHOTOS

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 04:50:39 UTC
From: David 01 <ifiwantspam@illask.org>
Message-ID: <111leh2amp7l176@corp.supernews.com>
Source record: 81665
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

HI Dan,

If you're satisfied with the performance that's all that counts.

As I mentioned, I tried one as my first antenna and really didn't have anything to compare it to until I changed and everything else I tried did a better job for me. One night I mentioned this on a repeater that stretches a couple of hundred miles and several others related their experiences and like I said, I never heard anything positive about that model until on here.

But like I said, if you're satisfied, great! My main point in commenting on the antenna in the first place was in case you hadn't tried other antennas like I hadn't when I bought mine.

73

David

"Dan" <starkenburg.remove@this.sio.midco.net> wrote in message news:7JqdnWgM0erwBYrfRVn-ug@midco.net...
> I installed a Cushcraft ARX2B Ringo Ranger II yesterday. It's on a 10' mast
> on a rooftop tripod. The measurements given in the manual for assembling
> the antenna for a specific frequency were right on the mark. I used the
> dimensions for 147MHz and my MFJ-259B showed the "sweet spot" to be
> 146.88MHz. SWR bandwidth is a bit narrower than I'd prefer, but it is a
> very usable antenna for the 2M FM application.
>
> As far as performance.... I cannot complain at this point. I am able to
> bring up a repeater 80 miles away half scale. My wife and I tried out
> simplex today and it performed well. Previously I've owned the Diamond X50A
> and CP22E antennas, as well as a slew of groundplane and J-Pole antennas.
> Based on the performance I've experienced so far, it appears the ARX2B is
> better than most, as it should be because it's a 5/8 wave x 3 (vs. a 1/4
> wave x 3 for the X50A and a 5/8 wave x 2 for the CP22E).
>
> I'd suggest you have the guys in your area double check their assembly as
> I'd tend to think they did something wrong if they're comparing the
> performance to a dummy load. The antenna has something like 40 pieces out
> of the box.... plus a few different adjustment points (middle and bottom
> coils, plus the length of the antenna between coils).... so there is a lot
> that could be done wrong with the antenna. Also, I'd tend to think the
> "weak point" of the antenna would be the run of coax that connects the
> radials to the bottom coil, so that would also be a good place to look.

>
> 73,
> Dan
>
>
>
>
>
> "David 01" <ifiwantspam@illask.org> wrote in message
> news:1115p7dheu0ai31@corp.supernews.com...
> > No offense, but where I live live the guys joke that they use the ringo
> > ranger II as a fishing pole or dummy load. We haven't experienced a good
> one
> > here. Anything else is far better in our experience and I know of no one
> > actually using one now, but they say there's a stack of them avsailable
> for
> > free behind a certain store.
> >
> > "Charlie" <charlie@earthlink.com> wrote in message
> > news:1108njbbertjqcc@news.supernews.com...
> > > 1. http://www.ad5th.com/VHF.html
> > >
> > > Also shown my Ringo Ranger II - ARX-2B. Links to technical data for
each
> > > antenna also.
> > >
> > > --
> > >
> > > Charlie
> > > Ham Radio - AD5TH
> > > www.ad5th.com
> > > Live Blues Music
> > > www.492acousticblues.com
> > >
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>

2828. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 06:43:53 UTC
From: yahdjt@bigfoot.com
Message-ID: <1109054633.512648.13970@l41g2000cwc.googlegroups.com>
Source record: 81666

Thanks for all your responses, good stuff here.

Rich, I am using TX modules from Liapac which specify a 50 ohm load.

So putting it all together (I think) by bending the antenna (both 1/4 and 1/2) I am messing with its impedance and subsequent matching? So I would be better off with a straight 1/4 over ground plane if I had the choice.

>From reading I've done I think that a bend from vertical to horizontal (closer to ground) would be decreasing the antenna impedance, does that sound correct? Would I benefit from adjusting (extending) the antenna length slightly (I don't think so because it would no longer be at wavelength, but I am not sure?).

Ken said ... "If I've read what you wrote correctly, the antenna spends more of its length parallel to the surface of the PCB than it does running 90 degrees away from it"... Actually it's about half and half (feed> up 15mm , loop around the case, up - {clear of case} 130mm). Note the horizontal loop does not cross over itself.

Sort of like this (~~ is horizontal loop) side view.

```
|
|
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~~~~
|
feed
```

I understand that more of the radiation is perpendicular to the wire in the 1/2-wave (than 1/4 wave), broadly speaking how will the bend('s) in the aerial effect radiation pattern (I understand this is tough to answer)? I can't fit a full loop inside the case.

I have no rf test equipment so can only use trial and error, thanks again to all who responded. As I said it actually works fine it's just I don't like not understanding the reason its working, and would like to make any small changes that may improve performance.

Thanks Again

2829. Re: Dipole vs. Delta loop vs. Quad loop -pratical experience

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 12:34:14 UTC
From: "Larry Gauthier (K8UT)" <MyCallsign@ARRL.NET>
Message-ID: <XLFSd.13457$aA4.4143@fe07.lga>
Source record: 81668

Jim,

I have also tried several horizontal and vertical combinations (everything you mentioned except a quad loop) on 30 meters. After lots of very unscientific experimentation and observation, I ended up with: A multi-band vertical (Hy-gain AV-640) which I use as my 'reference' antenna, and a horizontal delta loop at about 40 feet. I find the delta loop quieter than a previous dipole or the AV-640 vertical; it has a flatter SWR curve (although that doesn't seem to matter much on the narrow frequency allocation on 30 meters); and gives me better DX signal reception _almost_ all the time (once in a while the vertical beats the loop, but it's rare). The delta loop's characteristic impedance is 100 ohms, and I feed it in the corner with a 1/4 wavelength of RG/6 as a matching balun. Although the calculated length of the loop should be 97.14 feet (frequ/983), I found that the best resonance occurs when the total wire length is closer to 103 feet (lesson: you can always cut it shorter, but can't cut it longer).

--
-larry
K8UT

"Jim Leder" <k8cxm@spam.fuse.net> wrote in message
news:W1sSd.4576$Bo3.1452@fe37.usenetserver.com...
> I have modeled a 30 meter dipole, a Delta loop and a Quad loop (the loops
> 'hung' in a vertical plane). I have also spent hours reading various posts
> and web articles on the 2 loop antennas. I am trying to better my
> situation on 30 meters, my favorite band. Currently I have a dipole at
> about 38 feet, which is as high as I can go with the top wire and the
> trees that I use are no more than 48 feet apart (the dipole fits
> comfortably). I also have a wire vertical with 16 radials which gets
> dismantled when grass cutting season starts, it probably will go back up
> next fall. According to EZNEC, the Quad loop is a little better than the
> Delta loop which is a bit better than the dipole, but not by much. I did
> try a half square, and it seemed to work well on transmit, but it was as
> noisy as the vertical on receive. The dipole is nice and quite on receive,
> as it should be. The HS lasted 3 days before the dipole went back up.
> I've never used either loop but I did at one time use the inverted L loop.
> It worked OK, but was also noisy on receive and I probably lost an S unit
> due to low gain. The dipole seems to be the best antenna I've tried under
> my circumstances so far, but I sure would like some opinions on the 2
> mentioned loops: Is either noticeable better than a dipole? Which one and
> why? Are both nosier (important) than a dipole (both vertical hung,bottom
> fed apex down on the Delta loop and the Quad loop fed in the center of the
> bottom wire)? Should I just stick with the dipole and spend my efforts
> elsewhere? With the 48 feet between trees and my maximum height of 38

> feet, is there anything better I could try?
> I KNOW what the modeling programs say, but I don't always believe them
> and I am looking for PRACTICAL experience and personal opinions on the
> above 3 antennas. As it sits, I'm inclined to let well enough alone and
> stick with the simple dipole, unless I can be convinced otherwise.
>
> Thanks...
> --
>
> ***** Jim Leder *****
> IBM retiree since 1999
> http://home.fuse.net/k8cxm
>
>
>

2830. Re: Dipole vs. Delta loop vs. Quad loop -pratical experience

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 13:40:33 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <pZydnT8ezMqnq4bfRVn-uQ@comcast.com>
Source record: 81669

"Larry Gauthier (K8UT)" <MyCallsign@ARRL.NET> wrote in message
news:XLFSd.13457$aA4.4143@fe07.lga...
> Jim,
>
> I have also tried several horizontal and vertical combinations (everything
> you mentioned except a quad loop) on 30 meters. After lots of very
> unscientific experimentation and observation, I ended up with: A
> multi-band vertical (Hy-gain AV-640) which I use as my 'reference'
> antenna, and a horizontal delta loop at about 40 feet. I find the delta
> loop quieter than a previous dipole or the AV-640 vertical; it has a
> flatter SWR curve (although that doesn't seem to matter much on the narrow
> frequency allocation on 30 meters); and gives me better DX signal
> reception _almost_ all the time (once in a while the vertical beats the
> loop, but it's rare). The delta loop's characteristic impedance is 100
> ohms, and I feed it in the corner with a 1/4 wavelength of RG/6 as a
> matching balun. Although the calculated length of the loop should be 97.14
> feet (frequ/983), I found that the best resonance occurs when the total
> wire length is closer to 103 feet (lesson: you can always cut it shorter,
> but can't cut it longer).
>
> --
> -larry
> K8UT

Larry,

You don't apply the dipole fudge factor to full size loops. In fact, some people claim it should be longer than a free space wavelength. I have seen various formulas for the length between 1000/f and 1030/f feet. I started out with 1030/f, but ended up shortening it by about 2 %. I suspect some of that depends on how close to ground you are; also, I think my wire stretched.

Tam/WB2TT
>
> "Jim Leder" <k8cxm@spam.fuse.net> wrote in message
.....

2831. Re: F to B and F to rear

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 13:48:38 UTC
From: "aunwin@insightbb.com"
Message-ID: <WKGSd.16372$zH6.12023@attbi_s53>
Source record: 81670

Asimov
That's right, because every thing is known about antennas
And when something new comes along many will say they knew that all
the time
Art

"Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote in message
news:MSGID_1=3a167=2f133.0_421ab7c4@fidonet.org...
"aunwin@insightbb.com" bravely wrote to "All" (21 Feb 05 19:20:16)
--- on the heady topic of "Re: F to B and F to rear"

How about stuffing a dielectric type material between the elements so
that the antenna can be made a lot shorter though it still remains
electrically resonnant? How about making antennas 3 dimensional
instead of on a single plane? How about using newly discovered
materials exploiting their strange new properties.?

I don't mean to upset any apple carts but this stuff has been done for
almost 200 years and no really new ideas have been introduced since
the past half century.

A*s*i*m*o*v

au> From: "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com>
au> Xref: aeinews rec.radio.amateur.antenna:5555

au> The idea of 'reflectors' is perhaps the wrong approach, I prefer the
au> term deflectors
au> as one sees when rays hit a knife edge. Also close coupling enables
au> elements to
au> be current heavy and others voltage heavy such that it would appear
au> that a element was doing nothing when in fact it is the link for more
au> current loaded elements
au> in cluster form. A wall that you suggest can indeed reflect and absorb
au> radio waves but a
au> wall is beyond my means thus resonance remains a important function of
au> change.
au> But then close coupling of elements together with the deflection
au> aproach has been
au> dissed many times over the years with me and always ends in derision
au> of the author
au> Time will tell but experimentation can be enjoyable especially when a
au> trail of past results
au> suggests that my rubicon is at hand and close to submission to RADCOM
au> where experimentation is still valued.

au> Heh, no politics here or religeon so all can join in without fear
au> especially those who are willing
au> to consider and pursue 'outside of the box' ideas that others
au> distain., in order to gain better
au> understanding
au> Regards
au> Art

au> "Buck" <iam@this.site> wrote in message
au> news:rv9k11hj9rcjc55cue5mlfqooaamup0jp4@4ax.com...
> On Mon, 21 Feb 2005 17:10:00 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>>Roy allow me to be a bit more directive regarding my pursuit.
>>I am trying to see what methods that can be used for maximum gain.
>>Having made many a long boom yagi 80 feet and 13 elements I have
>>come to the cinclusion that thinking must move away from Yagi's.
>>If one starts with a balloon squeezed in the center we get the figure 8
>>pattern.
>>I think we all can agree on that
>>My logic is that we must find a way to move all the volume at the rear to
>>the front thus increasing
>>the front diameter before we begin to massage it. The present thinking is
>>one sqeeze at the rear
>>is the best that one can do. It is here that I part company with the
norm.
>>If we move all the volume to the front then talk of gain/boom length
>>becomes
>>moot.

... Acme Corp: Unlimited credit for disadvantaged coyotes.

2832. Gain increase from scanner antenna to quarter-wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 14:38:53 UTC
From: dave.harper@gmail.com
Message-ID: <1109083133.651075.29020@l41g2000cwc.googlegroups.com>
Source record: 81671
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

I'm tracking a high altitude balloon on 2m via a handheld scanner, and in the past have used the standard rubber-duck antenna that the scanner came with. However, reception isn't too great at times. What kind of gain increase could I expect to see if I were to replace the current rubber-duck antenna with a quarter-wave antenna (designed for 2m and 70cm)?

Thanks in advance for any insight!
Dave

2833. Re: Dipole vs. Delta loop vs. Quad loop -pratical experience

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 15:17:25 UTC
From: Jim Leder <k8cxm@spam.fuse.net>
Message-ID: <82ISd.5300$Bo3.1141@fe37.usenetserver.com>
Source record: 81572

I said in the original post that I didn't always trust what modeling
programs say, but in the case of 'length' I tend to agree with what it is
projecting. I've modeled both the Delta and Quad loop over and over, and
they always come out that the best overall length is closer to 1030/f.
1003/f is always too short, at least at 35-40 feet up. Whatever it is, as
Larry pointed out, it's easier to shorten the elements than add to them.
Larry, I use my vertical as you do: a reference antenna. However there are
times when it works better than the dipole. Depends on propagation effects.
Both have a place, but I can't (too lazy) keep the vertical in the grass
cutting season :+)) .

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
news:pZydnT8ezMqnq4bfRVn-uQ@comcast.com...
>
> "Larry Gauthier (K8UT)" <MyCallsign@ARRL.NET> wrote in message
> news:XLFSd.13457$aA4.4143@fe07.lga...
>> Jim,
>>
>> I have also tried several horizontal and vertical combinations
>> (everything you mentioned except a quad loop) on 30 meters. After lots of
>> very unscientific experimentation and observation, I ended up with: A
>> multi-band vertical (Hy-gain AV-640) which I use as my 'reference'
>> antenna, and a horizontal delta loop at about 40 feet. I find the delta
>> loop quieter than a previous dipole or the AV-640 vertical; it has a
>> flatter SWR curve (although that doesn't seem to matter much on the
>> narrow frequency allocation on 30 meters); and gives me better DX signal
>> reception _almost_ all the time (once in a while the vertical beats the
>> loop, but it's rare). The delta loop's characteristic impedance is 100
>> ohms, and I feed it in the corner with a 1/4 wavelength of RG/6 as a
>> matching balun. Although the calculated length of the loop should be
>> 97.14 feet (frequ/983), I found that the best resonance occurs when the
>> total wire length is closer to 103 feet (lesson: you can always cut it
>> shorter, but can't cut it longer).
>>
>> --
>> -larry
>> K8UT
>
> Larry,
>
> You don't apply the dipole fudge factor to full size loops. In fact, some
> people claim it should be longer than a free space wavelength. I have seen
> various formulas for the length between 1000/f and 1030/f feet. I started
> out with 1030/f, but ended up shortening it by about 2 %. I suspect some

> of that depends on how close to ground you are; also, I think my wire
> stretched.
>
> Tam/WB2TT
>>
>> "Jim Leder" <k8cxm@spam.fuse.net> wrote in message
> ....
>

2834. THE ULTRA ADVANCED PSYCHOTRONIC MONEY MAGNET

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 15:27:49 UTC
From: ormusalchemy@aol.com
Message-ID: <1109086069.160042.19330@c13g2000cwb.googlegroups.com>
Source record: 81573

Life Technology Research International®
www.lifetechnology.org
email us at: ormusalchemy@aol.com for more information

The Psychotronic Money Magnet☐ Ultra Advanced Version 1.0
The Ultimate in Causal Engineering Technology
www.lifetechnology.org/ultramoneymagnet.htm

Through the aid of spiritual guidance given to us by the higher forces we have discovered a uniquely different and improved method of creating our well known Psychotronic Money Magnet☐ .The new method was delivered to us through an exceptionally gifted channel and we were astounded by the information that we were privileged to have received. According to the information the new method which we are adopting can raise the subtle energy characteristics and the manifesting capabilities of The Ultra Advanced Psychotronic Money Magnet☐ more than one hundred fold.

According to numerous testimonials this powerful device has certainly proved that it has the power to change one's financial situation for the better in the shortest possible time, and it is without doubt the most powerful and successful money generating talisman of all time. The sole function of The Ultra Advanced Psychotronic Money Magnet☐ is simply to create opportunities for it's owner to gain money and prosper financially. The longer one possesses this unique cosmic money magnet , the stronger it will become, and the more money it will draw to it's owner.

We have been using this device ourselves for some time now and experienced a massive increase in company income and profits just a few days after the first creation of The Ultra Advanced Psychotronic Money Magnet☐ .We have been exceptionally blessed by the higher forces and in particular by the wisdom of The Archangel Mikhail.

Originally Life Technology Research International® had listed these devices as Psychotronic Generators☐ designed to be programmed for various different types of archetypal energy (trend) ,but when we became aware of the massive demand for the money and wealth programmed Psychotronic Generator☐ it was decided to being marketing The Psychotronic Money Magnet☐ as a specifically programmed stand alone device. It is only now that we have been given specific information to create a magical tool that will quite simply transform ones life.

Could The Ultra Advanced Psychotronic Money Magnet☐ become the most powerful metaphysical tool ever created? It is our belief that the most

significant difference between this device and other forms of magickal talisman or life changing catalyst (eg NLP ,Huna , Hypnosis, Kaballah , Magick etc) is its passive mode of operation, ie no conscious input is required from the user, and unlike many other talismans the device will function optimally without any necessity for a certain belief system on the part of the user. The Ultra Advanced Psychotronic Money Magnet☐ is so powerful in fact that it will override the belief system of the most hardened sceptic, and will reverse the mindset of the most pessimistic belief system.

Life Technology Research International® has taken this technology of 'Causal Engineering' and using methods based on the developmental work of Pavlita, Rifat , Fortune and many hours of Russian Psychotronics research we convert quartz crystals to Psychotronic Generators☐. They amplify, produce and direct bioplasmic energy to modify quantum mechanical collapse, changing the course of events in the macroscopic world. This device uses a multiphase set of fields which apart from altering events, inculcate a theta rhythm of around 7 to 8 Hz, the natural theta frequency of the planet being 7.82. This frequency is the Schumann Resonance, the doorway to the world of causal engineering, ie consciously creating and manifesting ones desires.

The Ultra Advanced Psychotronic Money Magnet☐ acts by establishing a new pattern of financial abundance in the subconscious and subtle energy fields of the user by harnessing the lifeforce and wealth enhancing powers of the Hebrew letters of the Kaballah. It is widely recognised in esoteric science and by academics such as James Hurtak and Stan Tenen among others that Hebrew letters through their specific mathematical structural geometry contain information that encodes life force energy, ie it provides an intelligent template for natural creative forces. It is these magical primal creative forces of The Kabbalah that we harness and focus in the preparation of The Ultra Advanced Psychotronic Money Magnet☐

In the 1920's it was discovered that quartz crystals resonate at 32,768 khz. Seeing that the Great Pyramid of Khufu or Cheops Pyramid, is made mostly of limestone, which stone crystal matrix is mostly quartz, It is proposed that the entire pyramid operates as a conciously programmable cosmic biocomputer or radionics device, a massive Psychotronic Generator☐ originally capable of harnessing and directing the focussed intent of the Egyptian priests who were its engineers .

The fact is that everything in the universe vibrates and oscillates. Therefore the connecting link between all forms of energy is vibration, sympathetic harmony and resonance. By studying and applying the principles of vibration we are enabled to see beyond material matter and into the primary creative forces of nature. Utilising the information from diverse fields such as Radionics, Psionics ,Psychotronics ,Quantum Physics ,Sacred Geometry, Sonics ,music and metaphysics has led to an understanding of how the human mind can interact creatively with the material universe.

Essentially, when the biotronic matrix of The Ultra Advanced Psychotronic Money Magnet☐ interacts with the conscious will of the operator it causes subtle changes to occur in the microcosmic universe which translates to manifestation in the macrocosmic universe (real world).

This device will naturally induce a theta state in the user as it alters reality to make money, wealth, abundance and affluence etc. more probable. The Ultra Advanced Psychotronic Money Magnet☐ is charged with the specific programming described above ,or may be programmed with your own specific intent. On request, Life Technology Research International® creates Psychotronic Generators☐ to generate any operational trend field which will facilitate the materialisation of any wish.

The Ultra Advanced Psychotronic Money Magnet☐ may be used in each of the following ways:
Place on a desk or on a bedside table for passive functionality, no input from the user is required.The device is an ideal size to be carried in a pocket or kept in a handbag. It is better that the device should be kept as close as possible to the user, ideally within 2 meters.

The device may also be kept under a pillow while sleeping where archetypal information will permeate and influence the subconscious mind ,or held in the hands or placed on the body while meditating. While relaxing or meditating it is an excellent idea to hold the crystal in either or both hands and focus positively on areas of ones life where positive financial change could occur, ie ones job ,business practices ,salary level etc. Create a mental movie and visualise achieving a wealthy ,prosperous state of existence. In any form of conscious subtle energy manipulation, results will occur through the artificial enhancement of natural processes. It is therefore important to recognise the new opportunities that you will attract to your life which will direct you towards a new paradigm of wealth and prosperity.

Ordering
The Ultra Advanced Psychotronic Money Magnet☐ supplied is the highest grade clear rock quartz . Please note that this is the much more powerful version of our other Psychotronic Money Magnet☐ for sale at our site and other auctions for $90. Each Ultra Advanced Psychotronic Money Magnet☐ comes with instructions for use. Each individually created Ultra Advanced Psychotronic Money Magnet☐ is priced at $180 US dollars. International shipping is priced at $10 US Dollars.
Shipping Insurance is optional.

Our 100% customer satisfaction rating at ebay indicates how pleased our customers have been since we began supplying our metaphysical products there. Please visit The Life Technology Ebay Store at http://stores.ebay.com/life-technology

This product may be of interest to students or practitioners of Alchemy ,Kabbalah, Reiki, Homeopathy, Healing, Buddhism, Shamanism, Pagansism, Rife Therapy, Chakra Therapy, Witchcraft, Antropology, Wicca, Magick, Huna, Hypnosis, Nlp, Rosicrucianism, Mysticism, Radionics, Psionics and Psychotronics etc.

For more information visit www.lifetechnology.org/ultramoneymagnet.htm

2835. Re: Gain increase from scanner antenna to quarter-wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 17:39:19 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cvfqo7qsp1@titan.btinternet.com>
Source record: 81574
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Dave,

The thing to remember at VHF is that the dimensions of the hand-held transmitter/receiver box are just as important as the dimensions of the antenna.

For example, a properly-designed hand-held transceiver plus a rubber-duck, isolated from ground, is equivalent, in overall length, to a half-wave dipole.

Likewise, a vertical whip mounted on a vehicle behaves as a halfwave antenna of length crudely equal to whip length + vehicle depth. (As modified by a loading coil if any.)

If the rubber-duck (which is mostly a helical loading coil) is replaced by a rod or wire of longer length, two things happen -

First, the resonant frequency of the system (antenna + box) changes.

Secondly, the antenna pure input resistance changes from its optimum (designed for) value to an entirely different impedance of resistance + reactance.

In your case, due to its longer length, the antenna + its new smaller loading coil (if you fit one) will certainly radiate more efficiently. But the mismatched transmitter power amplifier (which you havn't got) will now be appreciably less efficient.

With the rubber-duck the antenna will be matched to the receiver input. But with a different antenna impedance there will be a considerable mismatch loss and receiver sensitivity will also be reduced.

Ideally, if the antenna is changed then both Tx and Rx impedance matching arrangements should be changed. Which you can't do!

So the BEST you can do is change the antenna rod or wire length such that the overall length of the system (antenna + box) is crudely 1/2-wavelength at the working frequency and HOPE that you gain more on the swings than you lose on the roundabouts.

You will likely be more successful on receive than on transmit. But it is quite possible for performance, especially on transmit, to be worse.

The most likely result is that you will hardly notice any difference. At best, if you could measure it, you can expect a few dB improvement. Depends on how big is the rubber-duck you begin with. Don't throw it away. You may wish you hadn't.

Another thing to remember is that the extremely uncertain hand and arm which holds the scanner forms an integral part of the radiating/receiving system. A sweaty palm and an arm held over your head can seriously affect tuning.

Orientation (polarisation) of the antenna relative to balloon antenna orientation can also make a great difference.

Exact length of antenna (resonance) is a very non-critical matter. Just connect some wire to the antenna socket and be prepared to prune it.

What does your "Reception is not too great at times" mean. To effect a noticeable improvement, a 4-times increase in power from the balloon transmitter would be noticeable. (A 4-times increase in power is equivalent to twice the height or distance.)

Great fun is available just from all the uncertainty involved.

Happy experimenting!

Reg, G4FGQ

==========

> I'm tracking a high altitude balloon on 2m via a handheld scanner, and
> in the past have used the standard rubber-duck antenna that the scanner
> came with. However, reception isn't too great at times. What kind of
> gain increase could I expect to see if I were to replace the current
> rubber-duck antenna with a quarter-wave antenna (designed for 2m and
> 70cm)?
>
> Thanks in advance for any insight!
> Dave
>

2836. Re: F to B and F to rear

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 18:04:55 UTC
From: Buck <iam@this.site>
Message-ID: <n7sm119lvg13ovj723bn92ukp219facd4l@4ax.com>
Source record: 81575

On Tue, 22 Feb 2005 13:48:38 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>Asimov
>That's right, because every thing is known about antennas
>And when something new comes along many will say they knew that all
>the time
>Art
>

Similar to Asimov, I believe that the laws of physics are pretty much known about antennas and therefore not much new will come from that, however, I don't necessarily believe every antenna design has been found. I believe that there is plenty of room for improvement on antennas for frequency Z when one only has X by Y space.

I don't believe that the laws of physics will allow an antenna design that is more efficient (in terms of material, space and wind-resistance) than the Yagi. That's not to say that one can't invent a better vertical, array or some kind of gain antenna for a restricted area. I always believe there is room for improvement.

I differ with Asimov in that I would not want to discourage you from seeking out the new antenna design. You may surprise us all and find that more-effecient antenna, or you may just find a different style antenna that fits some particular purpose. Either way, we all win.

Edison was called a failure and told he was wasting his time when he didn't get a working light bulb out of hundreds of tries.

Good luck

--
73 for now
Buck
N4PGW

2837. Re: Gain increase from scanner antenna to quarter-wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 18:15:04 UTC
From: Buck <iam@this.site>
Message-ID: <pgtm11lg8foe8i1csl8h8b3b9idn3lvlei@4ax.com>
Source record: 81576
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

On 22 Feb 2005 06:38:53 -0800, dave.harper@gmail.com wrote:

>I'm tracking a high altitude balloon on 2m via a handheld scanner, and
>in the past have used the standard rubber-duck antenna that the scanner
>came with. However, reception isn't too great at times. What kind of
>gain increase could I expect to see if I were to replace the current
>rubber-duck antenna with a quarter-wave antenna (designed for 2m and
>70cm)?

Significant. I don't have a number, but it will definitely improve.

On the balloon, is the antenna vertically polarized? I would assume
so. If not, consider a dipole.

Also, to improve the reception further, build a 'rat-tail'. Its a 1/4
wave wire that hangs from the ground of the rig making your 1/4 wave
antenna more of a 1/2 wave. You may find adding that will help even
with the duck.

--
73 for now
Buck
N4PGW

2838. Re: Gain increase from scanner antenna to quarter-wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 18:34:46 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <6jase2-6qd.ln1@p400bob.lse.com.au>
Source record: 81580
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Hi Dave

Assuming you build a 1/4GP with a large enough counterpoise (ie dont rely on the case of the scanner) I think the figure of merit is around 6-12dB. You may however be better off making a turnstile about 3/8 wavelength over a mesh ground so the thing points roughly where you want it. That will also help with polarization changes as the baloon rotates. Maybe a similar antenna on the ballon as well?

Cheers Bob Vk2YQA

dave.harper@gmail.com wrote:
> I'm tracking a high altitude balloon on 2m via a handheld scanner, and
> in the past have used the standard rubber-duck antenna that the scanner
> came with. However, reception isn't too great at times. What kind of
> gain increase could I expect to see if I were to replace the current
> rubber-duck antenna with a quarter-wave antenna (designed for 2m and
> 70cm)?
>
> Thanks in advance for any insight!
> Dave
>

2839. Re: Gain increase from scanner antenna to quarter-wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 18:39:36 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <1109097576.400656.47630@g14g2000cwa.googlegroups.com>
Source record: 81577
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Reg,
Thanks for the feedback. I really appreciate it! If I could, I had a
few additional questions regarding some of your points:

Reg Edwards wrote:

> Secondly, the antenna pure input resistance changes from its optimum
> (designed for) value to an entirely different impedance of resistance
+
> reactance.
>
> With the rubber-duck the antenna will be matched to the receiver
input. But
> with a different antenna impedance there will be a considerable
mismatch
> loss and receiver sensitivity will also be reduced.
>
> Ideally, if the antenna is changed then both Tx and Rx impedance
matching
> arrangements should be changed. Which you can't do!

The antenna I had in mind was made for Radio Shack handheld scanners,
and I have a Uniden handheld, which both have a 50 Ohm impedence I
believe... this would eliminate the impedance mismatch, wouldn't it?

> The most likely result is that you will hardly notice any difference.
At
> best, if you could measure it, you can expect a few dB improvement.
Depends
> on how big is the rubber-duck you begin with. Don't throw it away.
You may
> wish you hadn't.

The antenna it came with is about 6" long, and I assume it's made to be
a decent antenna for all frequencies the scanner is designed for (29MHz
to 900+Mhz). Just FYI, in case that changes anything...?

> Orientation (polarisation) of the antenna relative to balloon antenna
> orientation can also make a great difference.

That would be great if I could control the orientation of the
transmitting antenna. It can vary +/- 45 degrees or so during the
flight... the transmitting antenna is an inverted standard 2m handheld
antenna (8" or 9" long?). I've assumed in the past that if I held the
recieve antenna vertical, that's about as good as I can get...?

> What does your "Reception is not too great at times" mean.

On the way down mainly, when it's decending between 30 and 100 mph.
I'm assuming this is due to antenna swing.

> To effect a noticeable improvement, a 4-times increase in power from
the balloon transmitter would be noticeable.

I'd love to, but due to battery capacity and time of operation, .5W is
what I'm trying to stick with.

Thanks again for the insight! I very much appreciate it.

Dave

2840. Re: Gain increase from scanner antenna to quarter-wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 18:41:15 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <1109097675.943765.91850@o13g2000cwo.googlegroups.com>
Source record: 81578
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Buck wrote:
> On 22 Feb 2005 06:38:53 -0800, dave.harper@gmail.com wrote:
>
> >I'm tracking a high altitude balloon on 2m via a handheld scanner,
and
> >in the past have used the standard rubber-duck antenna that the
scanner
> >came with. However, reception isn't too great at times. What kind
of
> >gain increase could I expect to see if I were to replace the current
> >rubber-duck antenna with a quarter-wave antenna (designed for 2m and
> >70cm)?
>
> Significant. I don't have a number, but it will definitely improve.

>
> On the balloon, is the antenna vertically polarized? I would assume
> so. If not, consider a dipole.
>
> Also, to improve the reception further, build a 'rat-tail'. Its a
1/4
> wave wire that hangs from the ground of the rig making your 1/4 wave
> antenna more of a 1/2 wave. You may find adding that will help even
> with the duck.

Really? Any point on the ground? Or does it need to be connected
somewhere on the antenna?

Thanks for the advise!
Dave

2841. Re: Dipole vs. Delta loop vs. Quad loop -pratical experience

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 19:04:43 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cvfvobaov2@sparta.btinternet.com>
Source record: 81579

> I said in the original post that I didn't always trust what modeling
> programs say,

==========

Very sensible!

Don't risk suffering from delusions of accuracy.

Modelling programs are invariably less acurate than the data stuffed into them.

And the data stuffed into them nearly always contains nonsensical elements.

Yet results are religiously quoted by old-wives as being of gospel truth and value, equivalent to misquoted, out-of-context, statements by Terman and Kraus.

Who believes antenna relative gain figures stated in milli-bels at 14 MHz, or the take-off angle is 20.7 degrees, when the DC ground conductivity is average and ground permitivity, just as important, is not even mentioned?

And a 1000 other examples.

2842. Re: Dipole vs. Delta loop vs. Quad loop -pratical experience

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 19:13:14 UTC
From: nm5k@wt.net
Message-ID: <1109099594.742906.218680@g14g2000cwa.googlegroups.com>
Source record: 81581

Jim Leder wrote:
As it sits, I'm inclined to let well enough alone and stick with
> the simple dipole, unless I can be convinced otherwise.

That's probably what I would do. In most cases like that, I prefer
the dipoles over the loops...Why? Cuz in general, more of the current
will be up at that apex height, than the loop, which usually will
have to have wires dropping lower to the ground, in order to fit.
If I've got 35-40 ft of height, I prefer to keep the antenna currents
at that height. If you have a delta loop, or any other, usually the
bottom will be fairly close to the ground. More ground loss, and
in general less effective than having it all at 35-40 ft...The
small increase in broadside gain hardly seems worth it to me.
Usually, it's hardly noticable...If I wanted gain, I'd run parallel
dipoles phased, or something along those lines...
I know you don't have the room, but a simple EDZ is more effective
than a loop, as far as the broadside gain..And you can keep it
all up high...An EDZ on 30m would be about 96 ft or so total length..
Anyway, I don't think the loops would be a drastic improvement, if
much at all...But that's just my $2.31 worth...
MK

2843. Radio Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 19:15:23 UTC
From: stryped@hotmail.com
Message-ID: <1109099723.659253.123390@c13g2000cwb.googlegroups.com>
Source record: 81582

have an Alinco DR590. I replaced the battery in it. I can turn it off and back on and it stays on the channel I left it on. If I turn it off and leave it off for an hour or so it always goes back to 145.000 and 445.000.

It is constantly hooked up to my 12 volt battery.

What could htis be?

2844. Re: Radio Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 19:40:33 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <SULSd.34442$xt.7639@fed1read07>
Source record: 81583

Maybe the internal "memory" battery. Not easy to get at with the small parts involved.
Might have to go back to Alinco for a replacement

See URL

http://www.explorerforum.com/forums/archive/index.php/t-90543.html

Where someone had a hacked up a DR-590 when someone tried to replace the internal battery

--
Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?

<stryped@hotmail.com> wrote in message
news:1109099723.659253.123390@c13g2000cwb.googlegroups.com...
> have an Alinco DR590. I replaced the battery in it. I can turn it off
> and back on and it stays on the channel I left it on. If I turn it off
> and leave it off for an hour or so it always goes back to 145.000 and
> 445.000.
>
>
> It is constantly hooked up to my 12 volt battery.
>
>
> What could htis be?
>

2845. Re: Radio Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 19:56:16 UTC
From: cl <clfurent@Yahoo.Com>
Message-ID: <x8MSd.46304$NC6.17779@newsread1.mlpsca01.us.to.verio.net>
Source record: 81584

He has been told this at least a dozen times in former posts..... in at least half a dozen news groups. He was given some very explicit directions on what to do. Failing that, he needs to send it to Alinco, since it seems all help has fallen on deaf ears or blind eyes. There is nothing wrong with asking for help, but this has reached the point of trolling.

cl

"Caveat Lector" <CL@barahmas.com> wrote in message
news:SULSd.34442$xt.7639@fed1read07...
> Maybe the internal "memory" battery. Not easy to get at with the small
> parts involved.
> Might have to go back to Alinco for a replacement
>
> See URL
>
> http://www.explorerforum.com/forums/archive/index.php/t-90543.html
>
>
> Where someone had a hacked up a DR-590 when someone tried to replace the
> internal battery
>
> --
> Caveat Lector (Reader Beware)
> Help The New Hams
> Someone Helped You
> Or did You Forget That ?
>
>
>
> <stryped@hotmail.com> wrote in message
> news:1109099723.659253.123390@c13g2000cwb.googlegroups.com...
>> have an Alinco DR590. I replaced the battery in it. I can turn it off
>> and back on and it stays on the channel I left it on. If I turn it off
>> and leave it off for an hour or so it always goes back to 145.000 and
>> 445.000.
>>
>>
>> It is constantly hooked up to my 12 volt battery.
>>
>>
>> What could htis be?
>>
>
>

2846. Re: Dipole vs. Delta loop vs. Quad loop -pratical experience

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-22 23:37:40 UTC
From: Jim Leder <k8cxm@spam.fuse.net>
Message-ID: <5%RSd.5697$Bo3.4249@fe37.usenetserver.com>
Source record: 81587

I have a 20 meter EDZ up about 35 feet and, yes, it is a very nice antenna.
The only problem I see with it is it's apparent narrow beamwidth. But, hey,
it's broadside NE/SW so I'm OK with that. I looked at one for 30, and know
that it would be nice to have one, but It would replace the 20 meter EDZ
(only place it would fit) and would not be high enough to be too effective.
I am very strongly leaning towards letting the dipole stay and MAYBE
getting off my duff and making the vertical more permanent and improving the
radial field.
I DO appreciate the comments. I have been debating this for some time now.
What else to do in mid winter in the Ohio but to think about spring time
antenna projects.

Jim

<nm5k@wt.net> wrote in message
news:1109099594.742906.218680@g14g2000cwa.googlegroups.com...
>
> Jim Leder wrote:
> As it sits, I'm inclined to let well enough alone and stick with
>> the simple dipole, unless I can be convinced otherwise.
>
> That's probably what I would do. In most cases like that, I prefer
> the dipoles over the loops...Why? Cuz in general, more of the current
> will be up at that apex height, than the loop, which usually will
> have to have wires dropping lower to the ground, in order to fit.
> If I've got 35-40 ft of height, I prefer to keep the antenna currents
> at that height. If you have a delta loop, or any other, usually the
> bottom will be fairly close to the ground. More ground loss, and
> in general less effective than having it all at 35-40 ft...The
> small increase in broadside gain hardly seems worth it to me.
> Usually, it's hardly noticable...If I wanted gain, I'd run parallel
> dipoles phased, or something along those lines...
> I know you don't have the room, but a simple EDZ is more effective
> than a loop, as far as the broadside gain..And you can keep it
> all up high...An EDZ on 30m would be about 96 ft or so total length..
> Anyway, I don't think the loops would be a drastic improvement, if
> much at all...But that's just my $2.31 worth...
> MK
>

2847. Re: Gain increase from scanner antenna to quarter-wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 01:47:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <u4nn11t1j7it4j83vipdhutj6v1k55t3nt@4ax.com>
Source record: 81585
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

On 22 Feb 2005 06:38:53 -0800, dave.harper@gmail.com wrote:

>I'm tracking a high altitude balloon on 2m via a handheld scanner, and
>in the past have used the standard rubber-duck antenna that the scanner
>came with. However, reception isn't too great at times. What kind of
>gain increase could I expect to see if I were to replace the current
>rubber-duck antenna with a quarter-wave antenna (designed for 2m and
>70cm)?
>
>Thanks in advance for any insight!
>Dave

Hi Dave,

Well, I see you got advice, but unrelated to the problem you offered.

The standard rubber duck and a quarterwave are going to have the same failings: they both have the same response curve in space. Basically they both are designed to work with transmitters located at right angles to them. And if you stand in the conventional upright manner of a biped, then those antennas are going to be vertical with the favored direction lying along the horizon.

Now, if your balloon is tracking along the curve of the earth's limb, some several hundred miles out, then this might work admirably (it doesn't take all that much power to hear this distance when nothing is in the way). However, as balloons go, they are generally above you and your antenna is pointed toward them, or nearly so (certainly more so than at the horizon). This is NOT a favored direction for communication and antennas when they are small (and a rubber duck, a quarterwave, or a halfwave easily meet that dismal prospect).

To obtain overhead coverage for communication (and this presumes that the balloon antenna is also vertical - which means it will suffer from the same geometry); then you need an antenna that is at least one wavelength long, or longer (1ï¿½ wavelength would be a nice way to go).

Long antennas have more sensitivity in the direction along their length.

Now, if your tracking pastime includes all angles from the horizon to directly above, then you need to consider designs that are more isotropic (and none of the suggestions offered by everyone, including me, come anywhere close).

73's
Richard Clark, KB7QHC

2848. Re: Gain increase from scanner antenna to quarter-wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 02:10:53 UTC
From: Dave <dave.harper@gmail.com>
Message-ID: <1109124653.623727.121440@g14g2000cwa.googlegroups.com>
Source record: 81586
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Richard Clark wrote:

> The standard rubber duck and a quarterwave are going to have the same
> failings: they both have the same response curve in space. Basically
> they both are designed to work with transmitters located at right
> angles to them. And if you stand in the conventional upright manner
> of a biped, then those antennas are going to be vertical with the
> favored direction lying along the horizon.

Richard,
Thanks for the advise. However, I thought 1/4 wave antennas were more
isotropic than 'most' other antennas... (see link below)

http://www.astrosurf.com/lombry/Radio/dipole-height.gif

What am I missing?

Basically, all I'm trying to do is increase the sensitivity of my
handheld scanner for the 2m range.

Thanks,
Dave

2849. Re: Gain increase from scanner antenna to quarter-wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 06:01:19 UTC
From: BKR <REMOVESPAMrchvid7@lycos.comFilter>
Message-ID: <111o719lsacfh0c@corp.supernews.com>
Source record: 81588
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Dave, I have seen you get some good information and some bad
information. The 1/4 wave will give you better results over the short
rubber duck.
There will be not much difference in the pattern between the original
antenna and the 1/4 wave. There will be an improvement in signal level
by about 10 dB. One poster said that you were in trouble because your
antenna was vertical. I am willing to bet you can turn your head and
look upward with the scanner turning upward as well.

Your radio is designed for a 50 Ohm antenna so half or more of the
information given by "Reg Edwards" is bogus as well. I don't think he
tried to mislead you, but may not have experience in real life experiments.
The case of the radio is important only in how it capacitively couples
with your hand or body.
A short vertical has an impedance far below a normal quarter wave. That
means your idea matches better to your radio.
As a sort of ground wire, a 1/4 wavelength long counterpoise, (as
someone said a rat tail) will also help.

Dave wrote:
> Richard Clark wrote:
>
>
>>The standard rubber duck and a quarterwave are going to have the same
>>failings: they both have the same response curve in space. Basically
>>they both are designed to work with transmitters located at right
>>angles to them. And if you stand in the conventional upright manner
>>of a biped, then those antennas are going to be vertical with the
>>favored direction lying along the horizon.
>
>
> Richard,
> Thanks for the advise. However, I thought 1/4 wave antennas were more
> isotropic than 'most' other antennas... (see link below)
>
> http://www.astrosurf.com/lombry/Radio/dipole-height.gif
>
> What am I missing?
>
> Basically, all I'm trying to do is increase the sensitivity of my
> handheld scanner for the 2m range.
>
> Thanks,
> Dave

>

2850. Re: Gain increase from scanner antenna to quarter-wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 06:18:02 UTC
From: Buck <iam@this.site>
Message-ID: <pt7o1115qf9ioju20bj82qkqr9038incjv@4ax.com>
Source record: 81589
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

On 22 Feb 2005 10:41:15 -0800, "dave.harper" <dave.harper@gmail.com>
wrote:

>
>Buck wrote:
>> On 22 Feb 2005 06:38:53 -0800, dave.harper@gmail.com wrote:
>>
>> >I'm tracking a high altitude balloon on 2m via a handheld scanner,
>and
>> >in the past have used the standard rubber-duck antenna that the
>scanner
>> >came with. However, reception isn't too great at times. What kind
>of
>> >gain increase could I expect to see if I were to replace the current
>> >rubber-duck antenna with a quarter-wave antenna (designed for 2m and
>> >70cm)?
>>
>> Significant. I don't have a number, but it will definitely improve.
>
>>
>> On the balloon, is the antenna vertically polarized? I would assume
>> so. If not, consider a dipole.
>>
>> Also, to improve the reception further, build a 'rat-tail'. Its a
>1/4
>> wave wire that hangs from the ground of the rig making your 1/4 wave
>> antenna more of a 1/2 wave. You may find adding that will help even
>> with the duck.
>
>Really? Any point on the ground? Or does it need to be connected
>somewhere on the antenna?
>
>Thanks for the advise!
>Dave

most commonly they are connected to the bnc ground, but anywhere that
is grounded to that connector will work. Since this is a scanner, you
might consider a piece of computer ribbon cable. Cut each wire in the
ribbon to 1/4 of your favorite bands or frequencies until you run out
of wire. If you have left-over strips, just remove them or leave them
for later use.

Just a thought.

Buck

--
73 for now
Buck
N4PGW

2851. Re: Gain increase from scanner antenna to quarter-wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 06:25:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vd7o11po9cvjufff0m77jmn7dl8tkr6rpf@4ax.com>
Source record: 81590
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

On 22 Feb 2005 18:10:53 -0800, "Dave" <dave.harper@gmail.com> wrote:
>Thanks for the advise. However, I thought 1/4 wave antennas were more
>isotropic than 'most' other antennas... (see link below)
>
>http://www.astrosurf.com/lombry/Radio/dipole-height.gif
>
>What am I missing?

Hi Dave,

Umm, those are lobes for a HORIZONTAL dipole --- wrong polarization,
wrong size. Cross polarized signals come with beaucoup loss.

>Basically, all I'm trying to do is increase the sensitivity of my
>handheld scanner for the 2m range.

If the balloon is overhead (or off of overhead by ï¿½15ï¿½) you are 10dB
down at best, or sitting in a deep null (deaf city). To compare that
30ï¿½ cone of silence: Hold your hand directly overhead, spread out
your fingers and thumb, the distance between little finger and thumb
tips spans 13 to 15 degrees (half that cone).

Is your balloon in that cone? Worst possible place for a short
vertical antenna to hear; and for a balloon with a short vertical, you
are in the worst place for it to shout down to you. This is a deadly
combination that puts your normal signal at -20dB (or worse).

A KW linear may overcome this sensitivity problem however.

73's
Richard Clark, KB7QHC

2852. RF basic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 07:43:47 UTC
From: simon0630@yahoo.com
Message-ID: <a6e4082c.0502222343.77c3806f@posting.google.com>
Source record: 81591

Hi, all,
I am new to RF, but (un)fortunately i am handling a transferred project on RFID. Some of the rf concepts i am not not so sure, and seek for assitance here.
Let me give a bit more on the original designs first. They are tags that talk to each other unlike the passive tag. This design is already working with a quarter wave-length antenna. My task is to modify it to a smaller (shorter) one.
The design is like :
antenna----matching circuit----transceiver----mcu

Now comes the questions:
1. when we talk about the load impedance, where should it start counting? From transceiver down left or from the matching circuit down left?
2. the original matching circuit is working for the quarter wave length antenna. Do i need to adjust the value (C and L) if i replace them with other forms of antennas(e.g chip antenna, loop antenna)?
3. How am i going to measure the load impedance? What equipment is needed?

thanks. Any advice is favorable.
Sigma

2853. Re: Radio Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 12:54:33 UTC
From: stryped@hotmail.com
Message-ID: <1109163273.403790.85600@f14g2000cwb.googlegroups.com>
Source record: 81592

I replaced the internal memory battery.

2854. Re: Radio Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 14:56:54 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <WQ0Td.11488$hU7.4475@newssvr33.news.prodigy.com>
Source record: 81593

stryped,
Then I would think the logical questions to ask are;
Was the replacement battery any good?
How long ago was this replacement done?
Was the battery replaced correctly?

If the answers are that the battery really was good, and it hasn't been an unreasonable period of time since replacement, and if the battery was replaced correctly, then it would seem that there is something else wrong. If you can't find the problem, send it back to the manufacturor, let them find it.
'Doc

2855. Re: RF basic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 15:23:12 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <Ad1Td.267529$w62.66747@bgtnsc05-news.ops.worldnet.att.net>
Source record: 81594

Montoya (Sigma),

You did not give any indication of the frequency you use, and commercial RFID tags range from somewhere around 125 kHz to over 5 Ghz. Makes just a little bit of difference.

This can't be part of a legitimate commercial project or else the company would already be bankrupt for lack of adequate staffing. Assuming it is a student project the recommendation would be to contact your professors and fellow students to learn more about RF.

For some specific ideas check out some of the voluminous documentation available from RFID manufacturers. For example, Texas Instruments has a lot of RFID documents available for downloading, including a 47 page technical note on antennas for RFID. The high level site address is www.ti.com/rfid

73,
Gene
W4SZ

Montoya wrote:
> Hi, all,
> I am new to RF, but (un)fortunately i am handling a transferred
> project on RFID. Some of the rf concepts i am not not so sure, and
> seek for assitance here.
> Let me give a bit more on the original designs first. They are tags
> that talk to each other unlike the passive tag. This design is already
> working with a quarter wave-length antenna. My task is to modify it
> to a smaller (shorter) one.
> The design is like :
> antenna----matching circuit----transceiver----mcu
>
> Now comes the questions:
> 1. when we talk about the load impedance, where should it start
> counting? From transceiver down left or from the matching circuit down
> left?
> 2. the original matching circuit is working for the quarter wave
> length antenna. Do i need to adjust the value (C and L) if i replace
> them with other forms of antennas(e.g chip antenna, loop antenna)?
> 3. How am i going to measure the load impedance? What equipment is
> needed?
>
> thanks. Any advice is favorable.
> Sigma

2856. Re: Question Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 15:56:10 UTC
From: conconemail@libero.it
Message-ID: <1109174170.746802.110470@g14g2000cwa.googlegroups.com>
Source record: 81595

You can have a look here for antenna plans and antenna theory

http://www.dxzone.com/

2857. Re: Gain increase from scanner antenna to quarter-wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 16:11:47 UTC
From: Dave <dave.harper@gmail.com>
Message-ID: <1109175107.175289.66930@z14g2000cwz.googlegroups.com>
Source record: 81596
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Richard Clark wrote:
> On 22 Feb 2005 18:10:53 -0800, "Dave" <dave.harper@gmail.com> wrote:
> >Thanks for the advise. However, I thought 1/4 wave antennas were
more
> >isotropic than 'most' other antennas... (see link below)
> >
> >http://www.astrosurf.com/lombry/Radio/dipole-height.gif
> >
> >What am I missing?
>
> Hi Dave,
>
> Umm, those are lobes for a HORIZONTAL dipole --- wrong polarization,
> wrong size. Cross polarized signals come with beaucoup loss.

Are there any online sources that show vertical whip antenna take-off
angles vs. antenna length (as a function of wavelength)?

> If the balloon is overhead (or off of overhead by ±15°) you are
10dB
> down at best, or sitting in a deep null (deaf city). To compare that
> 30° cone of silence: Hold your hand directly overhead, spread out
> your fingers and thumb, the distance between little finger and thumb
> tips spans 13 to 15 degrees (half that cone).
>
> Is your balloon in that cone? Worst possible place for a short
> vertical antenna to hear; and for a balloon with a short vertical,
you
> are in the worst place for it to shout down to you. This is a deadly
> combination that puts your normal signal at -20dB (or worse).

I don't know about "deadly"... atleast not in this scenario. :-)

Keeping the transmitter and reciever constant, what would you recommend
for the transmitting and receiving antennas in this case?

Thanks,
Dave

2858. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 16:21:55 UTC
From: "aunwin@insightbb.com"
Message-ID: <D42Td.20603$g44.4764@attbi_s54>
Source record: 81597

If one pursues this 'out of the box' hypothesis it can be seen that the
earth itself,
because of it constituents ,will consistently emit photons all the time such
that it will dwarf the
radio waves with respect to energy containment differences as well as energy
received from
beyond earth. It there fore can be seen that the earth itself can be mapped
out with respect to
photon emmisions and without reference to shore lines, mountains,buildings
e.t.c.
This map could in fact be made up of colours depending on frequencies of
emmissions.
It could well be that birds have the ability of 'seeing' such a map that
would allow them
to uneeringly navigate the oceans or migrate without material sign posts or
allow a homing
pigeon to speedily return to home. This does have drawbacks in that the
'map' can be totally distorted
when the earth is bombarded with outside energy leaving migratory birds in a
hopeless state until
the interference abates as with sun spots and normalcy returns with respect
to the natural
emmission of earth photons.
Moral is that you do not release homing pigeons during sun spot activity.
Perhaps I shoulds resume my antenna activities or I will never get things
done..grin

Regards
Art

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:wuQQd.10164$4q6.2269@attbi_s01...
> Cecil
> Sounds like cyclic flow changes between inductance and capacitance is
> instantanious
> leaving free electron that do not complete safe harbour to shove photons
> towards
> another antenna where it meets a similar cyclic flow between the
> inductance and
> capacitance which operates at the given frequency.
> No, I have not read this anywhere but it is as good as any theories or
> predictions
> offered here since it appears to comply with Newton's Laws that have
> been proven time and time again.
> Regards

> Art
>
>
>
>
> "Cecil Moore" <w5dxp@hotmail.com> wrote in message
> news:4213b0d5$1_2@127.0.0.1...
>> Jedi Knight wrote:
>>> Next the wave travels through space in a way that totally dumb founds
>>> me, and is picked up by a receiving antenna, which does the whole thing
>>> backward. It's this part that really mucks things up (yes, that's the
>>> technical term for it) for me. I really don't see how there can be
>>> more than one thing occuping the same space (the whole "Back to the
>>> Future" phenomenon, lol) at the same time. Something is missing for
>>> me. I'm way more of a visual learner, so if anybody has
>>> pictures....SWEET.
>>
>> This is the area where photons are easier to understand than EM
>> waves (although an understanding of superposition of waves will
>> explain everything). Photons emitted from any number of sources
>> all arrive at your antenna at the same time. Those photons are
>> absorbed by the free electrons in your copper antenna. Your
>> receiver senses those electrons giving up their energies at
>> different frequencies, magnitudes, and phases.
>> --
>> 73, Cecil http://www.qsl.net/w5dxp
>>
>>
>> ----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
>> News==----
>> http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000
>> Newsgroups
>> ---= East/West-Coast Server Farms - Total Privacy via Encryption =---
>
>

2859. Re: Gain increase from scanner antenna to quarter-wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 16:31:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9bbp11ptp3t7dsgi31e3r0a3o79a5lsp9a@4ax.com>
Source record: 81598
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

On 23 Feb 2005 08:11:47 -0800, "Dave" <dave.harper@gmail.com> wrote:
>
>Are there any online sources that show vertical whip antenna take-off
>angles vs. antenna length (as a function of wavelength)?

Hi Dave,

Go to:
http://www.eznec.com/
and research to your heart's content with the simple designs (or make
your own).

>Keeping the transmitter and reciever constant, what would you recommend
>for the transmitting and receiving antennas in this case?

Inverted F comes to mind, but is not the total solution. Then there
is the quadrifilar helix antenna.
Visit:
http://home.iag.net/~w2du/Reflections2Chapter22QuadrifilarHelixAntenna.pdf

73's
Richard Clark, KB7QHC

2860. Re: Mount antennas on pole

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 17:20:50 UTC
From: William Mutch <wcm1@NOSPAM.cornell.edu>
Message-ID: <MPG.1c86857dff2aeb809897f5@newsstand.cit.cornell.edu>
Source record: 81599

In article <cv7psd$9vd$1@reader01.news.esat.net>, d@iolfree.ie says...
> I want to purchase a 20-30 foot pole to put in my back garden as a place to
> mount the antennas on.I live in the country side so i dont need to worry
> about complaints.How would i mount antennas on to a basic metal pole?
>
> Chris
>
>
>
U bolts. There was a good discussion on the group a while ago
about the steel tubing made and marketed for the top rail of Cyclone
fencing being a good material for antenna masts. It comes in a number
of sizes with coupling harware and is relatively inexpensive.

2861. Re: Gain increase from scanner antenna to quarter-wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 17:53:05 UTC
From: Dave <dave.harper@gmail.com>
Message-ID: <1109181185.512926.189820@l41g2000cwc.googlegroups.com>
Source record: 81600
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Richard Clark wrote:
> On 23 Feb 2005 08:11:47 -0800, "Dave" <dave.harper@gmail.com> wrote:
> >
> >Are there any online sources that show vertical whip antenna
take-off
> >angles vs. antenna length (as a function of wavelength)?
>
> Hi Dave,
>
> Go to:
> http://www.eznec.com/
> and research to your heart's content with the simple designs (or make
> your own).

Done and done... nice program! I'm hoping I entered the correct values for everything. Do the patterns listed below look correct? I assumed things like wire diameter (I used 2mm) didn't affect the output significantly... although I did notice some things like the number of segments did affect the output if I decreased them (I used 10 for these cases).

(filename = length in wavelengths):

http://www.geocities.com/achilles03/eighth.gif
http://www.geocities.com/achilles03/quarter.gif
http://www.geocities.com/achilles03/half.gif
http://www.geocities.com/achilles03/5eighths.gif
http://www.geocities.com/achilles03/1wave.gif
http://www.geocities.com/achilles03/1point25wave.gif
http://www.geocities.com/achilles03/2.gif

Do those look correct?

Thanks in advance!
Dave

2862. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 18:01:10 UTC
From: Dave <dave.harper@gmail.com>
Message-ID: <1109181670.663409.45660@l41g2000cwc.googlegroups.com>
Source record: 81601

Jedi Knight wrote:
> Hello,
>
> I've been searching for an answer to this question for years. I'm
> hoping somebody here can answer it or at least point me in the
> direction. Or maybe I'm totally off base on my basic understanding
and
> so this question is out in left field.

Good question, and I'm sure you got lots of good answers. I'm sort of a beginner myself, but one way I think of radio waves is like this: it's a different kind of light. The light you see and radio waves are essentially the same thing (electromagnetic radiation), only your eye can't see radio waves. A radio antenna is like a light bulb, and different antenna shapes are like different shaped light bulbs. The main difference between the light we see and radio waves (that are transmitted) is that radio waves are created in phase from the antenna (like a laser), while the light we see kinda just streams out from whatever's creating it (ie not in phase). The fact that lasers create light in phase is why they're used for so many things, as opposed to just a really straight flashlight beam.

Hope that helps,
Dave

2863. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 18:27:34 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <qW3Td.268400$w62.31796@bgtnsc05-news.ops.worldnet.att.net>
Source record: 81602

Hi Art,

Why do you think this is "out of the box"? Photon emission over a huge range of wavelengths is all around us.

The earth has been mapped by photon emission 'forever', in color no less. You may choose to call it photon reflection, but the end result is the same. Photons are everywhere.

I hate to get personal, but do you have working eyes? Can you feel heat from the sun?

Photons rule.

73,
Gene
W4SZ

aunwin@insightbb.com wrote:
> If one pursues this 'out of the box' hypothesis it can be seen that the
> earth itself,
> because of it constituents ,will consistently emit photons all the time such
> that it will dwarf the
> radio waves with respect to energy containment differences as well as energy
> received from
> beyond earth. It there fore can be seen that the earth itself can be mapped
> out with respect to
> photon emmisions and without reference to shore lines, mountains,buildings
> e.t.c.
> This map could in fact be made up of colours depending on frequencies of
> emmissions.
> It could well be that birds have the ability of 'seeing' such a map that
> would allow them
> to uneeringly navigate the oceans or migrate without material sign posts or
> allow a homing
> pigeon to speedily return to home. This does have drawbacks in that the
> 'map' can be totally distorted
> when the earth is bombarded with outside energy leaving migratory birds in a
> hopeless state until
> the interference abates as with sun spots and normalcy returns with respect
> to the natural
> emmission of earth photons.
> Moral is that you do not release homing pigeons during sun spot activity.
> Perhaps I shoulds resume my antenna activities or I will never get things
> done..grin
>

> Regards
> Art
>
> "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
> news:wuQQd.10164$4q6.2269@attbi_s01...
>
>>Cecil
>>Sounds like cyclic flow changes between inductance and capacitance is
>>instantanious
>>leaving free electron that do not complete safe harbour to shove photons
>>towards
>>another antenna where it meets a similar cyclic flow between the
>>inductance and
>>capacitance which operates at the given frequency.
>> No, I have not read this anywhere but it is as good as any theories or
>>predictions
>>offered here since it appears to comply with Newton's Laws that have
>>been proven time and time again.
>>Regards
>>Art
>>
>>
>>
>>
>>"Cecil Moore" <w5dxp@hotmail.com> wrote in message
>>news:4213b0d5$1_2@127.0.0.1...
>>
>>>Jedi Knight wrote:
>>>
>>>>Next the wave travels through space in a way that totally dumb founds
>>>>me, and is picked up by a receiving antenna, which does the whole thing
>>>>backward. It's this part that really mucks things up (yes, that's the
>>>>technical term for it) for me. I really don't see how there can be
>>>>more than one thing occuping the same space (the whole "Back to the
>>>>Future" phenomenon, lol) at the same time. Something is missing for
>>>>me. I'm way more of a visual learner, so if anybody has
>>>>pictures....SWEET.
>>>
>>>This is the area where photons are easier to understand than EM
>>>waves (although an understanding of superposition of waves will
>>>explain everything). Photons emitted from any number of sources
>>>all arrive at your antenna at the same time. Those photons are
>>>absorbed by the free electrons in your copper antenna. Your
>>>receiver senses those electrons giving up their energies at
>>>different frequencies, magnitudes, and phases.
>>>--
>>>73, Cecil http://www.qsl.net/w5dxp
>>>
>>>
>>>----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet

>>>News==----
>>>http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000
>>>Newsgroups
>>>---= East/West-Coast Server Farms - Total Privacy via Encryption =---
>>
>>
>
>

2864. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 19:08:20 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <421CD4B3.D1083BFE@deadend.com>
Source record: 81603
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Ken Smith wrote:
>
> In article <ac89760f.0502202209.e0bb47e@posting.google.com>,
> Nug <yahdjt@bigfoot.com> wrote:
> >Hi
> >I am building an rf transmitter for a short range data link at 433MHZ
> >and am almost done, but I would like to understand better exactly what
> >I am seeing with regard to antenna performance.
>
> [.. 1/4 wave and 1/2 wave ...]
>
> An antenna looks like an LC tuned circuit loaded by the radiation
> resistance. Your output stage has some impedance that correctly matches
> to it (there are exceptions we will ignore) and it is this impedance you
> want the antenna system to have. When the correct matching is done, the
> antenna works as an impedance mathcing network that matches the output
> stages impedance to the radiation resistance.

RF transmitters are not impedance matched to antennae in the sense of maximum transfer of power. "Maximum transfer of power" is a small signal (ideal linear parameters) issue, not a large signal issue. That is, the antenna/load are not conjugately matched. What is said, is that a TX'er will deliver some given power into, for example, 50 ohms. This says nothing about the output impedance of the PA.

Power amplifiers are concerned with DC input power to RF output power efficiency, thus they are load-line "matched," not impedance matched. The concept of "output impedance" breaks down for large signal devices. For example, what is the output impedance of a class C or D amp taken when the transistor is on or off? I suppose one could consider the time-averaged impedance, but I'm not sure of the utility (to be fair, the time-averaged reactive output component is tuned out as best possible). The vague output impedance is a problem even for large signal class A devices. Again, RF PA's should be load-line matched. Output-Z is irrelevent.

2865. New MFJ Telescoping Mast and Possibilities

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 19:19:51 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <111plqolrf9adb4@corp.supernews.com>
Source record: 81604

OK. MFJ has a 33 ft. Telescoping Fiberglass Mast and collapses to 3.8 ft. If ever there was a pole with possibilities for multi design vertical antennas and dipole/inv.Vs of the portable/toteable/permanent type, this is it. It weighs in at only 3.3 pounds and costs $80.00 See the '05 catalog page 43 full details. It is flexible, it is black making it somewhat stealthy and it is UV resistant. MFJ has done only enough math to show that fully extended it is a full 1/4 wave for 40 mtrs. I don't know how many sections there are but each one pulls out and twist locks into place. I'm going to get one and play around with it. I'm dead in the middle of restricted covenant hell. My fault for that, I had a stroke right in the middle of new home search and my wife found this home in gated community bought it, but didn't think to ask about the covenants.

Butch KF5DE

2866. Re: Mount antennas on pole

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 19:28:52 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <421CDA08.A6366D4E@shaw.ca>
Source record: 81605

Chris wrote:
>
> I want to purchase a 20-30 foot pole to put in my back garden as a place to
> mount the antennas on.I live in the country side so i dont need to worry
> about complaints.How would i mount antennas on to a basic metal pole?
>
> Chris

Muffler Clamps may do the trick.

Irv VE6BP
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/index.html
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/index.htm
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/index.htm
---
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2867. Re: RF basic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 19:43:33 UTC
From: richardharrison@webtv.net
Message-ID: <6224-421CDCE5-93@storefull-3251.bay.webtv.net>
Source record: 81607

Sigma wrote:
"This design os already working with a quarter wavelength antenna. My task is to modify it to a smaller (shorter) one."

An antenna shorter than resonant length uses a lossy loadong ciil(a) in most cases to neutralize its capacitive reactance. The antenna system must be resonant so that reactance does not limit energy into the antenna.

A 1/4-wave of wire is only 1/2 of an antenna. The other 1/2 of the antenna must be supplied by another 1/4-wavelength of wire or by an image-maker such as a large conducting sheet or a ground plane. The image maker is larger than a lone 1/4-wavelength of wire.

A 1/2-wavelength of wire is resonant and it is a complete antenna. A 1/4-wavelength is not.

A shorter than resonant-length of wire is less directional than a full-length antenna, but not by much.This means there is less "gain" in it at its best direction. Its real problem is its fast rising capacitive reactance as it is shortened from resonance. Another problem is its dropping radiation resistance which causes its loss to heat resistance to take a larger share of its total energy.

There is a way to slightly reduce the length of a resonant dipole, and that is to make it fat instead of thin. This is usually costly, inadequate, and inconvenient. The length of a 1/2-wavelength conductor is only 94% of a 1/2-wavelength in free-space if its diameeter is 1/1000 of a wavelength. See Fig 8 on page 2-5 of the 19th edition of the ARRL Antenna Book.

Another way to reduce the length of a resonant dipole is to attach large conductive areas to its ends as capacitive hats for loading. This is almost lossless as compared with coils.

The antenna may not be the problem if you are working in the near field. You may have an advantage in the much higher energy very close to the antenna. The antenna`s induction fields are much larger than its radiation field up close. See page 865 of Terman`s 1055 edition.

You might not use a salient antenna at all. You could use a metal 1/2-wavelength slot. See Chapter 9 of Kraus` 1950 edition of "Antennas".

A practical solution may be a 1/4-wavelength, end to end, folded dipole. This consists of a resonant 1/2-wavelength of wire. It takes only 1/2 the space of a !/2-wavelength open-ended dipole. Its gain is only 0.5 dB less than the 1/2-wavelength dipole. Its problem is a feedpoint

resistance of 6000 ohms which may be hard to match. See page 509 of TV and Other Receiving Antennas" by Arnold B. Bailey.

Best regards, Richard H. Harrison, KB5WZI

2868. Re: Gain increase from scanner antenna to quarter-wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 19:57:43 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421ce101$1_1@127.0.0.1>
Source record: 81606
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Dave wrote:
> Are there any online sources that show vertical whip antenna take-off
> angles vs. antenna length (as a function of wavelength)?

There's a free demo version of an antenna analysis program,
EZNEC, at http://www.eznec.com It will answer your questions.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

2869. Re: New MFJ Telescoping Mast and Possibilities

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 20:03:53 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421ce274$2_1@127.0.0.1>
Source record: 81608

Butch wrote:

> OK. MFJ has a 33 ft. Telescoping Fiberglass Mast and collapses to 3.8
> ft. If ever there was a pole with possibilities for multi design
> vertical antennas and dipole/inv.Vs of the portable/toteable/permanent
> type, this is it. It weighs in at only 3.3 pounds and costs $80.00
> See the '05 catalog page 43 full details. It is flexible, it is black
> making it somewhat stealthy and it is UV resistant. MFJ has done only
> enough math to show that fully extended it is a full 1/4 wave for 40
> mtrs. I don't know how many sections there are but each one pulls out
> and twist locks into place. I'm going to get one and play around with
> it. I'm dead in the middle of restricted covenant hell. My fault for
> that, I had a stroke right in the middle of new home search and my wife
> found this home in gated community bought it, but didn't think to ask
> about the covenants.

A less expensive solution is the SD-20 collapsible fishing pole
from West Bend available through Worldradio. http://www.wr6wr.com
20 feet and a high-Q loading coil does a good job on 40m.
--
73, Cecil http://www.qsl.net/w5dxp

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2870. Re: New MFJ Telescoping Mast and Possibilities

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 20:29:42 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <111pptodff6nk22@corp.supernews.com>
Source record: 81609

Cecil Moore wrote:
> Butch wrote:
>
>> OK. MFJ has a 33 ft. Telescoping Fiberglass Mast and collapses to 3.8
>> ft. If ever there was a pole with possibilities for multi design
>> vertical antennas and dipole/inv.Vs of the portable/toteable/permanent
>> type, this is it. It weighs in at only 3.3 pounds and costs $80.00
>> See the '05 catalog page 43 full details. It is flexible, it is black
>> making it somewhat stealthy and it is UV resistant. MFJ has done only
>> enough math to show that fully extended it is a full 1/4 wave for 40
>> mtrs. I don't know how many sections there are but each one pulls out
>> and twist locks into place. I'm going to get one and play around with
>> it. I'm dead in the middle of restricted covenant hell. My fault for
>> that, I had a stroke right in the middle of new home search and my
>> wife found this home in gated community bought it, but didn't think to
>> ask about the covenants.
>
>
> A less expensive solution is the SD-20 collapsible fishing pole
> from West Bend available through Worldradio. http://www.wr6wr.com
> 20 feet and a high-Q loading coil does a good job on 40m.

Now, now Cecil. Think positive. Mine is 13 ft taller, much better
looking and does not smell like fish. Besides colapses to less than 4
ft. Will hold up a 40/80/160 half wave dipole or "V". Four of 'em will
support a full wave loop at 160, 320 even!!
With proper guying, no doubt will handle a Tail-Twister and 12 element
log periodic. Get rid of them negative waves radiating from your fishing
pole Cecil. Get a real and positive wave making MFJ high flyer! :o)
And all the children cried "Yea verily, and glory be unto MFJ (and Butch)"!

Butch Magee KF5DE

2871. Re: New MFJ Telescoping Mast and Possibilities

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 20:35:51 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421cea83_1@127.0.0.1>
Source record: 81610

Butch wrote:
>> A less expensive solution is the SD-20 collapsible fishing pole
>> from West Bend available through Worldradio. http://www.wr6wr.com
>
> Now, now Cecil. Think positive.

Oops, sorry, the SD-20 is more economical. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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2872. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 20:40:18 UTC
From: "aunwin@insightbb.com"
Message-ID: <SS5Td.21403$zH6.5499@attbi_s53>
Source record: 81611

But ofcourse I see it that way but I am not a scientist and I visualise
radio waves and photons my own
way even tho it may be in error. As for color I can see that also as in
infra red pictures but I am not sure whether birds see photon maps in black
and white or in color. .I wonder if that is why whales beach themselves and
even after they are towed away to sea they 'look' at their distorted map and
head right back to the beach!
And with respect to your terminology of 'photon reflection'.. is that not
how the dish works as there is no resonance or
or capacitive/inductive occillations that allow then to reunite with free
electrons, in other words a direct reflection off the dish face so that all
impacts can be focussed to a single point without interference from
electrical fields as in nearby near resonant elements ? Oh if Tom W8TI was
still with us, the director /reflector augument would immediately ignite
again
and various opinions would flow again and learning would increase.

Regards
Art

"Gene Fuller" <W4SZzzzzzz@att.net> wrote in message
news:qW3Td.268400$w62.31796@bgtnsc05-news.ops.worldnet.att.net...
> Hi Art,
>
> Why do you think this is "out of the box"? Photon emission over a huge
> range of wavelengths is all around us.
>
> The earth has been mapped by photon emission 'forever', in color no less.
> You may choose to call it photon reflection, but the end result is the
> same. Photons are everywhere.
>
> I hate to get personal, but do you have working eyes? Can you feel heat
> from the sun?
>
> Photons rule.
>
> 73,
> Gene
> W4SZ
>
> aunwin@insightbb.com wrote:
>> If one pursues this 'out of the box' hypothesis it can be seen that the
>> earth itself,
>> because of it constituents ,will consistently emit photons all the time
>> such that it will dwarf the

>> radio waves with respect to energy containment differences as well as
>> energy received from
>> beyond earth. It there fore can be seen that the earth itself can be
>> mapped out with respect to
>> photon emmisions and without reference to shore lines,
>> mountains,buildings e.t.c.
>> This map could in fact be made up of colours depending on frequencies of
>> emmissions.
>> It could well be that birds have the ability of 'seeing' such a map that
>> would allow them
>> to uneeringly navigate the oceans or migrate without material sign posts
>> or allow a homing
>> pigeon to speedily return to home. This does have drawbacks in that the
>> 'map' can be totally distorted
>> when the earth is bombarded with outside energy leaving migratory birds
>> in a hopeless state until
>> the interference abates as with sun spots and normalcy returns with
>> respect to the natural
>> emmission of earth photons.
>> Moral is that you do not release homing pigeons during sun spot activity.
>> Perhaps I shoulds resume my antenna activities or I will never get
>> things done..grin
>>
>> Regards
>> Art
>>
>> "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in
>> message news:wuQQd.10164$4q6.2269@attbi_s01...
>>
>>>Cecil
>>>Sounds like cyclic flow changes between inductance and capacitance is
>>>instantanious
>>>leaving free electron that do not complete safe harbour to shove photons
>>>towards
>>>another antenna where it meets a similar cyclic flow between the
>>>inductance and
>>>capacitance which operates at the given frequency.
>>> No, I have not read this anywhere but it is as good as any theories or
>>> predictions
>>>offered here since it appears to comply with Newton's Laws that have
>>>been proven time and time again.
>>>Regards
>>>Art
>>>
>>>
>>>
>>>
>>>"Cecil Moore" <w5dxp@hotmail.com> wrote in message
>>>news:4213b0d5$1_2@127.0.0.1...
>>>

>>>>Jedi Knight wrote:
>>>>
>>>>>Next the wave travels through space in a way that totally dumb founds
>>>>>me, and is picked up by a receiving antenna, which does the whole thing
>>>>>backward. It's this part that really mucks things up (yes, that's the
>>>>>technical term for it) for me. I really don't see how there can be
>>>>>more than one thing occuping the same space (the whole "Back to the
>>>>>Future" phenomenon, lol) at the same time. Something is missing for
>>>>>me. I'm way more of a visual learner, so if anybody has
>>>>>pictures....SWEET.
>>>>
>>>>This is the area where photons are easier to understand than EM
>>>>waves (although an understanding of superposition of waves will
>>>>explain everything). Photons emitted from any number of sources
>>>>all arrive at your antenna at the same time. Those photons are
>>>>absorbed by the free electrons in your copper antenna. Your
>>>>receiver senses those electrons giving up their energies at
>>>>different frequencies, magnitudes, and phases.
>>>>--
>>>>73, Cecil http://www.qsl.net/w5dxp
>>>>
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>>>
>>>
>>

2873. Re: Mount antennas on pole

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 20:40:44 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <421CEA4C.2020008@cableone.net>
Source record: 81612

Drive a metal pipe in the ground and attach your new MFJ 33 ft.
fiberglass collalpsable non-fishing pole onto it. The MFJ pole has a
1.3/4 in. od size base and probably about 1.5 in. ID. so the MFJ pole
will just slip over the pipe for support. You drive a an 8 ft. pipe
down 4ft. and you have one tough support/ground.

Butch KF5DE

Irv Finkleman wrote:

> Chris wrote:
>
>>I want to purchase a 20-30 foot pole to put in my back garden as a place to
>>mount the antennas on.I live in the country side so i dont need to worry
>>about complaints.How would i mount antennas on to a basic metal pole?
>>
>>Chris
>
>
> Muffler Clamps may do the trick.
>
> Irv VE6BP

2874. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 20:47:31 UTC
From: Dave <dave.harper@gmail.com>
Message-ID: <1109191651.840163.118910@g14g2000cwa.googlegroups.com>
Source record: 81613

Cecil Moore wrote:
> Buck wrote:
> > The electrons are then sent through a transmission
> > line to an antenna.
>
> Since this is RF AC, I doubt that electrons actually make
> it to the antenna from the source.

Most electrons in comsumer electronics are moving only a few cm/sec to
m/s. Slower than most people can run.

Dave

2875. Improving ground for a Vertical dipole worth it ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 20:48:39 UTC
From: ".J.S..." <mr_nobody@nowhere.com>
Message-ID: <421cec24$0$159$edfadb0f@dtext02.news.tele.dk>
Source record: 81614

I am using a vertical dipole (Sigma 5) 1m above ground.
Will it make sense to try to improve the ground by digging in lots of wires
around the antenna ?

Regards/JS

2876. Re: New MFJ Telescoping Mast and Possibilities

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 21:28:57 UTC
From: Bill Cherepy <wb4wtn@mindspring.com>
Message-ID: <lctp11highj4klfhj95t6qvl0leng4c93m@4ax.com>
Source record: 81615

On Wed, 23 Feb 2005 13:19:51 -0600, Butch <lynyrd@cableone.net> wrote:

>OK. MFJ has a 33 ft. Telescoping Fiberglass Mast and collapses to 3.8
>ft. If ever there was a pole with possibilities for multi design
>vertical antennas and dipole/inv.Vs of the portable/toteable/permanent
>type, this is it.

One of our club members has one and he uses it while camping. He hangs
a wire on it and runs a few radials and operates 20 and 40 meters. He
used it at our last JOTA operation in a local park with good results.

Bill WB4WTN

Bill Cherepy
Grayson, GA

2877. Re: Improving ground for a Vertical dipole worth it ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 22:12:57 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <Jd7Td.9631$x53.5724@newsread3.news.atl.earthlink.net>
Source record: 81616

NO, alot of work for and antenna that really doesn't need to have an
extra ground.

".J.S..." <mr_nobody@nowhere.com> wrote in message
news:421cec24$0$159$edfadb0f@dtext02.news.tele.dk...
>I am using a vertical dipole (Sigma 5) 1m above ground.
> Will it make sense to try to improve the ground by digging in lots of
> wires around the antenna ?
>
>
>
>
> Regards/JS
>
>

2878. Re: Gain increase from scanner antenna to quarter-wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 22:24:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nh0q11pehhpktpput2gugtkjb6qj6aj8d0@4ax.com>
Source record: 81617
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

On 23 Feb 2005 09:53:05 -0800, "Dave" <dave.harper@gmail.com> wrote:

>Done and done... nice program! I'm hoping I entered the correct values
>for everything. Do the patterns listed below look correct?

Hi Dave,

Yes, however, you will notice there is still a cone of silence above
any of these even if the preferred angle is now higher towards a
balloon.

>I assumed
>things like wire diameter (I used 2mm) didn't affect the output
>significantly... although I did notice some things like the number of
>segments did affect the output if I decreased them (I used 10 for these
>cases).

Not so much that any change will fill in the cone.

73's
Richard Clark, KB7QHC

2879. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 22:27:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9o0q119j1j3k1tsterd9glj0omjgj4s1n6@4ax.com>
Source record: 81618
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Wed, 23 Feb 2005 19:08:20 GMT, gwhite <gwhite@deadend.com> wrote:

>RF transmitters are not ....

Sorry OM,

This was all nonsense.

73's
Richard Clark, KB7QHC

2880. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 22:32:53 UTC
From: richardharrison@webtv.net
Message-ID: <11815-421D0495-41@storefull-3257.bay.webtv.net>
Source record: 81619

G. White wrote:
"Output Z is irrelevant."

This is an old argument in this newsgroup. I became convinced long ago that there are cases in which impedance is very important.

"Transmission Lines, Antennas, and Wave Guides" by King, Mimno, and Wing make a clear and concise case for the princuple of conjugates in impedance matching on page 43:

"If a dissipationless network is inserted between a constant-voltage generator of impedance Zg, and a load of impedance ZR such that maximum power is delivered to the load, at every pair of terminals the impedance looking in opposite directions are conjugates of each other.

To secure maximum power output from a generator whose emf and internal impedance are constant the load must have an impedance equal to the conjugate of the generator`s internal impedance."

Radio transmitters don`t produce significant harmonics. It`s the law. They are linear power sources. We can and do tune them for all the power they will produce under their particular operating conditions of drive and d-c power supply. They operate at more than 50% efficiency which means that they don`t take power 100% of the time, but are switched-off during part of the r-f cycle. Output impedance is thus an average over the entire cycle. It`s OK. We have no harmonics. Gaps are filled by the tank circuit and other filters. The radio is a proper source. The impedance added by off-time is called "dissipationless resistance" because no power is lost in the radio while it is switched-off.

Best regards, Richard Harrison, KB5WZI

2881. Re: Improving ground for a Vertical dipole worth it ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 22:51:42 UTC
From: ".J.S..." <mr_nobody@nowhere.com>
Message-ID: <421d08fa$0$177$edfadb0f@dtext02.news.tele.dk>
Source record: 81620

"John Franklin" <jpfrank@peoplepc.com> skrev i en meddelelse
news:Jd7Td.9631$x53.5724@newsread3.news.atl.earthlink.net...
> NO, alot of work for and antenna that really doesn't need to have
> an extra ground.
>
Yes I am avare that the antenna does not need exstra ground, it is working
now :-)

But does that mean there is no ground loss that could be reduced by
improving the ground quality ?

> ".J.S..." <mr_nobody@nowhere.com> wrote in message
> news:421cec24$0$159$edfadb0f@dtext02.news.tele.dk...
>>I am using a vertical dipole (Sigma 5) 1m above ground.
>> Will it make sense to try to improve the ground by digging in lots of
>> wires around the antenna ?
>>
>>
>>
>>
>> Regards/JS
>>
>>
>
>

2882. Re: New MFJ Telescoping Mast and Possibilities

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 23:14:43 UTC
From: jgboyles@aol.com
Message-ID: <1109200483.514062.185860@l41g2000cwc.googlegroups.com>
Source record: 81621

Butch wrote:
> OK. MFJ has a 33 ft. Telescoping Fiberglass Mast and collapses to
3.8
> ft. If ever there was a pole with possibilities for multi design
> vertical antennas and dipole/inv.Vs of the
portable/toteable/permanent
> type, this is it. It weighs in at only 3.3 pounds and costs $80.00
> See the '05 catalog page 43 full details. It is flexible, it is
black
> making it somewhat stealthy and it is UV resistant. MFJ has done
only
> enough math to show that fully extended it is a full 1/4 wave for 40
> mtrs. I don't know how many sections there are but each one pulls
out
> and twist locks into place. I'm going to get one and play around
with
> it. I'm dead in the middle of restricted covenant hell. My fault
for
> that, I had a stroke right in the middle of new home search and my
wife
> found this home in gated community bought it, but didn't think to ask

> about the covenants.
>
> Butch KF5DE

Hi Butch, Get one, you will like it. I have had one for several
years, it's not really new. I have used it to support verticals in the
back of my pickup, truck body was counterpoise. Operated 80 and 40
with an L network tuner at the base.
The best results was using the 33' pole as the center support for an
inverted vee. You can't get the apex up to 33', because the pole is
too flimsy, but you can get it up 25 to 30'. Vee was a 100' doublet
fed with 450 ohm ladder line and a tuner. All sorts of tricks to
quickly erect, and take down the system. The antenna gives a good
account of itself on 80m-10m.
Gary N4AST

2883. Re: Improving ground for a Vertical dipole worth it ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 23:29:26 UTC
From: nm5k@wt.net
Message-ID: <1109201366.208418.87000@l41g2000cwc.googlegroups.com>
Source record: 81522

.J.S... wrote:

>
> But does that mean there is no ground loss that could be reduced by
> improving the ground quality ?

Sure, you can further reduce losses, but I couldn't really tell
you if it's worth the trouble or not...Up to you I guess...
But note that BC stations using 1/2 waves still use 120 1/2 wave
radials in most cases. Or I believe anyway. It would take a
lot less wire to just elevate the antenna..If you had it up
higher, I doubt you would see much difference, radials or not.
In that case, you are more worried about feedline decoupling,
than ground loss. When I run 1/2 waves, they are always elevated
a good bit. IE: 10m...Usually 20-30-40 ft depending on what
mast I'm using. In a case like that, ground radials would
pretty much be a waste of time and wire. MK

2884. Re: New MFJ Telescoping Mast and Possibilities

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 23:41:46 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <111q55tgs3crra5@corp.supernews.com>
Source record: 81523

jgboyles@aol.com wrote:
> Butch wrote:
>
>>OK. MFJ has a 33 ft. Telescoping Fiberglass Mast and collapses to
>
> 3.8
>
>>ft. If ever there was a pole with possibilities for multi design
>>vertical antennas and dipole/inv.Vs of the
>
> portable/toteable/permanent
>
>>type, this is it. It weighs in at only 3.3 pounds and costs $80.00
>>See the '05 catalog page 43 full details. It is flexible, it is
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> black
>
>>making it somewhat stealthy and it is UV resistant. MFJ has done
>
> only
>
>>enough math to show that fully extended it is a full 1/4 wave for 40
>>mtrs. I don't know how many sections there are but each one pulls
>
> out
>
>>and twist locks into place. I'm going to get one and play around
>
> with
>
>>it. I'm dead in the middle of restricted covenant hell. My fault
>
> for
>
>>that, I had a stroke right in the middle of new home search and my
>
> wife
>
>>found this home in gated community bought it, but didn't think to ask
>
>
>>about the covenants.
>>
>>Butch KF5DE

>
>
> Hi Butch, Get one, you will like it. I have had one for several
> years, it's not really new. I have used it to support verticals in the
> back of my pickup, truck body was counterpoise. Operated 80 and 40
> with an L network tuner at the base.
> The best results was using the 33' pole as the center support for an
> inverted vee. You can't get the apex up to 33', because the pole is
> too flimsy, but you can get it up 25 to 30'. Vee was a 100' doublet
> fed with 450 ohm ladder line and a tuner. All sorts of tricks to
> quickly erect, and take down the system. The antenna gives a good
> account of itself on 80m-10m.
> Gary N4AST
>
Good news Gary,...thanks and the setup was just what I was thinking, do me a favor though, don't say anything to Cecil about only going up to 30 feet or so. He doesn't like my MFJ pushup, has a fixation on fish at about 20 ft. :o) (thats a 20ft smiley fish)

2885. ladder near metal?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-23 23:42:01 UTC
From: ml <m@di.net>
Message-ID: <m-7EE59F.18415823022005@news.verizon.net>
Source record: 81524

I wonder exactly what happens when you run ladder line say next to a 1''
metal pipe spaced about 1" apprt

is it just that the ohms that change would it be a bit or does it
swing waaaay off??

tnx

2886. Re: Improving ground for a Vertical dipole worth it ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 00:06:43 UTC
From: jgboyles@aol.com
Message-ID: <1109203603.954580.62180@o13g2000cwo.googlegroups.com>
Source record: 81525

Moving the antenna higher will reduce ground losses. Should be easier
than burying radials.
Gary N4AST

2887. Re: ladder near metal?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 00:31:02 UTC
From: jgboyles@aol.com
Message-ID: <1109205062.487435.237660@g14g2000cwa.googlegroups.com>
Source record: 81526

What happens is rather complex. In short, you make a balanced
transmission line, unbalanced. Transmission lines do not radiate,
unless they are unbalanced. Obviously, when you unbalance a
transmission line, everything changes due to common mode radiation of
the line. Exactly how much??
Gary N4AST

2888. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 03:03:35 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421d44d3$1_1@127.0.0.1>
Source record: 81527

aunwin@insightbb.com wrote:
> ... I am not sure whether birds see photon maps in black
> and white or in color.

Most birds have color vision - most mammals don't.

> And with respect to your terminology of 'photon reflection'..

If I remember correctly, the theory is that photons are not
reflected but instead are first absorbed and then emitted but
my memory might be wrong.
--
73, Cecil http://www.qsl.net/w5dxp

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2889. Re: New MFJ Telescoping Mast and Possibilities

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 03:09:05 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421d461d$1_1@127.0.0.1>
Source record: 81528

Butch wrote:
> Good news Gary,...thanks and the setup was just what I was thinking, do
> me a favor though, don't say anything to Cecil about only going up to 30
> feet or so. He doesn't like my MFJ pushup, has a fixation on fish at
> about 20 ft. :o) (thats a 20ft smiley fish)

Butch, for $80, I can buy 80 ft. of fishing poles. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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2890. Re: ladder near metal?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 03:15:30 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421d479e$1_2@127.0.0.1>
Source record: 81529

ml wrote:

> I wonder exactly what happens when you run ladder line say next to a 1''
> metal pipe spaced about 1" apprt
>
> is it just that the ohms that change would it be a bit or does it
> swing waaaay off??

The problem with metal and ladder-line is at the voltage antinodes.
The peak-to-peak voltage at a voltage antinode is about ten times
the power when the SWR is 20:1 (if memory serves me right). Running
1000 watts with an SWR of 20:1, that's about 10kv between the
conductors at a voltage antinode. If there's no metal, your finger
will do. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

2891. FT-857D and ASAT-120 question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 03:43:33 UTC
From: "Joe S." <nobody@nowhere.net>
Message-ID: <cvjigr0lkm@news4.newsguy.com>
Source record: 81531

I trust folks on this NG can stand one more question from me. Thanks to those who have replied.

I am considering purchasing an FT-857D and ASAT-120. As I understand it, the rig communicates with the antenna by coupling a control voltage to the coax and the only connection required between the rig and the antenna is the coax. The antenna does not require a separate connection to 12VDC -- right?

When I first key up the rig with the ASAT-120, is there a learning function for the rig and antenna where I tune to each band and let the antenna and rig remember the settings for each band?

Does the antenna automatically tune itself when I change bands, or, is there an UP-DOWN switch on the rig that I must press while watching the reflected power on the rig's meter?

Thanks.

--

Joe S.

2892. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 03:43:56 UTC
From: Tom Ring <news0001@taring.org>
Message-ID: <421d4d1f$0$38737$39cecf19@news.twtelecom.net>
Source record: 81532

Jedi Knight wrote:
> Hello,
>
> I've been searching for an answer to this question for years. I'm
> hoping somebody here can answer it or at least point me in the
> direction. Or maybe I'm totally off base on my basic understanding and
> so this question is out in left field.
>
<snip>
>
> Thanks,
> Bodi
>

Albert Einstein, when asked to describe radio, replied:
"You see, wire telegraph is a kind of a very, very long cat. You pull his tail in New York and his head is meowing in Los Angeles. Do you understand this? And radio operates exactly the same way: you send signals here, they receive them there. The only difference is that there is no cat."

Tom K0TAR

2893. Re: RF basic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 03:45:37 UTC
From: simon0630@yahoo.com
Message-ID: <a6e4082c.0502231945.29511607@posting.google.com>
Source record: 81530

Thanks, Harrison and Gene,
Actually this product is going to be deployed in about three months time in one of our public sectors. And it really gives me and my boss nightmare every night. For small company like us, there is no choice but to grab everything we could to deliver.
The original prototype is well designed and tested. the frequency is 433 m. Therefore quarter wave length would be about 17.2 cm, which would be too long for a commercial handheld product.
Our task is to re-package it and produce. And that is why i need to modify the antenna. I tested quite a few antennas including loop, semiloop, modified dipole and microstrip antenna as given in http://www.rfm.com/corp/appdata/antenna.pdf
I am using copper fold to make the antenna plane and the groundplane. However, the results is far from satisfactory.
For the above mentioned antennas, i did not changed the matching network given in the transferred design which caters for 17.2 cm antenna. Do i need to do so? Thanks.
Sigma montoya

2894. Re: New MFJ Telescoping Mast and Possibilities

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 04:37:15 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <421D59FB.4030209@cableone.net>
Source record: 81533

Cecil Moore wrote:
> Butch wrote:
>
>> Good news Gary,...thanks and the setup was just what I was thinking,
>> do me a favor though, don't say anything to Cecil about only going up
>> to 30 feet or so. He doesn't like my MFJ pushup, has a fixation on
>> fish at about 20 ft. :o) (thats a 20ft smiley fish)
>
>
> Butch, for $80, I can buy 80 ft. of fishing poles. :-)

Oh yeah, well for 6400.00 I can buy 80 33 footers! Wanna see my 4000.00 Drake? heh=heh :0)

2895. Re: RF basic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 06:14:29 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <9heTd.55683$uc.21025@trnddc04>
Source record: 81534

Sigma

Yageo sells a $2.00 ceramic antenna for circuit board mount for 433 that
you probably already know about. Contact me if you want any info about how
to get that antenna.

Jerry

"Montoya" <simon0630@yahoo.com> wrote in message
news:a6e4082c.0502231945.29511607@posting.google.com...
> Thanks, Harrison and Gene,
> Actually this product is going to be deployed in about three months
> time in one of our public sectors. And it really gives me and my boss
> nightmare every night. For small company like us, there is no choice
> but to grab everything we could to deliver.
> The original prototype is well designed and tested. the frequency is
> 433 m. Therefore quarter wave length would be about 17.2 cm, which
> would be too long for a commercial handheld product.
> Our task is to re-package it and produce. And that is why i need to
> modify the antenna. I tested quite a few antennas including loop,
> semiloop, modified dipole and microstrip antenna as given in
> http://www.rfm.com/corp/appdata/antenna.pdf
> I am using copper fold to make the antenna plane and the groundplane.
> However, the results is far from satisfactory.
> For the above mentioned antennas, i did not changed the matching
> network given in the transferred design which caters for 17.2 cm
> antenna. Do i need to do so? Thanks.
> Sigma montoya

2896. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 07:12:10 UTC
From: K5TB <pd_butler_1@msn.com>
Message-ID: <1109229130.461885.29390@l41g2000cwc.googlegroups.com>
Source record: 81535

radio waves travel in a staight line unless the are stopped or somehow
inhibited upon.
the travel just like the ripple effect ie: throwing a stone in a pond.
Jedi Knight wrote:
> Hello,
>
> I've been searching for an answer to this question for years. I'm
> hoping somebody here can answer it or at least point me in the
> direction. Or maybe I'm totally off base on my basic understanding
and
> so this question is out in left field.
>
> I've been to howstuffworks.com and read a few articles on radio; I
> learned a few cool things, but not what I was after.
>
> Here's my question. When a radio tower, or whatever, sends out a
wave
> it has to propagate somehow. I figure this works by making electrons
> do their thing, vibrate or whatever those crazy nothings do. If a
> group of electrons is creating a field or sending a wave it has to be
> at a specific frequency, but what I don't understand is how can there
> be the plethora of frequencies all at the same time in the same
place?
> Can't an electron only vibrate at one frequency at a time? In simple
> terms: how can my radio have the potential to tune into all the
> stations; how do the waves not interfere with each other?
>
> In wave theory, in physics class, I remember sending one water wave
> from one end, and another from another end, and they cancelled each
> other out. Wouldn't a radio wave work the same way?
>
> So many questions, so little time...
>
> Thanks,
> Bodi

2897. Re: Improving ground for a Vertical dipole worth it ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 12:15:16 UTC
From: KC1DI <elbc2@pivot.net>
Message-ID: <111rham9ekrda6e@corp.supernews.com>
Source record: 81536

.J.S... wrote:
> I am using a vertical dipole (Sigma 5) 1m above ground.
> Will it make sense to try to improve the ground by digging in lots of wires
> around the antenna ?
>
>
>
>
> Regards/JS
>
>
Hi J.S.

Cebik says concerning the Inverted L antenna- which is similar to the vertical Dipole that : "There is little evidence, despite the vertical position of one arm of the antenna, that the inverted-L would benefit from a ground plane beneath the antenna. The actual low-angle gain of the inverted-L will, however, vary with the quality of the soil in the region of reflection at a distance from the vertical arm. All patterns were taken over average soil, and soils that are either poor or better than average will tend to show a higher gain and lower take-off angle, at least on the fundamental frequency."

You might do well to read his articles at : http://www.cebik.com/radio.html
He has quite a few dealing with the effects of different radial systems for vertical antennas.

Food for thought and it might save you time and back breaking labor.

73 Dave

2898. Re: ladder near metal?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 12:21:14 UTC
From: KC1DI <elbc2@pivot.net>
Message-ID: <111rhlsqveplqd2@corp.supernews.com>
Source record: 81537

ml wrote:
> I wonder exactly what happens when you run ladder line say next to a 1''
> metal pipe spaced about 1" apprt
>
> is it just that the ohms that change would it be a bit or does it
> swing waaaay off??
>
>
> tnx
Hi ML

Keep the Ladder Line 3X it's width away from the metal for 300 ohm twin lead that would be about 2 " For 450 ohm Ladder line it would be about 5 " a twist in the portion of the line near the metal object about every 18" or so will also help. Remeber though that the portion of the line near the metal object must not be allowed to sway in the the wind if it does it will cause the impedence to very sometimes widly as the line moves closer then further away..

I've found the above to be very accurate and have not had problems in many installations over the years.

73 Dave

2899. Re: FT-857D and ASAT-120 question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 15:40:55 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <bAmTd.5880$Ba3.5647@newsread2.news.atl.earthlink.net>
Source record: 81538

As I understand it the ATS-120 is just Yaesu's version of a screwdriver antenna. I believe you still need to feed control current thru a cable and not the coax. Not having used one somebody please correct me if I am wrong. I'm still using my MP-1 yet, too cheap to buy a "screwdriver type" antenna.

2900. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 16:06:53 UTC
From: richardharrison@webtv.net
Message-ID: <8509-421DFB9D-251@storefull-3253.bay.webtv.net>
Source record: 81539

K5TB wrote:
"radio waves travel in a straight line unless they are stopped or
somehow inhibited upon."

Yes. Refraction and reflection can change the direction of a radio wave.

My physics book says:
"The unifying concept (for all electromagnetic radiation) here is that
electromagnetic radiation is produced when electric charge is
accelerated. We have seen this illustrated for radio eaves. As charges
rush back and forth along the antenna, they are undergoing rather rapid
accelerations, especially at the two ends."

Best regards, Richard Harrison, KB5WZI

2901. Re: Improving ground for a Vertical dipole worth it ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 17:34:40 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cvl37g$fp7$1@hercules.btinternet.com>
Source record: 81540

> You might do well to read his (Cebik's) articles at :

http://www.cebik.com/radio.html

> He has quite a few dealing with the effects of different radial systems
> for vertical antennas.
>
> Food for thought and it might save you time and back breaking labor.
>
> 73 Dave

==========

Without any doubt, Cebik is the finest author on radio antennas. The extent of coverage of practical subject matters, numerical accuracy and use of the English language are beyond reproach.

How he manages to find time even to keep his web-site in good working order is amazing.

But even for the above-average-intellect amateur, the amount of detail is too excessive to take in. Few people have time available for a complete study. And I'm an approaching, still willing to learn, octagonarian.

What is needed is a very much abbreviated summary, just the essentials of his works. Perhaps in small book form. But this can be produced, without unintentional distortion, only by Cebik himself. Does such a work exist?

==========

I have searched without success for the behaviour of simple antennas in the presence of so-called poor ground soils. Can't find much in Cebik except doubtful, expensive computer programs.

The 'constants' of ground soils are Resistivity (Conductivity), Permittivity and Permeabilty. (In the absence of magnetic material such as iron in the soil permeability can be neglected.)

It is generally accepted that ground loss increases as resistivity increases above that of salt sea water. But this cannot be universally true. Taking the extreme case of soils which approach insulators (solid granite rock and arid desert sands) it is obvious soil loss falls again to very low values.

There MUST be values of resistivity at which soil losses are at a maximum but which reduce at higher values of resistivity.

Here we are concerned with buried ground radials. It is submitted that maximum ground loss occurs at lower soil resistance values than are

upposed - if they are supposed or imagined at all!

Suppose soil resistivity is 377 ohm-metres, not a very high value, but it happens to completely absorb, without reflection, radio waves received from an antenna. Is this a suitable candidate for maximum loss in the ground?

The statement, for simplicity, ignores permittivity and the angle at which radiation strikes the ground. But you get the idea.

Has anyone any info on this subject?

Of course, I may be trolling, just to catch old-wives. ;o)

Reg, G4FGQ

2902. Re: ladder near metal?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 17:37:36 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <AhoTd.19285$D34.4109@newssvr12.news.prodigy.com>
Source record: 81541

Back in the 1950s we used to install TV antennas on 30 and 40 foot steel masts to get a 100 uvolt signal on channel 2 with a 10 or 12 element yagi. We used regular 300 ohm twim lead and twisted it before putting it into the slot of the standoff. the standoff were about 4" long. The twisting did two things: minimized leadin pickup and equalize any stresses from wind. What happens when you transmit with high SWR is out of my league.

--

73
Hank WD5JFR
"KC1DI" <elbc2@pivot.net> wrote in message
news:111rhlsqveplqd2@corp.supernews.com...
> ml wrote:
>> I wonder exactly what happens when you run ladder line say next to a 1''
>> metal pipe spaced about 1" apprt
>>
>> is it just that the ohms that change would it be a bit or does it swing
>> waaaay off?? tnx
> Hi ML
>
> Keep the Ladder Line 3X it's width away from the metal for 300 ohm twin
> lead that would be about 2 " For 450 ohm Ladder line it would be about 5
> " a twist in the portion of the line near the metal object about every 18"
> or so will also help. Remeber though that the portion of the line near
> the metal object must not be allowed to sway in the the wind if it does it
> will cause the impedence to very sometimes widly as the line moves closer
> then further away..
>
> I've found the above to be very accurate and have not had problems in many
> installations over the years.
>
> 73 Dave

2903. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 18:01:04 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421e1826$1_1@127.0.0.1>
Source record: 81542

Richard Harrison wrote:

> K5TB wrote:
> "radio waves travel in a straight line unless they are stopped or
> somehow inhibited upon."
>
> Yes. Refraction and reflection can change the direction of a radio wave.

So can gravity. :-) The earth's gravity bends the
radio waves by a very slight amount that can be
calculated if not measured. The earth's gravity also
affects frequency since it affects the length of a
second in "cycles per second". :-)
--
73, Cecil http://www.qsl.net/w5dxp

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2904. Re: New MFJ Telescoping Mast and Possibilities

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 18:39:54 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <111s7s7fi2j5s0e@news.supernews.com>
Source record: 81543

Dump the wife, sell the house, and look for hilltop property! Simple!!

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"Butch" <lynyrd@cableone.net> wrote in message
news:111plqolrf9adb4@corp.supernews.com...
> OK. MFJ has a 33 ft. Telescoping Fiberglass Mast and collapses to 3.8 ft.
> If ever there was a pole with possibilities for multi design vertical
> antennas and dipole/inv.Vs of the portable/toteable/permanent type, this
> is it. It weighs in at only 3.3 pounds and costs $80.00
> See the '05 catalog page 43 full details. It is flexible, it is black
> making it somewhat stealthy and it is UV resistant. MFJ has done only
> enough math to show that fully extended it is a full 1/4 wave for 40 mtrs.
> I don't know how many sections there are but each one pulls out and twist
> locks into place. I'm going to get one and play around with it. I'm dead
> in the middle of restricted covenant hell. My fault for that, I had a
> stroke right in the middle of new home search and my wife found this home
> in gated community bought it, but didn't think to ask about the covenants.
>
> Butch KF5DE

2905. Re: Improving ground for a Vertical dipole worth it ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 19:22:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <111sabd1kq6qucf@corp.supernews.com>
Source record: 81544

Reg Edwards wrote:
> . . .
> It is generally accepted that ground loss increases as resistivity increases
> above that of salt sea water. But this cannot be universally true. Taking
> the extreme case of soils which approach insulators (solid granite rock and
> arid desert sands) it is obvious soil loss falls again to very low values.
>
> There MUST be values of resistivity at which soil losses are at a maximum
> but which reduce at higher values of resistivity.
>
> Here we are concerned with buried ground radials. It is submitted that
> maximum ground loss occurs at lower soil resistance values than are
> upposed - if they are supposed or imagined at all!
>
> Suppose soil resistivity is 377 ohm-metres, not a very high value, but it
> happens to completely absorb, without reflection, radio waves received from
> an antenna. Is this a suitable candidate for maximum loss in the ground?
>
> The statement, for simplicity, ignores permittivity and the angle at which
> radiation strikes the ground. But you get the idea.
>
> Has anyone any info on this subject?
>
> Of course, I may be trolling, just to catch old-wives. ;o)
> ----
> Reg, G4FGQ

Go to groups.google.com and look up the thread "Just a comment on losses in the ground", in mid-January 2002, in which we both participated. The posting I made on Jan. 13, in particular, had a fair amount of information on the topic, but other postings in the thread are worth reading.

Roy Lewallen, W7EL

2906. EZNEC Model of a Terminated Vee-Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 19:57:00 UTC
From: "William M. Bickley" <bickley@dmv.com>
Message-ID: <111scc66cj4tma8@corp.supernews.com>
Source record: 81545

How does one model the ends of a terminated vee-beam, using EZNEC 3.0?

TIA

Bill

2907. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 20:45:38 UTC
From: richardharrison@webtv.net
Message-ID: <24890-421E3CF2-276@storefull-3255.bay.webtv.net>
Source record: 81546

Cecil, W5DXP wrote:
"So can gravity."

My physics book says:
"--Gravity waves, which should have many similarities to electromagnetic waves even though as far as is known there is no direct connection between the twp types of waves."

Also something the book, although I can`t find it right now, says:
Masses don`t exert gravitational forces on each other based upon where they have been but instead upon upon where they are located right now. In other words, there is no delay in the transmission of gravitational forces. This is different from electromagnetic forces which are transmoitter at no faster than the speed of light.

If the velocity of a gravitational wave is infinite, how could frequency and wavelemngth have any meaning for it?

Best regards, Richard Harrison, KB5WZI

2908. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 21:13:06 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421e45a3_1@127.0.0.1>
Source record: 81547

Richard Harrison wrote:

> Cecil, W5DXP wrote:
> "So can gravity."
>
> Also something the book, although I can`t find it right now, says:
> Masses don`t exert gravitational forces on each other based upon where
> they have been but instead upon upon where they are located right now.

I'm talking about the effect gravity has on EM waves.
Einstein predicted that the light passing close to
the sun would bend. It did exactly that during a total
eclipse of the sun within the accuracy of the measurements
possible at the time.

EM waves don't travel in a straight line around a Black
Hole which sucks them in from all directions never to
be seen again.

And we know that clocks located at ground level run
slower than clocks located on mountain tops. Gravity
warps time as well as space.
--
73, Cecil http://www.qsl.net/w5dxp

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2909. Re: FT-857D and ASAT-120 question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 21:21:16 UTC
From: Dave <myself@yourself.ie>
Message-ID: <gzrTd.59$v85.38@newsfe5-gui.ntli.net>
Source record: 81548

All you do is push the Tune button if you have look at this link to yaesu FT857 you will be able to read it yourself
http://www.rigpix.com/yaesu/ft857_manual.pdf

read from page 70

2910. Re: Improving ground for a Vertical dipole worth it ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-24 21:55:19 UTC
From: nm5k@wt.net
Message-ID: <1109282119.450998.298870@l41g2000cwc.googlegroups.com>
Source record: 81549

KC1DI wrote:

>
> Cebik says concerning the Inverted L antenna- which is similar to the

> vertical Dipole that : "There is little evidence, despite the
vertical
> position of one arm of the antenna, that the inverted-L would benefit

> from a ground plane beneath the antenna. The actual low-angle gain of

> the inverted-L will, however, vary with the quality of the soil in
the
> region of reflection at a distance from the vertical arm. All
patterns
> were taken over average soil, and soils that are either poor or
better
> than average will tend to show a higher gain and lower take-off
angle,
> at least on the fundamental frequency."
>
> You might do well to read his articles at :
http://www.cebik.com/radio.html
> He has quite a few dealing with the effects of different radial
systems
> for vertical antennas.

I'd have to look at the articles later...But, as it is, I would
have to disagree with that. An inv-L is nothing like a 1/2 wave
vertical. He may be referring to an extended version, but normally,
an inv -L is a single wire loaded, 1/4 wave vertical,
and relies on the ground connection.
Max current is still at the base, and you can lose a lot to ground,
if it's poor. A longer 3/8, etc L would show lesser losses, but
radials would still help some.
MK

2911. Re: Improving ground for a Vertical dipole worth it ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 00:06:26 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <6_tTd.276330$w62.126581@bgtnsc05-news.ops.worldnet.att.net>
Source record: 81550

Mark,

In the article quoted, Cebik was describing a half-wave "L" fed at the corner; basically a bent half-wave dipole in an odd orientation.

He fully agrees that the more typical base-fed quarter-wave "L" would benefit from radials.

73,
Gene
W4SZ

nm5k@wt.net wrote:
> KC1DI wrote:
>
>
>>Cebik says concerning the Inverted L antenna- which is similar to the
>
>
>>vertical Dipole that : "There is little evidence, despite the
>
> vertical
>
>>position of one arm of the antenna, that the inverted-L would benefit
>
>
>>from a ground plane beneath the antenna. The actual low-angle gain of
>
>
>>the inverted-L will, however, vary with the quality of the soil in
>
> the
>
>>region of reflection at a distance from the vertical arm. All
>
> patterns
>
>>were taken over average soil, and soils that are either poor or
>
> better
>
>>than average will tend to show a higher gain and lower take-off
>
> angle,
>

>>at least on the fundamental frequency."
>>
>>You might do well to read his articles at :
>
> http://www.cebik.com/radio.html
>
>>He has quite a few dealing with the effects of different radial
>
> systems
>
>>for vertical antennas.
>
>
> I'd have to look at the articles later...But, as it is, I would
> have to disagree with that. An inv-L is nothing like a 1/2 wave
> vertical. He may be referring to an extended version, but normally,
> an inv -L is a single wire loaded, 1/4 wave vertical,
> and relies on the ground connection.
> Max current is still at the base, and you can lose a lot to ground,
> if it's poor. A longer 3/8, etc L would show lesser losses, but
> radials would still help some.
> MK
>

2912. Velocity factor and impedance of ladder line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 00:14:25 UTC
From: Jim Leder <k8cxm@spam.fuse.net>
Message-ID: <z5uTd.830$Eq2.676@fe37.usenetserver.com>
Source record: 81551

What is LIKELY to be the true impedance and velocity factor of 450 ohm window 18AWG solid polyethylene ladder line? I see everything from .85 to .95 and 375 to 440. Most seem to think it's around .865 and 390 ohms. Is this close enough? I have no way of actually measuring it.
BTW, same as what the Wireman sells.

Sorry for asking a question that's been asked before, but it does have many ambiguous answers and I'm not sure what it really is. I'm using for a matching stub and need to fairly close.

Thanks...

--

***** Jim Leder *****
IBM retiree since 1999
http://home.fuse.net/k8cxm

2913. G5RV (Yet Again)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 00:27:51 UTC
From: wizard12342002@yahoo.com
Message-ID: <1109291271.142059.158490@g14g2000cwa.googlegroups.com>
Source record: 81552

As someone who is relatively inexperienced with the hobby, I am amazed at the confusion and mysticism surrounding the "G5RV" antenna. It appears to be nothing but a dipole, with a length of "balanced line" to transform the impedance to a better match for coax at certain frequencies.

A little consideration reveals that this antenna should suffer from unwanted return currents unless a balun is used (like any coax-fed dipole), and substantial loss in the coax at certain frequencies. So why is this antenna better than two pieces of reasonably long wire driven with balanced line and a tuner? What am I missing?

-JJ

2914. Re: New MFJ Telescoping Mast and Possibilities

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 00:30:43 UTC
From: wizard12342002@yahoo.com
Message-ID: <1109291443.910058.127730@z14g2000cwz.googlegroups.com>
Source record: 81553

When I asked about the MFJ 33' mast at HRO, the gent behind the counter
told me "it is very whippy. You won't like it".

-JJ

2915. Unloaded Transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 00:46:35 UTC
From: Al <ABurzynski@nojunk.satx.rr.com>
Message-ID: <LzuTd.43767$911.34360@fe2.texas.rr.com>
Source record: 81554

I have a project for which I use a wall wart with 18VAC (not DC) output. Is it safe to leave such an unloaded transformer plugged in for periods of time? If not, what would be a good solution other than plugging the unit in and out. Thanks in advance for all information.

Al KA5JGV

2916. Re: G5RV (Yet Again)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 00:53:33 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <1109292813.408605.250610@f14g2000cwb.googlegroups.com>
Source record: 81555

wizard12342...@yahoo.com wrote:
> As someone who is relatively inexperienced with the hobby, I am
amazed
> at the confusion and mysticism surrounding the "G5RV" antenna. It
> appears to be nothing but a dipole, with a length of "balanced line"
to
> transform the impedance to a better match for coax at certain
> frequencies.
>
> A little consideration reveals that this antenna should suffer from
> unwanted return currents unless a balun is used (like any coax-fed
> dipole), and substantial loss in the coax at certain frequencies. So
> why is this antenna better than two pieces of reasonably long wire
> driven with balanced line and a tuner? What am I missing?
>
> -JJ

(A) The G5RV feedpoint impedances are relatively low within some of the
ham bands. (B)It's a coax-fed antenna which does not need a balanced
antenna tuner which are scarce, complex and expensive.

w3rv

2917. Re: Unloaded Transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 01:01:05 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <INuTd.6350$Ba3.160@newsread2.news.atl.earthlink.net>
Source record: 81556

"Al" <ABurzynski@nojunk.satx.rr.com> wrote in message
news:LzuTd.43767$911.34360@fe2.texas.rr.com...
> I have a project for which I use a wall wart with 18VAC (not DC) output.
Is
> it safe to leave such an unloaded transformer plugged in for periods of
> time? If not, what would be a good solution other than plugging the unit
in
> and out. Thanks in advance for all information.
>
> Al KA5JGV
>
It is fine to leave it plugged in. If it is UL listed it should be as safe
as the millions of them in service.
Unloaded they should not develop as much heat as a loaded one.

2918. Re: G5RV (Yet Again)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 01:04:38 UTC
From: Dave <noone@nowhere.com>
Message-ID: <cJWdnd42ceAv5IPfRVn-qw@crocker.com>
Source record: 81557

<wizard12342002@yahoo.com> wrote in message
news:1109291271.142059.158490@g14g2000cwa.googlegroups.com...
> As someone who is relatively inexperienced with the hobby, I am amazed
> at the confusion and mysticism surrounding the "G5RV" antenna. It
> appears to be nothing but a dipole, with a length of "balanced line" to
> transform the impedance to a better match for coax at certain
> frequencies.
>
> A little consideration reveals that this antenna should suffer from
> unwanted return currents unless a balun is used (like any coax-fed
> dipole), and substantial loss in the coax at certain frequencies. So
> why is this antenna better than two pieces of reasonably long wire
> driven with balanced line and a tuner? What am I missing?
>
> -JJ

Marketing.

2919. Re: Velocity factor and impedance of ladder line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 01:35:07 UTC
From: Crazy George <munsch@atglobal.net>
Message-ID: <421e8a01_3@news1.prserv.net>
Source record: 81560

Jim:

I have no information to answer your two questions numerically, but I do want to point out the following: Both the
impedance and velocity factor will be different in the solid sections and in the windows. So, if you need great
accuracy, good luck!

--
Crazy George
The attglobal.net address is a SPAM trap. Please change that part to: att<dot>biz properly formatted.
"Jim Leder" <k8cxm@spam.fuse.net> wrote in message
news:z5uTd.830$Eq2.676@fe37.usenetserver.com...
> What is LIKELY to be the true impedance and velocity factor of 450 ohm
> window 18AWG solid polyethylene ladder line? I see everything from .85 to
> .95 and 375 to 440. Most seem to think it's around .865 and 390 ohms. Is
> this close enough? I have no way of actually measuring it.
> BTW, same as what the Wireman sells.
>
> Sorry for asking a question that's been asked before, but it does have many
> ambiguous answers and I'm not sure what it really is. I'm using for a
> matching stub and need to fairly close.
>
> Thanks...
>
> --
>
> ***** Jim Leder *****
> IBM retiree since 1999
> http://home.fuse.net/k8cxm
>
>
>

2920. Re: G5RV (Yet Again)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 01:39:23 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <v50t11d18uiq1vbnmmotqua6rp4li2sego@4ax.com>
Source record: 81558

On 24 Feb 2005 16:27:51 -0800, wizard12342002@yahoo.com wrote:

>As someone who is relatively inexperienced with the hobby, I am amazed
>at the confusion and mysticism surrounding the "G5RV" antenna. It
>appears to be nothing but a dipole, with a length of "balanced line" to
>transform the impedance to a better match for coax at certain
>frequencies.
>
>A little consideration reveals that this antenna should suffer from
>unwanted return currents unless a balun is used (like any coax-fed
>dipole), and substantial loss in the coax at certain frequencies. So
>why is this antenna better than two pieces of reasonably long wire
>driven with balanced line and a tuner? What am I missing?
>
>-JJ

Well, this is what G5RV himself wrote about his antenna:

http://www.qsl.net/aa3px/g5rv.htm

And Mr. Cebik did a nice 3-part analysis on same:

http://www.cebik.com/g5rv.html

Bob
k5qwg

2921. Re: G5RV (Yet Again)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 02:00:05 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cvm0r5mkq1@hercules.btinternet.com>
Source record: 81559

> As someone who is relatively inexperienced with the hobby, I am amazed
> at the confusion and mysticism surrounding the "G5RV" antenna. It
> appears to be nothing but a dipole, with a length of "balanced line" to
> transform the impedance to a better match for coax at certain
> frequencies.
>
> A little consideration reveals that this antenna should suffer from
> unwanted return currents unless a balun is used (like any coax-fed
> dipole), and substantial loss in the coax at certain frequencies. So
> why is this antenna better than two pieces of reasonably long wire
> driven with balanced line and a tuner? What am I missing?
>

==========

Well done! You are correct about the G5RV in every respect.

As a multi-band HF antenna it is just another dipole without any magical properties.

With the coax (Zo unspecified) its loss is greater than other dipoles.

Its balanced feedline impedance Zo is not specified. This important performance parameter can be anything you like and the antenna will still remain a G5RV.

It has an approximate impedance match at only one frequency, 14.15 MHz. You will be very lucky to find a resonance in any other band.

The impedance match to coax at 14.15 MHz is not at the desirable 50 but 75 ohms.

It has a cloverleaf radiation pattern only in the 20m band, sometimes praised as desirable if you work from South America into both Europe and the USA as G5RV often did.

As with other balanced line fed dipoles a current or choke balun is best when converting impedance from a balanced line to a tuner plus 50-ohm transmitter.

But the biggest joke of all is the half-size G5RV. Mr R L Varney must be turning over in his grave.

Reg, G4FGQ

2922. Re: ladder near metal?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 02:10:18 UTC
From: Dan Roth <dpvjroth@locl.net>
Message-ID: <421ec074@news.greennet.net>
Source record: 81561

I was curious as to the characteristic impedance sensitivity to height variations of parallel line over an infinite perfect conducting plane (not the same problem but it may give some insights to the pipe question). The characteristic impedance formula for this appears in many handbooks and transmission line books. Each line is a height h above the conducting plane and the distance between the two lines is W. I chose the wire spacing, wire diameter and dielectric constant to give a nominal impedance of 400 Ohms when h=infinity. Here are some intermediate results:

h=0.5W , Z=363 Ohms
h=W , Z=388 Ohms
h=2W , Z=397 Ohms
h=3W , Z=399 Ohms
h=4W , Z=399.6 Ohms

The 3W rule offered by Dave is apparently very conservative and leaves some margin for cable movement due to wind as he suggests.

Getting back to the iron pipe case, for h values less than W, other issues such as Ohmic loss and ferromagnetic loss may come into play.

73 Dan

--
Dan Roth, N9NO

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:AhoTd.19285$D34.4109@newssvr12.news.prodigy.com...
> Back in the 1950s we used to install TV antennas on 30 and 40 foot steel
> masts to get a 100 uvolt signal on channel 2 with a 10 or 12 element yagi.
> We used regular 300 ohm twim lead and twisted it before putting it into
> the slot of the standoff. the standoff were about 4" long. The twisting
> did two things: minimized leadin pickup and equalize any stresses from
> wind. What happens when you transmit with high SWR is out of my league.
>
> --
>
> 73
> Hank WD5JFR
> "KC1DI" <elbc2@pivot.net> wrote in message
> news:111rhlsqveplqd2@corp.supernews.com...
>> ml wrote:
>>> I wonder exactly what happens when you run ladder line say next to a 1''
>>> metal pipe spaced about 1" apprt
>>>
>>> is it just that the ohms that change would it be a bit or does it

>>> swing waaaay off?? tnx
>> Hi ML
>>
>> Keep the Ladder Line 3X it's width away from the metal for 300 ohm twin
>> lead that would be about 2 " For 450 ohm Ladder line it would be about 5
>> " a twist in the portion of the line near the metal object about every
>> 18" or so will also help. Remeber though that the portion of the line
>> near the metal object must not be allowed to sway in the the wind if it
>> does it will cause the impedence to very sometimes widly as the line
>> moves closer then further away..
>>
>> I've found the above to be very accurate and have not had problems in
>> many installations over the years.
>>
>> 73 Dave
>
>

2923. Chemical to Improve Electrical Connection in Antenna Elements

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 02:28:16 UTC
From: Rob <noemail@pse.com>
Message-ID: <o1wTd.45891$Am3.1394451@news20.bellglobal.com>
Source record: 81562

I live in a harsh winter environment with lots of ice, wind and snow. I am looking at ways to improve the reliability of my antenna. I don't want to do repairs in the winter!

Is there a chemical that improves the reliability of the electrical connections between telescoping antenna elements? (e.g. telescoping elements used in a vertical)

Rob

2924. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 03:17:12 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <421E98CC.6E3BDC78@deadend.com>
Source record: 81563
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Richard Clark wrote:
>
> On Wed, 23 Feb 2005 19:08:20 GMT, gwhite <gwhite@deadend.com> wrote:
>
> >RF transmitters are not ....
>
> Sorry OM,
>
> This was all nonsense.

Nice articulation. I don't know who OM is, but RF transmitter power amps are
not "impedance matched." Neither are audio power amps for that matter.

2925. Re: Chemical to Improve Electrical Connection in Antenna Elements

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 03:19:30 UTC
From: Whononian <someone@jablome.com>
Message-ID: <387jptF5k6k15U1@individual.net>
Source record: 81564

"Rob" <noemail@pse.com> wrote in message
news:o1wTd.45891$Am3.1394451@news20.bellglobal.com...
> I live in a harsh winter environment with lots of ice, wind and snow. I
am
> looking at ways to improve the reliability of my antenna. I don't want to
> do repairs in the winter!
>
> Is there a chemical that improves the reliability of the electrical
> connections between telescoping antenna elements? (e.g. telescoping
elements
> used in a vertical)
>
> Rob
>
>

Try tuner spray. it cleans TV tuners contacts and leaves a protective
residue, silicon stuff.
Should not freeze either.

2926. Re: Velocity factor and impedance of ladder line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 03:29:34 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421e9c6b$1_2@127.0.0.1>
Source record: 81565

Jim Leder wrote:
> Most seem to think it's around .865 and 390 ohms.

That's fairly close to what I measured for the #14 stranded.
Depending upon the amount of insulation, which varies
from run to run, the VF can be higher or lower.

> I'm using for a matching stub and need to fairly close.

Cut&Try. Make it too long and chop until perfect.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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2927. Re: G5RV (Yet Again)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 03:35:15 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421e9dc0$1_1@127.0.0.1>
Source record: 81566

wizard12342002@yahoo.com wrote:

> As someone who is relatively inexperienced with the hobby, I am amazed
> at the confusion and mysticism surrounding the "G5RV" antenna. It
> appears to be nothing but a dipole, with a length of "balanced line" to
> transform the impedance to a better match for coax at certain
> frequencies.
>
> A little consideration reveals that this antenna should suffer from
> unwanted return currents unless a balun is used (like any coax-fed
> dipole), and substantial loss in the coax at certain frequencies. So
> why is this antenna better than two pieces of reasonably long wire
> driven with balanced line and a tuner? What am I missing?

It is a pretty good antenna on 80m, 40m, 20m, and 12m because
the 50 ohm SWR is relatively low on those bands. A dipole fed
by balanced line and a tuner may perform better or worse than
a G5RV depending upon the configuration. If one knows what one
is doing, the 100% balanced line approach is best and can be
done without a conventional tuner as explained on my web page.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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2928. Re: Unloaded Transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 03:37:49 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421e9e5b$1_1@127.0.0.1>
Source record: 81567

Al wrote:

> I have a project for which I use a wall wart with 18VAC (not DC) output. Is
> it safe to leave such an unloaded transformer plugged in for periods of
> time?

Leave it plugged in for awhile and then feel of it.
If it is warm or hot, it's a poor design, and there
are some of those out there.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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2929. Re: G5RV (Yet Again)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 03:45:29 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421ea027$1_1@127.0.0.1>
Source record: 81568

Reg Edwards wrote:
> It has a cloverleaf radiation pattern only in the 20m band, sometimes
> praised as desirable if you work from South America into both Europe and the
> USA as G5RV often did.

It has a multi-lobed pattern on all frequencies
above 14 MHz. A 102' dipole has a beautiful clover-
leaf pattern on 17m.

> But the biggest joke of all is the half-size G5RV. Mr R L Varney must be
> turning over in his grave.

Antennas are scalable with frequency, Reg. The
102' G5RV is a pretty good antenna for 80m, 40m,
20m, and 12m. That makes the 51' half-sized G5RV
a pretty good antenna for 40m, 20m, 10m, and 6m.
When Mr. Varney designed the G5RV antenna, there
were no WARC bands.
--
73, Cecil http://www.qsl.net/w5dxp

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2930. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 03:58:58 UTC
From: kensmith@green.rahul.net
Message-ID: <cvm7q2$7f8$1@blue.rahul.net>
Source record: 81569
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <421E98CC.6E3BDC78@deadend.com>, gwhite <gwhite@deadend.com> wrote:
>Richard Clark wrote:
>>
>> On Wed, 23 Feb 2005 19:08:20 GMT, gwhite <gwhite@deadend.com> wrote:
>>
>> >RF transmitters are not ....
>>
>> Sorry OM,
>>
>> This was all nonsense.
>
>Nice articulation. I don't know who OM is, but RF transmitter power amps are
>not "impedance matched." Neither are audio power amps for that matter.

"OM" is an amateur radio term. It is short for "Old Man". It is a
respectful term for all other males that is quick to transmit via Morse
code. Richard Clark appears to be an amateur radio operator or the like.

RF transmitter power amps are certainly "impedance matched" to the
intended load. Take a look in the ARRL "The radio amateur's handbook".
If you have the 1944 addition, you will need to start reading at page 96
in the lower right column. If you don't have that, try Motorola's AN-721.

As for audio amp, you are 1 for 3 my friend.

--
--
kensmith@rahul.net forging knowledge

2931. Re: Chemical to Improve Electrical Connection in Antenna Elements

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 04:26:32 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <%KxTd.37287$a96.927@bignews3.bellsouth.net>
Source record: 81570

"Rob" <noemail@pse.com> wrote in message
news:o1wTd.45891$Am3.1394451@news20.bellglobal.com...
> I live in a harsh winter environment with lots of ice, wind and snow. I
am
> looking at ways to improve the reliability of my antenna. I don't want to
> do repairs in the winter!
>
> Is there a chemical that improves the reliability of the electrical
> connections between telescoping antenna elements? (e.g. telescoping
elements
> used in a vertical)
>
> Rob

If the elements are aluminum, there's a connection compound made for
aluminum
There are several brands and trademarks two of the names are "NoAlox" and
"Penetrox"..
This is for the contacting surfaces in the telescoping sections.

- or move down below the 38th parallel where all antennas last twice as long
;-)

2932. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 05:26:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vidt1156vpt7fqocbhf2dia6k7tth8rn6c@4ax.com>
Source record: 81571
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Fri, 25 Feb 2005 03:17:12 GMT, gwhite <gwhite@deadend.com> wrote:

>RF transmitter power amps are
>not "impedance matched." Neither are audio power amps for that matter.

Hi OM,

You seem to be shy of facts and long on claims. Got any experience at
the bench, or is this all arm-chair philosophy?

73's
Richard Clark, KB7QHC

2933. W1HXU small quad antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 06:31:18 UTC
From: Mario Bros <rocco.calbe@tin.it>
Message-ID: <WCzTd.587875$b5.26851037@news3.tin.it>
Source record: 81472

Hi folks,
I try articles on the W1HXU antenna quad:

Ham Radio 1975 nr. 7 pag. 22
Ham Radio 1976 nr. 5 pag. 25

Someone, kindly, can make one copy?

Thanks and best regards de IK6GQC Rocco

2934. Re: Velocity factor and impedance of ladder line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 06:51:18 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <9hit11dlbv4g7ca7h71m7blbqj4brgvovd@4ax.com>
Source record: 81473

On Thu, 24 Feb 2005 19:14:25 -0500, "Jim Leder" <k8cxm@spam.fuse.net>
wrote:

> What is LIKELY to be the true impedance and velocity factor of 450 ohm
>window 18AWG solid polyethylene ladder line? I see everything from .85 to
>.95 and 375 to 440. Most seem to think it's around .865 and 390 ohms. Is
>this close enough? I have no way of actually measuring it.
>BTW, same as what the Wireman sells.
>
> Sorry for asking a question that's been asked before, but it does have many
>ambiguous answers and I'm not sure what it really is. I'm using for a
>matching stub and need to fairly close.

http://users.triconet.org/wesandlinda/ladder.htm

2935. Re: G5RV (Yet Again)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 06:53:32 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <rpit119s5mb5577bqt3e71kpafv9los1bd@4ax.com>
Source record: 81474

On 24 Feb 2005 16:27:51 -0800, wizard12342002@yahoo.com wrote:

>As someone who is relatively inexperienced with the hobby, I am amazed
>at the confusion and mysticism surrounding the "G5RV" antenna. It
>appears to be nothing but a dipole, with a length of "balanced line" to
>transform the impedance to a better match for coax at certain
>frequencies.
>
>A little consideration reveals that this antenna should suffer from
>unwanted return currents unless a balun is used (like any coax-fed
>dipole), and substantial loss in the coax at certain frequencies. So
>why is this antenna better than two pieces of reasonably long wire
>driven with balanced line and a tuner? What am I missing?

Nothing.

2936. Re: RF basic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 08:04:13 UTC
From: simon0630@yahoo.com
Message-ID: <a6e4082c.0502250004.2bfd9704@posting.google.com>
Source record: 81475

Thanks, Jerry.
How can make a 50 ohm semi-loop antenna as stated in the link
http://www.rfm.com/corp/appdata/antenna.pdf

2937. antenna work help

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 13:19:51 UTC
From: ml <m@di.net>
Message-ID: <m-92E0FE.08194325022005@news.verizon.net>
Source record: 81476

I thought this may or may not be a good place to post but not sure
where elese i'd go

The other day I managed to put up my antenna on the roof.Looks beautiful
up there, I thought that was the hard part...

murphys law applied , got in over my head ,

My plan was to drop the coax down a floor mounted vent shaft about
2'x2'. the tv and sat cables are routed this was my plan was to just
copy this method

however it has a 'cap' on it with flashing etc to waterproof it, i
can't remove it , i am not a roofer or a pro installer.

therfore my plan on wiggling the coax into the hole (which i can do)
and then downwards into the shaft failed it was too stiff to turn the
tv guys must have removed the cap

that cap needs to be removed

question

does anyone know of a really good licensced/insured/bonded prefessional
either roofer that can assist me in removing the vent cap and replacing
it OR a cable installer that can handle removing this kind of stuff
and droping the cable down the shaft

i must use a pro' since the building just spent a million on a new roof
and got a waterproff warantee that prohibits them from just doing what
ever i must be profissional

i know this is outside of the favor catagory and i am understanding this
is a for hire job

i am in the Bronx , NY should anyone know of any good such contractors

the vent shaft is straight so i would suspect after that cap is removed
the coax can be droped down the vent and pulled out on my floor vent
along w/all the other coax i mean if the cable tv and sat tv guys
could do it ..

scope of work

remove sheet metal vent cap flashed in and waterprofed, drop cables
down vent to my floor along side of the existing cables , replace vent
cap as it was
pull cable out of vent hole where other tv cable are on my floor
end scope of work

any recomendations for good people/companies is appreciated

thanks email can go to

myles remove this at, dti , dot net

2938. Re: antenna work help

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 13:37:21 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <421F2A11.70009@cableone.net>
Source record: 81477

Myles, I'm a long way from the Bronx and it's construction codes, but down here on the Gulf Coast we would just drill an appropriate size hole in the vent cap, install the coax, and then seal up around coax. Should do just fine

Butch KF5DE

ml wrote:
> I thought this may or may not be a good place to post but not sure
> where elese i'd go
>
> The other day I managed to put up my antenna on the roof.Looks beautiful
> up there, I thought that was the hard part...
>
> murphys law applied , got in over my head ,
>
> My plan was to drop the coax down a floor mounted vent shaft about
> 2'x2'. the tv and sat cables are routed this was my plan was to just
> copy this method
>
> however it has a 'cap' on it with flashing etc to waterproof it, i
> can't remove it , i am not a roofer or a pro installer.
>
> therfore my plan on wiggling the coax into the hole (which i can do)
> and then downwards into the shaft failed it was too stiff to turn the
> tv guys must have removed the cap
>
> that cap needs to be removed
>
>
> question
>
> does anyone know of a really good licensced/insured/bonded prefessional
> either roofer that can assist me in removing the vent cap and replacing
> it OR a cable installer that can handle removing this kind of stuff
> and droping the cable down the shaft
>
> i must use a pro' since the building just spent a million on a new roof
> and got a waterproff warantee that prohibits them from just doing what
> ever i must be profissional
>
> i know this is outside of the favor catagory and i am understanding this
> is a for hire job
>
> i am in the Bronx , NY should anyone know of any good such contractors

>
> the vent shaft is straight so i would suspect after that cap is removed
> the coax can be droped down the vent and pulled out on my floor vent
> along w/all the other coax i mean if the cable tv and sat tv guys
> could do it ..
>
>
> scope of work
>
> remove sheet metal vent cap flashed in and waterprofed, drop cables
> down vent to my floor along side of the existing cables , replace vent
> cap as it was
> pull cable out of vent hole where other tv cable are on my floor
> end scope of work
>
> any recomendations for good people/companies is appreciated
>
>
> thanks email can go to
>
> myles remove this at, dti , dot net

2939. Re: antenna work help

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 14:14:54 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <4ecu119g4dh2mv2ft1u08akudgpqmop7vr@4ax.com>
Source record: 81478

On Fri, 25 Feb 2005 13:19:51 GMT, ml <m@di.net> wrote:

>I thought this may or may not be a good place to post but not sure
>where elese i'd go
>
>The other day I managed to put up my antenna on the roof.Looks beautiful
>up there, I thought that was the hard part...
>
>murphys law applied , got in over my head ,
>
>My plan was to drop the coax down a floor mounted vent shaft about
>2'x2'. the tv and sat cables are routed this was my plan was to just
>copy this method

Do what you want, but personally I wouldn't mix transmitting coax in a
vent shaft with receiving coax being used by your neighbors to receive
TV and satellite signals. You may interfere with their TVs and
stereos.

Maybe there's another route to bring the coax down to your residence?

bob
k5qwg

2940. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 14:16:02 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <111ucocpk4o4l72@corp.supernews.com>
Source record: 81479
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Dear gwhite [no call, no location]:
Notwithstanding the clear limitations on making conclusions about what
happens inside of a circuit that has been modeled using Thevenin's theorem,
it is part of Religion that the least important theorem in circuit theory is
applicable.
Debates about Faith are a waste of energy. Avoid the tar-baby.

73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net

"gwhite" <gwhite@deadend.com>

2941. Re: G5RV (Yet Again)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 14:26:32 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <sAGTd.3598$DW.2110@newssvr17.news.prodigy.com>
Source record: 81480

JJ,
What you're missing is the 'mystique' the advertising
department has generated.
'Doc

PS - By the way, I have this bridge for sale. Built from
gold bricks...

2942. Re: Unloaded Transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 15:11:56 UTC
From: richardharrison@webtv.net
Message-ID: <24338-421F403C-406@storefull-3256.bay.webtv.net>
Source record: 81481

Al, KA5GV wrote:
"If not, what would be a good solution other than plugging the unit in and out?"

Overheating is a fire hazard eliminated by a fuse or circuit breaker which limits current to a safe value.

The power circuits in your house may be protected with 15-amp breakers. The wiring is then safely chosen to carry 15 amps with no danger that the wires will overheat.

15 amps in your wall wart may set it on fire with no help from your load-center. This can be prevented with a fuse or breaker on the wall wart by itself which limits the current to less than it takes to set the device on fire.

Best regards, Richard Harrison, KB5WZI

2943. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 15:24:12 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421f458e_2@127.0.0.1>
Source record: 81482
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Ken Smith wrote:
> RF transmitter power amps are certainly "impedance matched" to the
> intended load. Take a look in the ARRL "The radio amateur's handbook".
> If you have the 1944 addition, you will need to start reading at page 96
> in the lower right column. If you don't have that, try Motorola's AN-721.

A CMOS Class-E amp is in full saturation (0.5v at 2a)
for 10% of a cycle and off (12v at 0a) for the other
90% of a cycle. The tank circuit changes the digital
energy to analog energy by filtering out everything
except the fundamental frequency component. How
in the world does one determine the steady-state
impedance of the CMOS source? Isn't the best one
can do with a digital switch is to keep it within
specified parameters? The CMOS device dissipates 2
watts for 10% of the time - therefore 0.2 watts
steady-state.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2944. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 15:34:17 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421f47eb_2@127.0.0.1>
Source record: 81483
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Cecil Moore wrote:
> The CMOS device dissipates 2
> watts for 10% of the time - therefore 0.2 watts
> steady-state.

Sorry, should have been: The CMOS device dissipates
one watt for 10% of the time - therefore 0.1 watts.

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2945. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 15:47:16 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421f4b12_1@127.0.0.1>
Source record: 81484
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Ken Smith wrote:
> RF transmitter power amps are certainly "impedance matched" to the
> intended load. Take a look in the ARRL "The radio amateur's handbook".
> If you have the 1944 addition, you will need to start reading at page 96
> in the lower right column. If you don't have that, try Motorola's AN-721.

It appears that I may have canceled an earlier posting
by accident so will repeat it.

A certain Class-E CMOS amp is in full saturation for
10% of a cycle, 0.5v at 2a. For the rest of the time
it is off. The supply voltage is 12v. What is the
steady-state impedance of the source at the fundamental
frequency?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2946. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 16:42:59 UTC
From: Jim Thompson <thegreatone@example.com>
Message-ID: <balu11ho51ui947sboak8fbsg86dp281rq@4ax.com>
Source record: 81485
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Fri, 25 Feb 2005 09:47:16 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Ken Smith wrote:
>> RF transmitter power amps are certainly "impedance matched" to the
>> intended load. Take a look in the ARRL "The radio amateur's handbook".
>> If you have the 1944 addition, you will need to start reading at page 96
>> in the lower right column. If you don't have that, try Motorola's AN-721.
>
>It appears that I may have canceled an earlier posting
>by accident so will repeat it.
>
>A certain Class-E CMOS amp is in full saturation for
>10% of a cycle, 0.5v at 2a. For the rest of the time
>it is off. The supply voltage is 12v. What is the
>steady-state impedance of the source at the fundamental
>frequency?

Now, now, Cecil! Don't sully the thread with facts !-)

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

2947. Re: W1HXU small quad antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 17:19:05 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd1ung8.146f.bit-bucket@shell.config.com>
Source record: 81486

On Fri, 25 Feb 2005 06:31:18 GMT, Mario Bros wrote:

> I try articles on the W1HXU antenna quad:
>
> Ham Radio 1975 nr. 7 pag. 22
> Ham Radio 1976 nr. 5 pag. 25
>
> Someone, kindly, can make one copy?
>
> Thanks and best regards de IK6GQC Rocco

Rocco

I am scanning the articles now. Do you wish them by email
attachment, or by HTML reference?

<Copy sent by email>

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

2948. Re: RF basic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 17:39:12 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <4pJTd.29968$uc.24837@trnddc01>
Source record: 81487

"Montoya" <simon0630@yahoo.com> wrote in message
news:a6e4082c.0502250004.2bfd9704@posting.google.com...
> Thanks, Jerry.
> How can make a 50 ohm semi-loop antenna as stated in the link
> http://www.rfm.com/corp/appdata/antenna.pdf

Sigma

Although I am confidant that I could design and build an antenna from the above sited antenna concept, I have way too litle knowledge of your restrictions. If you did want to get some help with this antenna maybe you could write a more difinitive description of your needs and restrictions for the really good antenna guys who read this antenna news group.
If your "specs" are realistic, I'd bet money that even I could design a satisfactory "semi-loop", and I might be one of the least prepared antenna designers who frequent this site.

Jerry

2949. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 22:59:56 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <e62dnZNJCPRTMILfRVn-ig@comcast.com>
Source record: 81488
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"gwhite" <gwhite@deadend.com> wrote in message
news:421E98CC.6E3BDC78@deadend.com...
> Richard Clark wrote:
>>
>> On Wed, 23 Feb 2005 19:08:20 GMT, gwhite <gwhite@deadend.com> wrote:
>>
>> >RF transmitters are not ....
>>
>> Sorry OM,
>>
>> This was all nonsense.
>
> Nice articulation. I don't know who OM is, but RF transmitter power amps
> are
> not "impedance matched." Neither are audio power amps for that matter.

My stereo amp has a spec on output impedance. As I recall, it was around
0.16 Ohms. Intended load is 4 - 16 Ohms.

Tam

2950. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-25 23:56:21 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <421FBB39.6BB0153C@deadend.com>
Source record: 81489
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Ken Smith wrote:
>

> RF transmitter power amps are certainly "impedance matched" to the
> intended load.

I'm sorry, but they are not. Nor are any power amps that I know of. Efficiency (and thus necessarily output swing) is what matters for power amps. To maximize swing requires load line matching, not impedance matching.

If you want to study RF PA's I suppose Cripps is one of the best I know of for a modern text:

http://www.amazon.com/exec/obidos/tg/detail/-/0890069891/

2951. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 00:09:39 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <421FBE57.9372A210@deadend.com>
Source record: 81490
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Cecil Moore wrote:
>

> What is the steady-state impedance of the
> source at the fundamental frequency?

Exactly Cecil. That's exactly why I said the concept of impedance is dubious for large signal devices and thus provides a second argument, albeit weaker, against the "impedance matching" idea for power amps.

"The concept of 'output impedance' breaks down
for large signal devices. For example, what is
the output impedance of a class C or D amp taken
when the transistor is on or off?"

The strongest argument for dropping the impedance matching concept is PA efficiency, and therefore maximum signal swing. Obtaining maximum swing is a load line issue.

2952. Re: EZNEC Model of a Terminated Vee-Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 00:15:35 UTC
From: jgboyles@aol.com
Message-ID: <1109376935.016706.198650@z14g2000cwz.googlegroups.com>
Source record: 81491

Use Loads?

2953. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 00:20:03 UTC
From: kensmith@green.rahul.net
Message-ID: <cvofbj$56n$1@blue.rahul.net>
Source record: 81492
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <421f458e_2@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com> wrote:
>Ken Smith wrote:
>> RF transmitter power amps are certainly "impedance matched" to the
>> intended load. Take a look in the ARRL "The radio amateur's handbook".
>> If you have the 1944 addition, you will need to start reading at page 96
>> in the lower right column. If you don't have that, try Motorola's AN-721.
>
>A CMOS Class-E amp is in full saturation (0.5v at 2a)
>for 10% of a cycle and off (12v at 0a) for the other
>90% of a cycle. The tank circuit changes the digital
>energy to analog energy by filtering out everything
>except the fundamental frequency component. How
>in the world does one determine the steady-state
>impedance of the CMOS source? Isn't the best one
>can do with a digital switch is to keep it within
>specified parameters? The CMOS device dissipates 2
>watts for 10% of the time - therefore 0.2 watts
>steady-state.

For what you say here really to be true the transistors must switch very fast. About 25pS switching speed is needed at about 400KHz. If we take that to be the case however, I think you will see why matching still applies.

Lets take the reactive component first. If there is a reactive component to the loading, the current in the switch will have a higher RMS value without that increase in RMS increasing the radiated power of the system. So the reactive component of the matching is fairly obvious.

Imagine that you have a well designed Class-E circuit loaded with the load the designer optimized it for.

Now imagine that you slightly increase the resistance slightly. When you do so, the current into the load will decrease but the voltage will not increase enough to compensate for this.

Now lets assume that you slightly decrease the resistance. Since we are assuming that this is a well designed case, we can assume that the designer took steps to ensure that the output devices would be protected from excess currents. This could be done by reducing the operating voltage of the output section, for example. In any case, the voltage on the load will decrease by a larger factor than the current will increase.

So it is obvious that the reactive part is matched and the resistive part is matched just as it would be in a non-class-E output section.

--
--
kensmith@rahul.net forging knowledge

2954. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 00:21:22 UTC
From: kensmith@green.rahul.net
Message-ID: <cvofe2$56n$2@blue.rahul.net>
Source record: 81493
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <421f4b12_1@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com> wrote:
>Ken Smith wrote:
>> RF transmitter power amps are certainly "impedance matched" to the
>> intended load. Take a look in the ARRL "The radio amateur's handbook".
>> If you have the 1944 addition, you will need to start reading at page 96
>> in the lower right column. If you don't have that, try Motorola's AN-721.
>
>It appears that I may have canceled an earlier posting
>by accident so will repeat it.

I answered your other copy of the posting.

--
--
kensmith@rahul.net forging knowledge

2955. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 00:23:23 UTC
From: kensmith@green.rahul.net
Message-ID: <cvofhr$56n$3@blue.rahul.net>
Source record: 81494
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <balu11ho51ui947sboak8fbsg86dp281rq@4ax.com>,
Jim Thompson <thegreatone@example.com> wrote:
>On Fri, 25 Feb 2005 09:47:16 -0600, Cecil Moore <w5dxp@hotmail.com>
>wrote:
[...]
>>A certain Class-E CMOS amp is in full saturation for
>>10% of a cycle, 0.5v at 2a. For the rest of the time
>>it is off. The supply voltage is 12v. What is the
>>steady-state impedance of the source at the fundamental
>>frequency?
>

>Now, now, Cecil! Don't sully the thread with facts !-)

This needs a 12V transistor that switches in about 25pS. Would that be
likely on a current chip?

--
--
kensmith@rahul.net forging knowledge

2956. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 00:34:34 UTC
From: kensmith@green.rahul.net
Message-ID: <cvog6q$56n$4@blue.rahul.net>
Source record: 81495
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <421FBE57.9372A210@deadend.com>, gwhite <gwhite@deadend.com> wrote:
>Cecil Moore wrote:
[...]
> "The concept of 'output impedance' breaks down
> for large signal devices.

Motorola seems to disagree with you. Perhaps more importantly, I disagree with you. The large signal impedance of a transistor working into a tuned load still applies quite well.

> For example, what is
> the output impedance of a class C or D amp taken
> when the transistor is on or off?"

When dealing with an RF output section you don't deal with just one part of the cycle. You can tell if the real part of the impedance is matched if:

(1) If you increase the resistance of the load does the power decrease?

AND

(2) If you decrease the resistance of the load does the power decrease?

>The strongest argument for dropping the impedance matching concept is PA
>efficiency, and therefore maximum signal swing. Obtaining maximum swing is a
>load line issue.

What do you mean by "maximum signal swing" in this context. I can get a bigger swing by leaving the output completely unloaded and hence causing the actual efficiency to be zero.

The reactive component issue is still there too. Reactive loads cause increased currents in the output stage without delivering any power to the load so they still need to be reduced as much as practical.

--
--
kensmith@rahul.net forging knowledge

2957. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 00:40:09 UTC
From: kensmith@green.rahul.net
Message-ID: <cvogh9$56n$5@blue.rahul.net>
Source record: 81496
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <421FBB39.6BB0153C@deadend.com>, gwhite <gwhite@deadend.com> wrote:
>Ken Smith wrote:
>>
>
>> RF transmitter power amps are certainly "impedance matched" to the
>> intended load.
>
>I'm sorry, but they are not. Nor are any power amps that I know of. Efficiency
>(and thus necessarily output swing) is what matters for power amps. To maximize
>swing requires load line matching, not impedance matching.

I still say they are. Motorola AN-721 takes on the theory. AN-758 does a
practical example matching 12.5 Ohms into 50 Ohms

--
--
kensmith@rahul.net forging knowledge

2958. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 01:05:28 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <sXPTd.56446$Dc.23189@trnddc06>
Source record: 81497
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
news:e62dnZNJCPRTMILfRVn-ig@comcast.com...
>
> "gwhite" <gwhite@deadend.com> wrote in message
> news:421E98CC.6E3BDC78@deadend.com...
>> Richard Clark wrote:
>>>
>>> On Wed, 23 Feb 2005 19:08:20 GMT, gwhite <gwhite@deadend.com> wrote:
>>>
>>> >RF transmitters are not ....
>>>
>>> Sorry OM,
>>>
>>> This was all nonsense.
>>
>> Nice articulation. I don't know who OM is, but RF transmitter power amps
>> are
>> not "impedance matched." Neither are audio power amps for that matter.
>
> My stereo amp has a spec on output impedance. As I recall, it was around
> 0.16 Ohms. Intended load is 4 - 16 Ohms.
>
> Tam

Tam

An audio amplifier can have an improved capability of minimizing a
speaker's deviation from its desired displacement if it has a low output
impedance. That is, the speaker's cone tends to swing past its desired
displacement when its terminals are loaded to a high impedance.

Jerry
>
>

2959. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 01:26:48 UTC
From: Tom Ring <news0001@taring.org>
Message-ID: <421fcff1$0$38730$39cecf19@news.twtelecom.net>
Source record: 81498
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Ken Smith wrote:

> In article <421FBB39.6BB0153C@deadend.com>, gwhite <gwhite@deadend.com> wrote:
>
>>Ken Smith wrote:
>>
>>>RF transmitter power amps are certainly "impedance matched" to the
>>>intended load.
>>
>>I'm sorry, but they are not. Nor are any power amps that I know of. Efficiency
>>(and thus necessarily output swing) is what matters for power amps. To maximize
>>swing requires load line matching, not impedance matching.
>
>
> I still say they are. Motorola AN-721 takes on the theory. AN-758 does a
> practical example matching 12.5 Ohms into 50 Ohms
>
>

Sure are. A 30 year ago 500 level course I took called Non-Linear
Transistor Design said so. The way you handle class C etc. is by
handling each harmonic separately in your analysis of the transistor
plus tank circuit. You match to the harmonic you want. It may be the
fundamental, or the third for a tripler, etc.

tom
K0TAR

2960. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 01:33:10 UTC
From: Tom Ring <news0001@taring.org>
Message-ID: <421fd16f$0$92311$39cecf19@news.twtelecom.net>
Source record: 81499
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Jerry Martes wrote:

> "Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
> news:e62dnZNJCPRTMILfRVn-ig@comcast.com...
>
>>"gwhite" <gwhite@deadend.com> wrote in message
>>news:421E98CC.6E3BDC78@deadend.com...
>>
>>>Richard Clark wrote:
>>>
>>>>On Wed, 23 Feb 2005 19:08:20 GMT, gwhite <gwhite@deadend.com> wrote:
>>>>
>>>>
>>>>>RF transmitters are not ....
>>>>
>>>>Sorry OM,
>>>>
>>>>This was all nonsense.
>>>
>>>Nice articulation. I don't know who OM is, but RF transmitter power amps
>>>are
>>>not "impedance matched." Neither are audio power amps for that matter.
>>
>>My stereo amp has a spec on output impedance. As I recall, it was around
>>0.16 Ohms. Intended load is 4 - 16 Ohms.
>>
>>Tam
>
>
> Tam
>
> An audio amplifier can have an improved capability of minimizing a
> speaker's deviation from its desired displacement if it has a low output
> impedance. That is, the speaker's cone tends to swing past its desired
> displacement when its terminals are loaded to a high impedance.
>
> Jerry

Correct - in the case of an audio amplifier damping factor is critical
to accurate reproduction of transients. In an RF amp, it is normally
not required or desired.

tom
K0TAR

2961. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 02:09:02 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.02.26.02.09.06.635542@example.net>
Source record: 81500
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Sat, 26 Feb 2005 00:40:09 +0000, Ken Smith wrote:

> In article <421FBB39.6BB0153C@deadend.com>, gwhite <gwhite@deadend.com> wrote:
>>Ken Smith wrote:
>>>
>>
>>> RF transmitter power amps are certainly "impedance matched" to the
>>> intended load.
>>
>>I'm sorry, but they are not. Nor are any power amps that I know of. Efficiency
>>(and thus necessarily output swing) is what matters for power amps. To maximize
>>swing requires load line matching, not impedance matching.
>
> I still say they are. Motorola AN-721 takes on the theory. AN-758 does a
> practical example matching 12.5 Ohms into 50 Ohms
>
>

Evidently, the guy's never tuned up a 40 meter pi-net output transmitter. ;-)

If that's not impedance matching, I don't know what it is! (Oh, "Load line"
matching? What are the two parameters of the load line? Voltage and Current,
right? What's the slope of the load line? Impedance!)

Cheers!
Rich

2962. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 02:11:23 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.02.26.02.11.30.772360@example.net>
Source record: 81501
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Fri, 25 Feb 2005 17:59:56 -0500, Tam/WB2TT wrote:

>
> "gwhite" <gwhite@deadend.com> wrote in message
> news:421E98CC.6E3BDC78@deadend.com...
>> Richard Clark wrote:
>>>
>>> On Wed, 23 Feb 2005 19:08:20 GMT, gwhite <gwhite@deadend.com> wrote:
>>>
>>> >RF transmitters are not ....
>>>
>>> Sorry OM,
>>>
>>> This was all nonsense.
>>
>> Nice articulation. I don't know who OM is, but RF transmitter power amps
>> are
>> not "impedance matched." Neither are audio power amps for that matter.
>
> My stereo amp has a spec on output impedance. As I recall, it was around
> 0.16 Ohms. Intended load is 4 - 16 Ohms.
>

That works because the transmission line is less than 0.01 wavelength.
So impedance matching becomes moot. If the speaker line were 1/4 wavelength
long, there would be almost no signal transferred at all.

Cheers!
Rich

2963. Matched or Not Matched

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 02:21:53 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cvomg1rni1@sparta.btinternet.com>
Source record: 81502
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Arguments about whether the power ammplifier is matched or not matched to 50 ohms arise due to misunderstandings about the meaning of "matched".

Meaning 1.

The PA has been designed for maximum, linear, undistorted power output when loaded with Ro ohms and the load reistance has actually been adjusted to equal Ro. Ro is usually 50 ohms. (There may be additional criteria to define what constitutes an optimum match.)

Meaning 2.

The load impedance Z = R+jX has been adjusted to equal the conjugate of the internal impedance resistance of the PA. (The internal impedance of the PA is usually unknown but the circuit is assumed to behave as if a conjugate match exists.)

The two meanings are entirely different from each other. If there is danger of confusion then the meaning should be stated. Some people already use the descriptions "Zo match" and "Conjugate match".

Reg, G4FGQ

2964. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 02:28:47 UTC
From: kensmith@green.rahul.net
Message-ID: <cvomsv$9dq$4@blue.rahul.net>
Source record: 81503
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <pan.2005.02.26.02.11.30.772360@example.net>,
Rich Grise <richgrise@example.net> wrote:
[... audio matching ..]
>That works because the transmission line is less than 0.01 wavelength.
>So impedance matching becomes moot. If the speaker line were 1/4 wavelength
>long, there would be almost no signal transferred at all.

(Unless you use the specially tapered euphonic cable!)

Actually, if you used a thick enough wire, you could go 1/4 wavelength at
audio frequencies. If you connect a speaker straight onto the mains,
chances are you are going further than that from the generator.

--
--
kensmith@rahul.net forging knowledge

2965. Re: Matched or Not Matched

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 02:39:14 UTC
From: kensmith@green.rahul.net
Message-ID: <cvongi$9dq$5@blue.rahul.net>
Source record: 81504
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <cvomg1rni1@sparta.btinternet.com>,
Reg Edwards <g4fgq,regp@ZZZbtinternet,com> wrote:
>Arguments about whether the power ammplifier is matched or not matched to 50
>ohms arise due to misunderstandings about the meaning of "matched".
>
>Meaning 1.
>-------------
>The PA has been designed for maximum, linear, undistorted power output when
>loaded with Ro ohms and the load reistance has actually been adjusted to
>equal Ro. Ro is usually 50 ohms. (There may be additional criteria to
>define what constitutes an optimum match.)
>
>Meaning 2.
>-------------
>The load impedance Z = R+jX has been adjusted to equal the conjugate of the
>internal impedance resistance of the PA. (The internal impedance of the PA
>is usually unknown but the circuit is assumed to behave as if a conjugate
>match exists.)

Meaning 3:
The PA has been designed to deliver the maximum power at that load
impedance and the distortion is not an issue.

>The two meanings are entirely different from each other. If there is danger
>of confusion then the meaning should be stated. Some people already use the
>descriptions "Zo match" and "Conjugate match".

Actually meanings 2 and 3 are effectively equal in the case of the tuned
system, if you define the Zo based on the change in output power vs
connected impedance for small changes. Since a lot of such systems aren't
linear, this is the way you end up having to define the impedance. You
can't use open circuit voltage and short circuit current.

Remember that this all started with the OP having a "transmitter". This
would include any needed filtering. He was just connecting a 1/4 and 1/2
wave lengths of bent up wire. His output filter, I assume is just a bunch
of LC sections.

--
--
kensmith@rahul.net forging knowledge

2966. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 03:09:43 UTC
From: richardharrison@webtv.net
Message-ID: <8510-421FE877-196@storefull-3253.bay.webtv.net>
Source record: 81505

Ken Smith wrote:
"Motorola AN-721 takes on the theory. AN-758 gives a practical example matching 12.5 Ohms into 50 Ohms."

As King, Mimno, and Wing said, a conjugate match is required to get maximum power out of the radio.

Terman says the same on page 76 of his 1955 edition of "Electronic and Radio Engineering."

There is also an Eimac application note on matching their tubes to a load on the final amplifier.

If Larry, Moe, and Curly published an application note, we`d have a crowd of skeptics here. See Terman`s Fig. 3-21 on page 77 of his 1955 edition.

Best regards, Richard Harrison, KB5WZI

2967. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 03:42:19 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <wtKdnbcLscJhcoLfRVn-1w@comcast.com>
Source record: 81506
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Rich Grise" <richgrise@example.net> wrote in message
news:pan.2005.02.26.02.11.30.772360@example.net...
> On Fri, 25 Feb 2005 17:59:56 -0500, Tam/WB2TT wrote:
>
>>
>> "gwhite" <gwhite@deadend.com> wrote in message
>> news:421E98CC.6E3BDC78@deadend.com...
>>> Richard Clark wrote:
>>>>
>>>> On Wed, 23 Feb 2005 19:08:20 GMT, gwhite <gwhite@deadend.com> wrote:
>>>>
>>>> >RF transmitters are not ....
>>>>
>>>> Sorry OM,
>>>>
>>>> This was all nonsense.
>>>
>>> Nice articulation. I don't know who OM is, but RF transmitter power
>>> amps
>>> are
>>> not "impedance matched." Neither are audio power amps for that matter.
>>
>> My stereo amp has a spec on output impedance. As I recall, it was around
>> 0.16 Ohms. Intended load is 4 - 16 Ohms.
>>
>
> That works because the transmission line is less than 0.01 wavelength.
> So impedance matching becomes moot. If the speaker line were 1/4
> wavelength
> long, there would be almost no signal transferred at all.
>
> Cheers!
> Rich
>
>
There is nothing wrong with driving a transmission line/antenna from a zero
impedance source. It does NOT change the SWR. The point is that an audio
amplifier with a damping factor of 50 is NOT conjugate matched.

Somebody mentioned Motorola Application note 721. This is what it says:

****
" ..the load, in first approximation, is not related to the device, except
for VCE(sat). The load value is primarily dictated by the required output

power and the peak voltage; it is not matched to the output impedance of the device. "

****

When device people talk about "matching", they mean matching the load to what the transistor wants to see, which is not the conjugate of the output impedance. The way this is done is to build an amplifier, and vary the load until maximum output power is reached. The transistor is then removed, and the impedance looking into the coupling network is measured. The conjugate of this is sometimes listed as "output impedance" on data sheets. Newer data sheets will have an asterisk * next to that, and a note explaining what it means. If you look at Philips literature, you will see exactly the same explanation.

This whole thing has been hashed out here about 5 times during the past year.

Tam

2968. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 03:46:08 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <q_idnQYlC5F8bYLfRVn-qw@comcast.com>
Source record: 81507
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Ken Smith" <kensmith@green.rahul.net> wrote in message
news:cvogh9$56n$5@blue.rahul.net...
> In article <421FBB39.6BB0153C@deadend.com>, gwhite <gwhite@deadend.com>
> wrote:
>>Ken Smith wrote:
>>>
>>
>>> RF transmitter power amps are certainly "impedance matched" to the
>>> intended load.
>>
>>I'm sorry, but they are not. Nor are any power amps that I know of.
>>Efficiency
>>(and thus necessarily output swing) is what matters for power amps. To
>>maximize
>>swing requires load line matching, not impedance matching.
>
> I still say they are. Motorola AN-721 takes on the theory. AN-758 does a
> practical example matching 12.5 Ohms into 50 Ohms
>

Ken,
Motorola 721 specifically says the device IS NOT MATCHED.

Tam
>
> --
> --
> kensmith@rahul.net forging knowledge
>

2969. Conjugate Match and Internal Impedance again

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 04:10:14 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cvosr6$kn4$1@titan.btinternet.com>
Source record: 81508

If a conjugate match matters two hoots, or is involved in the slightest way with the design of power amplifiers or any other sort of amplifier, why don't tube manufacturers state the internal resistance or impedance in tube date sheets?

2970. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 04:15:57 UTC
From: kensmith@green.rahul.net
Message-ID: <cvot5tdqq2@blue.rahul.net>
Source record: 81509
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <q_idnQYlC5F8bYLfRVn-qw@comcast.com>,
Tam/WB2TT <t-tammaru@c0mca$t.net> wrote:
[...]
>Ken,
>Motorola 721 specifically says the device IS NOT MATCHED.

It say " Strictly speaking..." is that the section you are refering to?

Yes they do say that but then if you follow the design through, I think you will find that they try to cancel the reactive component. If you then put in the output device protection they didn't include, you end up with the matching as I explained elsewhere. As the impedance moves away from what the designer intended, the radiated power decreases.

The point is that the OP was taking about hooking a "transmitter" to a length of wire. I was talking about the matching from a complete transmitter which I assume contains such protection to this length of wire.

--
--
kensmith@rahul.net forging knowledge

2971. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 04:18:33 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421ff9e3_2@127.0.0.1>
Source record: 81511
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

gwhite wrote:
> The strongest argument for dropping the impedance matching concept is PA
> efficiency, and therefore maximum signal swing. Obtaining maximum swing is a
> load line issue.

So what impedance does the reflected wave encounter?
--
73, Cecil http://www.qsl.net/w5dxp

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2972. Re: Conjugate Match and Internal Impedance again

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 04:21:40 UTC
From: Tom Ring <news0001@taring.org>
Message-ID: <421ff8ec$0$38735$39cecf19@news.twtelecom.net>
Source record: 81510

Reg Edwards wrote:

> If a conjugate match matters two hoots, or is involved in the slightest way
> with the design of power amplifiers or any other sort of amplifier, why
> don't tube manufacturers state the internal resistance or impedance in tube
> date sheets?
>
>

So I guess you just connect your tubes or transistor finals directly to
the coax?

I mean, since it doesn't matter...

Tom
K0TAR

2973. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 04:23:55 UTC
From: kensmith@green.rahul.net
Message-ID: <cvotkrdqq3@blue.rahul.net>
Source record: 81512
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <wtKdnbcLscJhcoLfRVn-1w@comcast.com>,
Tam/WB2TT <t-tammaru@c0mca$t.net> wrote:
[...]
>When device people talk about "matching", they mean matching the load to
>what the transistor wants to see, which is not the conjugate of the output
>impedance.

Actually, in this case, I was speaking of matching the transmitter's
output to the load. The transmitter already contains gawd knows what L
and C components etc. The OP has a completed transmitter and a hunk of
wire. If he matches the wire to what the transmitter wants to see, the
transmitter will be happy. If he causes a reactive current to flow that
the designer did not design for he will cause added heating in the output
device. If the designer did a good job, the transmitter will protect its
output devices and thus end up producing less power.

Also if he makes the real component of the impedance vary from what the
designer intended, the output power will decrease. Which direction gets
limited by the Vcc and which by the protection circuit depends on the
collection of Ls and Cs inside the transmitter.

--
--
kensmith@rahul.net forging knowledge

2974. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 04:26:47 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421ffbaa_2@127.0.0.1>
Source record: 81513
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Ken Smith wrote:
> Now lets assume that you slightly decrease the resistance. Since we are
> assuming that this is a well designed case, we can assume that the
> designer took steps to ensure that the output devices would be protected
> from excess currents.

Let's assume the designer is an amateur who didn't provide
any protection for his tube's output. The lower the resistive
load, the more current the output device draws until it fails.
What is the output impedance of the device?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
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2975. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 04:35:28 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <421ffe62_1@127.0.0.1>
Source record: 81514
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Rich Grise wrote:
> Evidently, the guy's never tuned up a 40 meter pi-net output transmitter. ;-)
>
> If that's not impedance matching, I don't know what it is! (Oh, "Load line"
> matching? What are the two parameters of the load line? Voltage and Current,
> right? What's the slope of the load line? Impedance!)

And there's the catch. If the load line is the source
impedance, the load (not the designer) effects the source
impedance.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
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2976. Re: Conjugate Match and Internal Impedance again

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 04:52:25 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42200314_2@127.0.0.1>
Source record: 81516

Reg Edwards wrote:
> If a conjugate match matters two hoots, or is involved in the slightest way
> with the design of power amplifiers or any other sort of amplifier, why
> don't tube manufacturers state the internal resistance or impedance in tube
> date sheets?

When I first became a ham, transmitters didn't have
any protection at all. They would keep putting out
more and more power until the final or power supply
got too hot.

My 6L6 went out during a contest in the 50's. All I
had to replace it with was a metal 6V6. What's the
source impedance of a 6V6 plugged into a 6L6 socket?
--
73, Cecil http://www.qsl.net/w5dxp

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2977. Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 04:53:03 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cvovbf$6m2$1@sparta.btinternet.com>
Source record: 81515
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

The phrase "output impedance" in connection with amplifiers is ambiguous and likely to result in arguments.

The correct description is "internal impedance" or "internal resistance" and should always be used.

Reg.

2978. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 04:56:47 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <422003f1_1@127.0.0.1>
Source record: 81517
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Ken Smith wrote:
> If you then
> put in the output device protection they didn't include, you end up with
> the matching as I explained elsewhere.

SWR foldback is part of impedance matching?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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2979. PileupBuster.com - Domain Name is For Sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 05:21:45 UTC
From: erfurth@gmail.com
Message-ID: <36ba001b.0502252121.13e8203e@posting.google.com>
Source record: 81518

-NOTICE-

The "PileupBuster.com" domain name is For Sale.

For less then the price of an HF rig you can own the ultimate Ham Radio domain name.

The PileupBuster.com domain has immediate name recognition to everyone associated with Ham Radio. Plus, the sales and marketing potential of this name is unlimited.

The minimum offer on this domain is $1,250.00 (US Dollars). The PileupBuster.com domain name will be sold to the person, company or group that makes the highest offer. International offers are welcome.

This is a Private Auction. No one will see what you offer and you will not be able to see what others are offering.

You may begin submitting your offers on Saturday February 26. No offers will be accepted after 12:00 midnight (Pacific Time) on Friday March 4, 2005.

TO MAKE AN OFFER, GO TO: http://PileupBuster.com When the web page comes up, look right under the PileupBuster.com name. You will see "This domain is For Sale" then click on: "More detailsï¿½" You will then see a box to enter your offer. Enter your offer and then click "Make Offer"

This sale is supervised and regulated by SEDO (sedo.com), a highly respected International domain sales company.

If you have any questions, please feel free to contact me at: erfurth@gmail.com

Good luck.

73s,

Bill

2980. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 05:42:37 UTC
From: Larry Brasfield <donotspam_larry_brasfield@hotmail.com>
Message-ID: <5%TTd.87$MW3.2174@news.uswest.net>
Source record: 81519
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in
message news:cvovbf$6m2$1@sparta.btinternet.com...
> The phrase "output impedance" in connection with amplifiers is ambiguous and
> likely to result in arguments.

I suppose the same could be said of any block that is
susceptible to having some feedback put around it.
Therefore the term "output impedance" should never
be used at all. And of course, any term that could, or
has ever been known to lead to an argument, with any
uninformed person that might come along, should be
eliminated from our vocabulary.

Uuugh. Mmmmph. Me drag woman to cave by hair.

> The correct description is "internal impedance" or "internal resistance" and
> should always be used.

Nonsense.

If I wanted to speak of an impedance inside of some
circuit, I might loosely speak of it as "internal", but in
any useful discussion, it would be spoken of as either
an output impedance or an input impedance, and, with
most people I have such discussions with, there would
be no need to add that some unknown additional feed-
back not part of the present discussion could alter the
observable impedance.

I hope your post was a troll.

--
--Larry Brasfield
email: donotspam_larry_brasfield@hotmail.com
Above views may belong only to me.

2981. help me out with my wire ant farm idea please?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 06:46:46 UTC
From: dx440@webtv.net
Message-ID: <20744-42201B56-392@storefull-3276.bay.webtv.net>
Source record: 81520

i just bought 10 acres of flat land here in alabama . i need a huge horizontal ant for 160.to 11 meter band .is the rhombic a good choice.i don't wont a huge tower . i need a good budget wire ant.thats all thank you very much 73s

2982. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 07:27:34 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <JwkX6yBmTCICFwxE@jmwa.demon.co.uk>
Source record: 81422
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that gwhite <gwhite@deadend.com> wrote
(in <421FBB39.6BB0153C@deadend.com>) about '1/4 vs 1/2 wavelength
antenna', on Fri, 25 Feb 2005:

>I'm sorry, but they are not. Nor are any power amps that I know of.
>Efficiency (and thus necessarily output swing) is what matters for power
>amps. To maximize swing requires load line matching, not impedance
>matching.

What is a 'load line'? A straight line on an I/V graph? What does the
gradient of that line represent?
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

2983. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 07:32:29 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <BAuVW8BNYCICFwTS@jmwa.demon.co.uk>
Source record: 81521
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Larry Brasfield <donotspam_larry_b
rasfield@hotmail.com> wrote (in <5%TTd.87$MW3.2174@news.uswest.net>)
about 'Say what you mean.', on Fri, 25 Feb 2005:

>If I wanted to speak of an impedance inside of some circuit, I might
>loosely speak of it as "internal", but in any useful discussion, it
>would be spoken of as either an output impedance or an input impedance,

The problem is that people say 'output impedance' when they mean 'load
impedance'. To prevent misunderstanding I use the term 'output source
impedance'.

There are also some people who use 'input impedance' when they mean
'source impedance'. I don't talk to them. (;-)
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

2984. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 08:34:35 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.02.26.08.34.41.140706@example.net>
Source record: 81423
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Fri, 25 Feb 2005 22:35:28 -0600, Cecil Moore wrote:

> Rich Grise wrote:
>> Evidently, the guy's never tuned up a 40 meter pi-net output transmitter. ;-)
>>
>> If that's not impedance matching, I don't know what it is! (Oh, "Load line"
>> matching? What are the two parameters of the load line? Voltage and Current,
>> right? What's the slope of the load line? Impedance!)
>
> And there's the catch. If the load line is the source
> impedance, the load (not the designer) effects the source
> impedance.

Apparently, I'm not following the same conversation here, because I
thought that the impedance matching network (in the instant example, the
pi-net output of the transmitter) was what translated the load impedance
to the source impedance, matching both in the process.

Thanks,
Rich

2985. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 08:36:46 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.02.26.08.36.52.613325@example.net>
Source record: 81424
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Fri, 25 Feb 2005 21:42:37 -0800, Larry Brasfield wrote:
>
> Uuugh. Mmmmph. Me drag woman to cave by hair.

Uh. Nuh. Drag _FROM_ hair.

2986. Re: help me out with my wire ant farm idea please?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 10:20:53 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <94YTd.12598$Sa6.11086@fe2.columbus.rr.com>
Source record: 81425

Google " wire antenna " if you can drink from a fire hose :o)
73, Dave, N3HE

"Free radio" <dx440@webtv.net> wrote in message
news:20744-42201B56-392@storefull-3276.bay.webtv.net...
>i just bought 10 acres of flat land here in alabama . i need a huge
> horizontal ant for 160.to 11 meter band .is the rhombic a good
> choice.i don't wont a huge tower . i need a good budget wire ant.thats
> all thank you very much 73s
>

2987. Re: help me out with my wire ant farm idea please?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 11:46:57 UTC
From: "Edward A. Feustel" <efeustel@direcway.com>
Message-ID: <42206265$1_1@127.0.0.1>
Source record: 81426

"Free radio" <dx440@webtv.net> wrote in message
news:20744-42201B56-392@storefull-3276.bay.webtv.net...
>i just bought 10 acres of flat land here in alabama . i need a huge
> horizontal ant for 160.to 11 meter band .is the rhombic a good
> choice.i don't wont a huge tower . i need a good budget wire ant.thats
> all thank you very much 73s
>
>
I am not certain that a Rhombic for 160 would fit in your 10 acres. In part
it depends on the
configuration of the lot. 10 acres in a square configuration would lead a
side of about 650 feet. A wavelength is 160 x 3.1 or 496 feet. So the side
of the lot is less than 1.5 wavelengths on 160 -- not very long for a
rhombic. Do you have really tall supports for the Rhombic? You clearly have
enough space for a rhombic on 20 meters and perhaps 40 meters.

Do you really want to have most of your power going in only two directions?
This would assume that you could selectively feed one end or the other of
the antenna while terminating the other.

Perhaps one or more 160 meter center fed wire antennas arranged so that you
could choose the one
with lobes in the correct direction for your contact on the your choice of
bands would work out better.

Regards,
Ed, N5EI

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

2988. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 12:20:13 UTC
From: "Airy R.Bean" <Me@privacy.net>
Message-ID: <38b83cF5lqjoqU1@individual.net>
Source record: 81428
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

My "Bailey" amps (Wireless World c. 1970) have lots
of internal resistances, all soldered in neatly by hand.

In your comment below, I think that you have "output"
much "impudance".

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cvovbf$6m2$1@sparta.btinternet.com...
> The phrase "output impedance" in connection with amplifiers is ambiguous
and
> likely to result in arguments.
> The correct description is "internal impedance" or "internal resistance"
and
> should always be used.

2989. Re: G5RV (Yet Again)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 12:24:29 UTC
From: Jim <K4SQR@juno.com>
Message-ID: <1109420669.246602.77580@o13g2000cwo.googlegroups.com>
Source record: 81427

G5RV originally designed the antenna for gain on the 20 meter band.
Over the years, various mfg. have made minor changes, but the design
essentially remains unchanged.
(The "double-size" for 160 is not an efficient antenna. Better to feed
260' of wire via ladder or open wire line.)

2990. Re: Unloaded Transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 12:45:38 UTC
From: Al <aburzynski@nojunk.satx.rr.com>
Message-ID: <Sb_Td.56523$911.37721@fe2.texas.rr.com>
Source record: 81429

Thank you for your replies. Like it or not, I feel most comfortable if I unplug the unit.
Al

2991. Re: FT-857D and ASAT-120 question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 13:08:35 UTC
From: Jon <jon@portlandbill.co.uk>
Message-ID: <cvpsca$ll8$11@newsg3.svr.pol.co.uk>
Source record: 81430

Joe

All currents are fed via the coax and there is no separate 12v line. The rig knows where the ATAS is tuned to and adjusts it accordingly when you press the tune button. The ATAS can be manually tuned using the up and down buttons but in my experience this is never required. Even on 40m (7.0 - 7.2MHz here in the UK) once tuned to the centre of the band retuning within the band is not required.

I have changed the standard whip on my ATAS 120 for one that is about a foot longer and it works great on all bands including 30, 17, 12 and 11m. I have never used it on the VHF or UHF bands as I have a separate antenna for these bands. Drop me an email if you want any more information.

Jon G2FHF

2992. Re: Ladder Line and wind

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 13:20:37 UTC
From: Jon <jon@portlandbill.co.uk>
Message-ID: <cvpt2s$hn5$9@newsg3.svr.pol.co.uk>
Source record: 81431

Jim

I live in a similar location to you and have found the 450 Ohm ladder line to be pretty useless in the wind. It seems to break every couple of months and I have to keep repairing it. I made some open wire feeder using standard speaker cable spaced about three inches with the spreaders every meter and it lasted for several years. For the spreaders I used short sections of square PVC trunking, drilled a hole at each end just large enough to thread the wire through then used Superglue to lock them in place. It works just as well than the commercial stuff but with less loss.

Jon G2FHF

"Jim Miller" <jim@removethisjtmiller.com> wrote in message news:T7adnfKO6L8uvIvfRVn-pA@comcast.com...
> I'm putting up a doublet centerfed by 450 ohm ladderline. It will be about
> 50ft away from the house to the feedpoint of the antenna. We live on top
> of
> a hill and winds here are often gusting to 60mph. The typical direction of
> the wind is perpendicular to the ladderline and I'm concerned about it
> whipping itself to death.
>
> The ladder grabber at center of the doublet will be supported by a line
> running from the house to a tree so I'm considering attaching the
> ladderline
> to the support line leading to the house to minimize the whipping. The
> ladderline has to come this way anyway. This support line will be
> perpendicular to the axis of the antenna.
>
> I briefly thought about threading the house line through the ladder
> windows
> but that seemed likely to spoil the impedence especially if wet.
>
> Any concerns or recommendations?
>
> tnx
> jtm
>
>

2993. Re: help me out with my wire ant farm idea please?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 14:28:51 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42208876_1@127.0.0.1>
Source record: 81432

Free radio wrote:
> i just bought 10 acres of flat land here in alabama . i need a huge
> horizontal ant for 160.to 11 meter band .is the rhombic a good
> choice.

A rhombic is highly directional and fixed in place.
What do you want your antenna to do for you?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2994. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 14:33:25 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4220898b_1@127.0.0.1>
Source record: 81433
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Rich Grise wrote:

> On Fri, 25 Feb 2005 22:35:28 -0600, Cecil Moore wrote:
>
>>Rich Grise wrote:
>>>If that's not impedance matching, I don't know what it is! (Oh, "Load line"
>>>matching? What are the two parameters of the load line? Voltage and Current,
>>>right? What's the slope of the load line? Impedance!)
>>
>>And there's the catch. If the load line is the source
>>impedance, the load (not the designer) effects the source
>>impedance.
>
> Apparently, I'm not following the same conversation here, because I
> thought that the impedance matching network (in the instant example, the
> pi-net output of the transmitter) was what translated the load impedance
> to the source impedance, matching both in the process.

Maybe I inferred wrong. From your "load line equals
impedance" statement above, I inferred that you were
implying that the load line *is* the source impedance.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

2995. Re: Ladder Line and wind

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 14:38:02 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42208a9b$1_1@127.0.0.1>
Source record: 81434

Jon wrote:
> I live in a similar location to you and have found the 450 Ohm ladder line
> to be pretty useless in the wind. It seems to break every couple of months
> and I have to keep repairing it.

That's true for the solid copper wire stuff. But
I have used the #14 stranded stuff ever since it
was introduced and it has never broken. AZ and
TX have their share of wind.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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2996. Re: help me out with my wire ant farm idea please?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 14:58:19 UTC
From: Buck <iam@this.site>
Message-ID: <4h3121hbu67amho8r5ki142f61f1iui1va@4ax.com>
Source record: 81435

On Sat, 26 Feb 2005 00:46:46 -0600, dx440@webtv.net (Free radio)
wrote:

>i just bought 10 acres of flat land here in alabama . i need a huge
>horizontal ant for 160.to 11 meter band .is the rhombic a good
>choice.i don't wont a huge tower . i need a good budget wire ant.thats
>all thank you very much 73s

What about a full -wave loop? Approximately 150 feet per side for a
square. Feed it from a corner or the center of one side. Tune it for
all bands.

Its just one of many options.

--
73 for now
Buck
N4PGW

2997. Re: Unloaded Transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 15:32:40 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <sE0Ud.48125$uc.8371@trnddc03>
Source record: 81436

"Al" <aburzynski@nojunk.satx.rr.com> wrote in message
news:Sb_Td.56523$911.37721@fe2.texas.rr.com...
> Thank you for your replies. Like it or not, I feel most comfortable if I
> unplug the unit.
> Al

Al

Do you unplug your TV? It is always on, drawing some current . Then
there is the electric clock. The list could go on and on in most
households.

That is -- If your mind is already made up, why ask a question about
wallwarts on an antenna news group

Jerry

2998. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 15:51:46 UTC
From: Allan Herriman <allan.herriman.hates.spam@ctam.com.au.invalid>
Message-ID: <7f61215vkil228ehkcfhrou37f914fm7fe@4ax.com>
Source record: 81437
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Sat, 26 Feb 2005 04:53:03 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>The phrase "output impedance" in connection with amplifiers is ambiguous and
>likely to result in arguments.
>
>The correct description is "internal impedance" or "internal resistance" and
>should always be used.

S22 is fairly well defined.

Allan

2999. Re: antenna work help

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 15:55:49 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <11216veg3q0up85@corp.supernews.com>
Source record: 81438

Dear Myles N2EHG:
An excellent antenna organization is XX Towers. Even if you do not use
their services this time, keep them in mind.
http://www.xxtowers.com/

73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"ml" <m@di.net> wrote in message
news:m-92E0FE.08194325022005@news.verizon.net...
> I thought this may or may not be a good place to post but not sure
> where elese i'd go
>
> The other day I managed to put up my antenna on the roof.Looks beautiful
> up there, I thought that was the hard part...
>
> murphys law applied , got in over my head ,
>
> My plan was to drop the coax down a floor mounted vent shaft about
> 2'x2'. the tv and sat cables are routed this was my plan was to just
> copy this method
>
> however it has a 'cap' on it with flashing etc to waterproof it, i
> can't remove it , i am not a roofer or a pro installer.
>
> therfore my plan on wiggling the coax into the hole (which i can do)
> and then downwards into the shaft failed it was too stiff to turn the
> tv guys must have removed the cap
>
> that cap needs to be removed
>
>
> question
>
> does anyone know of a really good licensced/insured/bonded prefessional
> either roofer that can assist me in removing the vent cap and replacing
> it OR a cable installer that can handle removing this kind of stuff
> and droping the cable down the shaft
>
> i must use a pro' since the building just spent a million on a new roof
> and got a waterproff warantee that prohibits them from just doing what
> ever i must be profissional
>

> i know this is outside of the favor catagory and i am understanding this
> is a for hire job
>
> i am in the Bronx , NY should anyone know of any good such contractors
>
> the vent shaft is straight so i would suspect after that cap is removed
> the coax can be droped down the vent and pulled out on my floor vent
> along w/all the other coax i mean if the cable tv and sat tv guys
> could do it ..
>
>
> scope of work
>
> remove sheet metal vent cap flashed in and waterprofed, drop cables
> down vent to my floor along side of the existing cables , replace vent
> cap as it was
> pull cable out of vent hole where other tv cable are on my floor
> end scope of work
>
> any recomendations for good people/companies is appreciated
>
>
> thanks email can go to
>
> myles remove this at, dti , dot net

3000. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 16:01:31 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.02.26.16.01.37.492680@example.net>
Source record: 81439
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Sat, 26 Feb 2005 08:33:25 -0600, Cecil Moore wrote:

> Rich Grise wrote:
>
>> On Fri, 25 Feb 2005 22:35:28 -0600, Cecil Moore wrote:
>>
>>>Rich Grise wrote:
>>>>If that's not impedance matching, I don't know what it is! (Oh, "Load line"
>>>>matching? What are the two parameters of the load line? Voltage and Current,
>>>>right? What's the slope of the load line? Impedance!)
>>>
>>>And there's the catch. If the load line is the source
>>>impedance, the load (not the designer) effects the source
>>>impedance.
>>
>> Apparently, I'm not following the same conversation here, because I
>> thought that the impedance matching network (in the instant example, the
>> pi-net output of the transmitter) was what translated the load impedance
>> to the source impedance, matching both in the process.
>
> Maybe I inferred wrong. From your "load line equals
> impedance" statement above, I inferred that you were
> implying that the load line *is* the source impedance.

No, just trying to make the point that it does, in fact, _have_ an
impedance. (even if it's running class E.) What that exact impedance is,
of course, is left as an exercise for the reader. :-)

And another thing - in a transmitter, the impedance matching only happens
at the one frequency, which is a lot different scenario from, say, a
stereo. This could be a confusion factor here.

Thanks,
Rich

3001. 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 17:38:28 UTC
From: KC8QJP KATHY LEE <N8WWM@ARRL.NET>
Message-ID: <svc1219h100jvf50he98s6baes2hpaqhlb@4ax.com>
Source record: 81440
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

Nice antenna, designed after the UKSMG design I
"borrowed" (tee hee) from GW0WFH.

http://www.uksmg.org/longwire.htm

This is a great working antenna, with 12dB
measured gain over a dipole. It isnt a beam, but
it sure is better than a dipole!

$140.00 plus $6.50 shipping in lower 48 states.

Email N8WWM@arrl.net for more information and
photos. I'll take paypal, a check, money order,
whatever.

Usenet Zone Free Binaries Usenet Server
More than 120,000 groups
Unlimited download
http://www.usenetzone.com to open account

3002. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 18:00:50 UTC
From: richardharrison@webtv.net
Message-ID: <4701-4220B952-541@storefull-3258.bay.webtv.net>
Source record: 81443

John Woodgate wrote:
"The problem is that people say "output impedance" when they mean "load impedance".

Quite right. I`ll use "source" and "load".

Current through a load depends on the voltage. Ratio of volts to amps is the impedance. A source with the same resistance and offsetting reactance to the load enjoys a Goldilocks relationship with its load. The source`s volts and amps perfectly match the demands of the load. It`s just right. There`s no surplus of either volts or amps when source and load are connected. Its a match. Only a matched source and load deliver all the power available in a source.

If we have too much resistance in our load, it doesn`t take as much power as it could.

If we have too little resistance in our load, too much power is lost in our source.

The perfect match of equal source and load resistances, with the reactance neutralized, is the only condition permitting maximum power transfer.

Somme amateurs want all the power they can get from their transmitters.

Best regards, Richard Harrison, KB5WZI

3003. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 18:01:09 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <FP2Ud.13434$QQ3.5735@trnddc02>
Source record: 81441
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

Kathy

Thats a really interesting antenna. And it isnt too expensive either.
Could 8 of them be connected in parallel to get 21 db gain over a dipole?

Jerry

"KC8QJP KATHY LEE" <N8WWM@ARRL.NET> wrote in message
news:svc1219h100jvf50he98s6baes2hpaqhlb@4ax.com...
> Nice antenna, designed after the UKSMG design I
> "borrowed" (tee hee) from GW0WFH.
>
> http://www.uksmg.org/longwire.htm
>
> This is a great working antenna, with 12dB
> measured gain over a dipole. It isnt a beam, but
> it sure is better than a dipole!
>
> $140.00 plus $6.50 shipping in lower 48 states.
>
> Email N8WWM@arrl.net for more information and
> photos. I'll take paypal, a check, money order,
> whatever.
>
>
> _____
> Usenet Zone Free Binaries Usenet Server
> More than 120,000 groups
> Unlimited download
> http://www.usenetzone.com to open account

3004. Re: help me out with my wire ant farm idea please?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 18:12:48 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <4220BCBA.6D92DB25@shaw.ca>
Source record: 81442

Buck wrote:
>
> On Sat, 26 Feb 2005 00:46:46 -0600, dx440@webtv.net (Free radio)
> wrote:
>
> >i just bought 10 acres of flat land here in alabama . i need a huge
> >horizontal ant for 160.to 11 meter band .is the rhombic a good
> >choice.i don't wont a huge tower . i need a good budget wire ant.thats
> >all thank you very much 73s
>
> What about a full -wave loop? Approximately 150 feet per side for a
> square. Feed it from a corner or the center of one side. Tune it for
> all bands.
>
> Its just one of many options.
>
> --
> 73 for now
> Buck
> N4PGW

I second the motion. The full wave loop will do it all.

Irv VE6BP
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/index.html
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/index.htm
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/index.htm
---
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

3005. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 20:15:25 UTC
From: KC8QJP KATHY LEE <N8WWM@ARRL.NET>
Message-ID: <e4m1219ca84bdi0c37o5ccvtkarqn10f9d@4ax.com>
Source record: 81444
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

Your hilarious, I guess that's why you played the
Beaver on TV, fucknozzle.

On Sat, 26 Feb 2005 18:01:09 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

>
> Kathy
>
> Thats a really interesting antenna. And it isnt too expensive either.
>Could 8 of them be connected in parallel to get 21 db gain over a dipole?
>
> Jerry
>
>
>"KC8QJP KATHY LEE" <N8WWM@ARRL.NET> wrote in message
>news:svc1219h100jvf50he98s6baes2hpaqhlb@4ax.com...
>> Nice antenna, designed after the UKSMG design I
>> "borrowed" (tee hee) from GW0WFH.
>>
>> http://www.uksmg.org/longwire.htm
>>
>> This is a great working antenna, with 12dB
>> measured gain over a dipole. It isnt a beam, but
>> it sure is better than a dipole!
>>
>> $140.00 plus $6.50 shipping in lower 48 states.
>>
>> Email N8WWM@arrl.net for more information and
>> photos. I'll take paypal, a check, money order,
>> whatever.
>>
>>
>> --
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3006. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 20:56:55 UTC
From: Scan da bands <RK22@msn.com>
Message-ID: <4220de1e$0$1694$8f2e0ebb@news.shared-secrets.com>
Source record: 81445
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

"KC8QJP KATHY LEE" <N8WWM@ARRL.NET> wrote in message
news:svc1219h100jvf50he98s6baes2hpaqhlb@4ax.com...
> Nice antenna, designed after the UKSMG design I
> "borrowed" (tee hee) from GW0WFH.
>
> http://www.uksmg.org/longwire.htm
>
> This is a great working antenna, with 12dB
> measured gain over a dipole. It isnt a beam, but
> it sure is better than a dipole!
>
> $140.00 plus $6.50 shipping in lower 48 states.
>
> Email N8WWM@arrl.net for more information and
> photos. I'll take paypal, a check, money order,
> whatever.
>
What a CROCK! Small wonder that both of the no code calls in this post
(n8wwm & kc8qp) are felon crooks.

Who in their right mind would buy this crap?

3007. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 21:21:09 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4220e9dc_2@127.0.0.1>
Source record: 81446
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Allan Herriman wrote:
> S22 is fairly well defined.

What's the S22 of an IC-756PRO?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
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3008. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 21:27:27 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4220eb22_2@127.0.0.1>
Source record: 81447
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Allan Herriman wrote:
> S22 is fairly well defined.

What's the S22 of an IC-756PRO? With that figure,
S22^2 is defined as:

Power reflected from the network output divided by
Power incident on the network output.

Better yet, we can then calculate the reflected power
dissipated by the IC-756PRO.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

3009. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 21:35:46 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4220ecfe_1@127.0.0.1>
Source record: 81448
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Rich Grise wrote:
> And another thing - in a transmitter, the impedance matching only happens
> at the one frequency, which is a lot different scenario from, say, a
> stereo. This could be a confusion factor here.

Therefore, the key to converting the non-linear source to
an equivalent linear source lies in a Fourier analysis?
Do the other-than-fundamental terms in the Fourier analysis
encounter a low impedance or a high impedance?
--
73, Cecil http://www.qsl.net/w5dxp

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3010. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 21:41:58 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <G26Ud.56443$uc.3458@trnddc04>
Source record: 81449
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

OOPS - I just got the same feeling i had when I stepped in a pile of cow sh*t. I should have been watching where I posted. Please disregard the previous replies to this information about antennas.
I do want to thank you for reminding me to read more and to not get involved in replies to others's posts.

Jerry

"KC8QJP KATHY LEE" <N8WWM@ARRL.NET> wrote in message news:e4m1219ca84bdi0c37o5ccvtkarqn10f9d@4ax.com...
> Your hilarious, I guess that's why you played the
> Beaver on TV, fucknozzle.
>
> On Sat, 26 Feb 2005 18:01:09 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
>>
>> Kathy
>>
>> Thats a really interesting antenna. And it isnt too expensive either.
>>Could 8 of them be connected in parallel to get 21 db gain over a dipole?
>>
>> Jerry
>>
>>
>>"KC8QJP KATHY LEE" <N8WWM@ARRL.NET> wrote in message
>>news:svc1219h100jvf50he98s6baes2hpaqhlb@4ax.com...
>>> Nice antenna, designed after the UKSMG design I
>>> "borrowed" (tee hee) from GW0WFH.
>>>
>>> http://www.uksmg.org/longwire.htm
>>>
>>> This is a great working antenna, with 12dB
>>> measured gain over a dipole. It isnt a beam, but
>>> it sure is better than a dipole!
>>>
>>> $140.00 plus $6.50 shipping in lower 48 states.
>>>
>>> Email N8WWM@arrl.net for more information and
>>> photos. I'll take paypal, a check, money order,
>>> whatever.
>>>
>>>
>>> _____

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3011. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 21:42:41 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4220ee75_2@127.0.0.1>
Source record: 81450

Richard Harrison wrote:
> Some amateurs want all the power they can get from their transmitters.

I learned long ago that approach burns up unprotected
transmitters. Nowadays, I settle for efficiency and
lots of protection circuitry.
--
73, Cecil http://www.qsl.net/w5dxp

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3012. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 21:47:39 UTC
From: jwwinkel <jwwinkel@tref.nl>
Message-ID: <cvqqpu$e2g$1@reader13.wxs.nl>
Source record: 81451
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

140 doller for wire??? goldwire ....
73' Willem PD3UX WP3UX

"KC8QJP KATHY LEE" <N8WWM@ARRL.NET> schreef in bericht
news:svc1219h100jvf50he98s6baes2hpaqhlb@4ax.com...
> Nice antenna, designed after the UKSMG design I
> "borrowed" (tee hee) from GW0WFH.
>
> http://www.uksmg.org/longwire.htm
>
> This is a great working antenna, with 12dB
> measured gain over a dipole. It isnt a beam, but
> it sure is better than a dipole!
>
> $140.00 plus $6.50 shipping in lower 48 states.
>
> Email N8WWM@arrl.net for more information and
> photos. I'll take paypal, a check, money order,
> whatever.
>
>
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3013. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 21:55:10 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <z$CpZXL+APICFwHu@jmwa.demon.co.uk>
Source record: 81452
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Cecil Moore <w5dxp@hotmail.com>
wrote (in <4220ecfe_1@127.0.0.1>) about '1/4 vs 1/2 wavelength antenna',
on Sat, 26 Feb 2005:
>Rich Grise wrote:
>> And another thing - in a transmitter, the impedance matching only happens
>> at the one frequency, which is a lot different scenario from, say, a
>> stereo. This could be a confusion factor here.
>
>Therefore, the key to converting the non-linear source to
>an equivalent linear source lies in a Fourier analysis?
>Do the other-than-fundamental terms in the Fourier analysis
>encounter a low impedance or a high impedance?

Yes. Not facetious; the impedance matching network can be configured to
minimise individual or a few harmonic emissions by adjusting its
impedances at harmonic frequencies. Either high or low (or perhaps both)
can minimise the emission, depending on the configuration.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

3014. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 22:13:43 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cvqsannhk1@titan.btinternet.com>
Source record: 81453
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Cecil Moore" wrote
> Allan Herriman wrote:
> > S22 is fairly well defined.
>
> What's the S22 of an IC-756PRO?

==========

Cecil, I havn't the foggiest idea what an IC-756PRO is except that it is something which comes from that excellent manufacturer Icom.

But your extremely brief question is the most hillarious ever asked on this newsgroup. You are still at the best of your form. I can't stop laughing.

The best I could do is ask what is the S22 of a 6J5. One thing for certain, it is not mentioned in manufacturer's data sheets. Yet ARRL simple PA design rules manage very well without it.

Yours, Reg.

3015. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 22:28:10 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <4220F895.47054F39@shaw.ca>
Source record: 81454
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

KC8QJP KATHY LEE wrote:
>
> Nice antenna, designed after the UKSMG design I
> "borrowed" (tee hee) from GW0WFH.
>
> http://www.uksmg.org/longwire.htm
>
> This is a great working antenna, with 12dB
> measured gain over a dipole. It isnt a beam, but
> it sure is better than a dipole!

You've obviously mistaken this group for e-bay!
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/index.html
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/index.htm
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/index.htm
---
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

3016. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 22:34:55 UTC
From: KC8QJP KATHY LEE <N8WWM@ARRL.NET>
Message-ID: <vau121dfav13da5bocdgg3ukmh1vd62iv3@4ax.com>
Source record: 81455
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

Go buy some deoderent and razor blades instead
cheapskate.
>
On Sat, 26 Feb 2005 22:47:39 +0100, "jwwinkel"
<jwwinkel@tref.nl> wrote:

>140 doller for wire??? goldwire ....
>73' Willem PD3UX WP3UX
>
>
>"KC8QJP KATHY LEE" <N8WWM@ARRL.NET> schreef in bericht
>news:svc1219h100jvf50he98s6baes2hpaqhlb@4ax.com...
>> Nice antenna, designed after the UKSMG design I
>> "borrowed" (tee hee) from GW0WFH.
>>
>> http://www.uksmg.org/longwire.htm
>>
>> This is a great working antenna, with 12dB
>> measured gain over a dipole. It isnt a beam, but
>> it sure is better than a dipole!
>>
>> $140.00 plus $6.50 shipping in lower 48 states.
>>
>> Email N8WWM@arrl.net for more information and
>> photos. I'll take paypal, a check, money order,
>> whatever.
>>
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3017. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 23:00:41 UTC
From: KC8QJP KATHY LEE <N8WWM@ARRL.NET>
Message-ID: <kqv121t9j5j1jdhr73u5nuuf51gjqgnqpd@4ax.com>
Source record: 81456
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

On Sat, 26 Feb 2005 22:28:10 GMT, Irv Finkleman
<finkirv@shaw.ca> wrote:

>KC8QJP KATHY LEE wrote:
>>
>> Nice antenna, designed after the UKSMG design I
>> "borrowed" (tee hee) from GW0WFH.
>>
>> http://www.uksmg.org/longwire.htm
>>
>> This is a great working antenna, with 12dB
>> measured gain over a dipole. It isnt a beam, but
>> it sure is better than a dipole!
>
>You've obviously mistaken this group for e-bay!
>
You've obviously misten me for someone who gives a
shit what a jew bastard like you thinks.

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3018. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-26 23:03:23 UTC
From: jwwinkel <jwwinkel@tref.nl>
Message-ID: <cvqv7t$k5c$1@reader13.wxs.nl>
Source record: 81457
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

You my friend hi.....

73' Willem PD3UX WP3UX

"KC8QJP KATHY LEE" <N8WWM@ARRL.NET> schreef in bericht
news:vau121dfav13da5bocdgg3ukmh1vd62iv3@4ax.com...
> Go buy some deoderent and razor blades instead
> cheapskate.
>>
> On Sat, 26 Feb 2005 22:47:39 +0100, "jwwinkel"
> <jwwinkel@tref.nl> wrote:
>
>>140 doller for wire??? goldwire ....
>>73' Willem PD3UX WP3UX
>>
>>
>>"KC8QJP KATHY LEE" <N8WWM@ARRL.NET> schreef in bericht
>>news:svc1219h100jvf50he98s6baes2hpaqhlb@4ax.com...
>>> Nice antenna, designed after the UKSMG design I
>>> "borrowed" (tee hee) from GW0WFH.
>>>
>>> http://www.uksmg.org/longwire.htm
>>>
>>> This is a great working antenna, with 12dB
>>> measured gain over a dipole. It isnt a beam, but
>>> it sure is better than a dipole!
>>>
>>> $140.00 plus $6.50 shipping in lower 48 states.
>>>
>>> Email N8WWM@arrl.net for more information and
>>> photos. I'll take paypal, a check, money order,
>>> whatever.
>>>
>>>
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3019. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 00:09:52 UTC
From: Jim <junk@junk.com>
Message-ID: <kd8Ud.5349$Nv5.2916@fe1.columbus.rr.com>
Source record: 81458
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

"KC8QJP KATHY LEE" <N8WWM@ARRL.NET> wrote in message
news:kqv121t9j5j1jdhr73u5nuuf51gjqgnqpd@4ax.com...
> On Sat, 26 Feb 2005 22:28:10 GMT, Irv Finkleman
> <finkirv@shaw.ca> wrote:
>
>>KC8QJP KATHY LEE wrote:
>>>
>>> Nice antenna, designed after the UKSMG design I
>>> "borrowed" (tee hee) from GW0WFH.
>>>
>>> http://www.uksmg.org/longwire.htm
>>>
>>> This is a great working antenna, with 12dB
>>> measured gain over a dipole. It isnt a beam, but
>>> it sure is better than a dipole!
>>
>>You've obviously mistaken this group for e-bay!
>>
> You've obviously misten me for someone who gives a
> shit what a jew bastard like you thinks.
>
> --
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Now, now, children! Don't make me ground you and take away your computer
privileges!

3020. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 00:27:49 UTC
From: jwwinkel <jwwinkel@tref.nl>
Message-ID: <cvr467mje1@reader13.wxs.nl>
Source record: 81459
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

What wire can do hi.. Jim...

73' Willem.

"Jim" <junk@junk.com> schreef in bericht
news:kd8Ud.5349$Nv5.2916@fe1.columbus.rr.com...
>
> "KC8QJP KATHY LEE" <N8WWM@ARRL.NET> wrote in message
> news:kqv121t9j5j1jdhr73u5nuuf51gjqgnqpd@4ax.com...
>> On Sat, 26 Feb 2005 22:28:10 GMT, Irv Finkleman
>> <finkirv@shaw.ca> wrote:
>>
>>>KC8QJP KATHY LEE wrote:
>>>>
>>>> Nice antenna, designed after the UKSMG design I
>>>> "borrowed" (tee hee) from GW0WFH.
>>>>
>>>> http://www.uksmg.org/longwire.htm
>>>>
>>>> This is a great working antenna, with 12dB
>>>> measured gain over a dipole. It isnt a beam, but
>>>> it sure is better than a dipole!
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>>>You've obviously mistaken this group for e-bay!
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>> You've obviously misten me for someone who gives a
>> shit what a jew bastard like you thinks.
>>
>> --
>> Usenet Zone Free Binaries Usenet Server
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>
> Now, now, children! Don't make me ground you and take away your computer
> privileges!
>
>

3021. Re: Ladder Line and wind

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 01:15:20 UTC
From: "jim@jtmiller.com" <jim@jtmiller.com>
Message-ID: <1109466920.750487.202110@f14g2000cwb.googlegroups.com>
Source record: 81460

I've been looking over the options and now have decided to have the ladder line drop pretty much straight down to an LDG RT-11 remote tuner. Ladder line will be 22 feet long which will put the RT-11 and the 1:1 balun up out of harm's way on a treetrunk facing the woods. I'm going to direct bury coax and use some 18-10 direct burial irrigation wire for the controls.

This will keep the ladder line out of the shack and also make it more stealthy neighbor-wise.

Hope to have it all on the air with an /AG call by mid-April!

tnx
jtm

3022. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 01:31:50 UTC
From: Sky King <SkyKing310b@optonline.net>
Message-ID: <KB9Ud.6762$rX6.160@fe10.lga>
Source record: 81461
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

Ya know, I thought the same thing when I saw the name.
Then I relized the beavers name is Jerry Mathers.
But fucknozzle? Now that's my kind of girl!

KC8QJP KATHY LEE wrote:

> Your hilarious, I guess that's why you played the
> Beaver on TV, fucknozzle.
>
> On Sat, 26 Feb 2005 18:01:09 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
>
>> Kathy
>>
>> Thats a really interesting antenna. And it isnt too expensive either.
>>Could 8 of them be connected in parallel to get 21 db gain over a dipole?
>>
>> Jerry
>>
>>
>>"KC8QJP KATHY LEE" <N8WWM@ARRL.NET> wrote in message
>>news:svc1219h100jvf50he98s6baes2hpaqhlb@4ax.com...
>>
>>>Nice antenna, designed after the UKSMG design I
>>>"borrowed" (tee hee) from GW0WFH.
>>>
>>>http://www.uksmg.org/longwire.htm
>>>
>>>This is a great working antenna, with 12dB
>>>measured gain over a dipole. It isnt a beam, but
>>>it sure is better than a dipole!
>>>
>>>$140.00 plus $6.50 shipping in lower 48 states.
>>>
>>>Email N8WWM@arrl.net for more information and
>>>photos. I'll take paypal, a check, money order,
>>>whatever.
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3023. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 01:56:11 UTC
From: kensmith@green.rahul.net
Message-ID: <cvr9br$co0$1@blue.rahul.net>
Source record: 81462
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <421ffbaa_2@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com> wrote:
>Ken Smith wrote:
>> Now lets assume that you slightly decrease the resistance. Since we are
>> assuming that this is a well designed case, we can assume that the
>> designer took steps to ensure that the output devices would be protected
>> from excess currents.
>
>Let's assume the designer is an amateur who didn't provide
>any protection for his tube's output. The lower the resistive
>load, the more current the output device draws until it fails.
>What is the output impedance of the device?

At the point where it fails, the output goes to zero, I assume. If so,
wouldn't that be the impedance as I've been defining it.

--
--
kensmith@rahul.net forging knowledge

3024. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 02:04:41 UTC
From: kensmith@green.rahul.net
Message-ID: <cvr9rp$co0$2@blue.rahul.net>
Source record: 81463
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <422003f1_1@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com> wrote:
>Ken Smith wrote:
>> If you then
>> put in the output device protection they didn't include, you end up with
>> the matching as I explained elsewhere.
>
>SWR foldback is part of impedance matching?

Yes for the purposes of the OP's case it is. He is trying to use an
existing transmitter design and a hunk of wire. This seems to be the part
of my argument that people are missing. I suggested he use a matching
network to match the wire to the transmitter's output.

--
--
kensmith@rahul.net forging knowledge

3025. Re: help me out with my wire ant farm idea please?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 02:54:15 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <rDaUd.14011$hU7.8458@newssvr33.news.prodigy.com>
Source record: 81464

Free radio,
No, a rhombic wouldn't be a good choice for an 'all band' antenna. I think a better choice would be several antennas optimized for particular bands, as high as you can get them. But, since you rule out towers, and I've no idea what trees you may have on the property, the multi-antenna thingy may not be a good choice either.
Lots of help, huh?
'Doc

PS - The large horizontal loop idea isn't a bad one...

3026. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 03:12:21 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <pUaUd.1089$C47.421@newssvr14.news.prodigy.com>
Source record: 81465
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

Funny: try as hard as I can,with EZNEC, can come up with
4.12 dBD gain, and a f/b ratio of 1.44 dB (in free
space), and at 20 ft elevation, has about .1 dB gain
over the free space amount from ground reflections!
Does this mean that EZNEC has a BUG ??
I don't think so! And, at the price-
could double the amount and get a antenna with REAL gain!
As for me , I'll stick with my 7 El M2, with "only" 10.5
dBd gain ! I'd like to see the field, and equipment that
was used to measure that 12 dBd gain-- I don't think so!

Jim NN7K

KC8QJP KATHY LEE wrote:
> Nice antenna, designed after the UKSMG design I
> "borrowed" (tee hee) from GW0WFH.
>
> http://www.uksmg.org/longwire.htm
>
> This is a great working antenna, with 12dB
> measured gain over a dipole. It isnt a beam, but
> it sure is better than a dipole!
>
> $140.00 plus $6.50 shipping in lower 48 states.

3027. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 04:15:23 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42214a2e$1_2@127.0.0.1>
Source record: 81466
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

John Woodgate wrote:
> Cecil Moore <w5dxp@hotmail.com> wrote:
>>Therefore, the key to converting the non-linear source to
>>an equivalent linear source lies in a Fourier analysis?
>>Do the other-than-fundamental terms in the Fourier analysis
>>encounter a low impedance or a high impedance?
>
> Yes. Not facetious; the impedance matching network can be configured to
> minimise individual or a few harmonic emissions by adjusting its
> impedances at harmonic frequencies. Either high or low (or perhaps both)
> can minimise the emission, depending on the configuration.

Whether the harmonic impedance is high or low would affect
the efficiency, no?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

3028. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 04:24:11 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42214c3d$1_1@127.0.0.1>
Source record: 81467
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Ken Smith wrote:
> At the point where it fails, the output goes to zero, I assume. If so,
> wouldn't that be the impedance as I've been defining it.

Is an amp that fails at one minute with 100w FM
better matched than an amp that fails at two minutes
with 100w CW?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

3029. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 04:34:48 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_42214ee3@fidonet.org>
Source record: 81468

"Rich Grise" bravely wrote to "All" (26 Feb 05 16:01:31)
--- on the heady topic of "Re: 1/4 vs 1/2 wavelength antenna"

RG> From: Rich Grise <richgrise@example.net>
RG> Xref: aeinews rec.radio.amateur.antenna:26047
RG> sci.electronics.design:194
RG> On Sat, 26 Feb 2005 08:33:25 -0600, Cecil Moore wrote:

> Rich Grise wrote:
>
>> On Fri, 25 Feb 2005 22:35:28 -0600, Cecil Moore wrote:
>>
>>>Rich Grise wrote:
>>>>If that's not impedance matching, I don't know what it is! (Oh, "Load line"
>>>>matching? What are the two parameters of the load line? Voltage and
Current,
>>>>right? What's the slope of the load line? Impedance!)
>>>
>>>And there's the catch. If the load line is the source
>>>impedance, the load (not the designer) effects the source
>>>impedance.
>>
>> Apparently, I'm not following the same conversation here, because I
>> thought that the impedance matching network (in the instant example, the
>> pi-net output of the transmitter) was what translated the load impedance
>> to the source impedance, matching both in the process.
>
> Maybe I inferred wrong. From your "load line equals
> impedance" statement above, I inferred that you were
> implying that the load line *is* the source impedance.

RG> No, just trying to make the point that it does, in fact, _have_ an
RG> impedance. (even if it's running class E.) What that exact impedance
RG> is, of course, is left as an exercise for the reader. :-)

RG> And another thing - in a transmitter, the impedance matching only
RG> happens at the one frequency, which is a lot different scenario from,
RG> say, a stereo. This could be a confusion factor here.

RG> Thanks,
RG> Rich

There are a couple of things meant by matching. The usual notion has
to do with the plate resistance of tubes. When used in a linear mode a
tube has a given plate resistance. To get the most power output from a
tube its plate resistance must equal the load. The available plate

current curve and equivalent load then must match the supply voltage. A transformer is needed to adjust the typically low value load resistance to the much greater plate resistance.

The other notion of matching has to do with using a switched voltage to synthesize the right output voltage and current to drive a given load. This type of transformation is done by using sampling over time.

Another type of transformation uses a resonnant tank circuit which, like the above transformer, can adjust the load resistance to equal that of the source resistance by a choice of the proper tank network reactances. This is a single frequency only matching however.

Transistor audio impedance is never matched since an extremely low source resistance is desirable for speaker damping. Musical instrument tube amplifiers are somewhat between these since the tube power must be transformed to match the high voltage supply low plate current to the high current low voltage load, but yet must present a low source resistance damping to a speaker so uses negative feedback for this.

A*s*i*m*o*v

... Ok, I pulled the pin. Now what?.....Hey! Where are you all going?

3030. Re: help me out with my wire ant farm idea please?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 05:50:20 UTC
From: dx440@webtv.net
Message-ID: <28448-42215F9C-670@storefull-3274.bay.webtv.net>
Source record: 81469

ok thanks for the tip i will go with the full wave loop ant dont really need 160 meters .

3031. WANTED: Force 12 SIGMA-5 Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 06:51:00 UTC
From: erfurth@gmail.com
Message-ID: <36ba001b.0502262251.2e91995@posting.google.com>
Source record: 81470

Hi,

I am looking for a used Force 12 Sigma-5, five band vertical antenna.

If you have one of these available, please contact me at: erfurth@gmail.com

Thanks,

Bill

3032. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 07:01:25 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <CVcFzUAFBXICFwjZ@jmwa.demon.co.uk>
Source record: 81373
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Cecil Moore <w5dxp@hotmail.com>
wrote (in <42214c3d$1_1@127.0.0.1>) about '1/4 vs 1/2 wavelength
antenna', on Sat, 26 Feb 2005:
>Is an amp that fails at one minute with 100w FM
>better matched than an amp that fails at two minutes
>with 100w CW?

If the FM is what passes for music these days, it's MUCH better IMHO.
(;-)
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

3033. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 07:03:44 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <NFpGnhAQDXICFwip@jmwa.demon.co.uk>
Source record: 81471
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Cecil Moore <w5dxp@hotmail.com>
wrote (in <42214a2e$1_2@127.0.0.1>) about '1/4 vs 1/2 wavelength
antenna', on Sat, 26 Feb 2005:
>John Woodgate wrote:
>> Cecil Moore <w5dxp@hotmail.com> wrote:
>>>Therefore, the key to converting the non-linear source to
>>>an equivalent linear source lies in a Fourier analysis?
>>>Do the other-than-fundamental terms in the Fourier analysis
>>>encounter a low impedance or a high impedance?
>>
>> Yes. Not facetious; the impedance matching network can be configured to
>> minimise individual or a few harmonic emissions by adjusting its
>> impedances at harmonic frequencies. Either high or low (or perhaps both)
>> can minimise the emission, depending on the configuration.
>
>Whether the harmonic impedance is high or low would affect
>the efficiency, no?

I think the question can only be answered by 'It depends..'. For
example, it is 'affected' if it's changed by 1%, but is that
significant?
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

3034. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 07:06:11 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <I11HruAjFXICFwhV@jmwa.demon.co.uk>
Source record: 81372
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Reg Edwards
<g4fgq.regp@ZZZbtinternet.com> wrote (in <cvqsannhk1@titan.btinternet.
com>) about 'Say what you mean.', on Sat, 26 Feb 2005:

>The best I could do is ask what is the S22 of a 6J5. One thing for
>certain, it is not mentioned in manufacturer's data sheets. Yet ARRL
>simple PA design
>rules manage very well without it.

You wouldn't expect to use scattering parameters for a 6J5. But change
that to 7194 and the question is not so facetious. (;-)
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

3035. Re: help me out with my wire ant farm idea please?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 07:10:04 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <gneUd.14074$hU7.10708@newssvr33.news.prodigy.com>
Source record: 81374

...Pssst. make it a full wave on 160 meters, that way
you get it all.
'Doc

3036. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 09:12:25 UTC
From: nana <nana@netscape.net>
Message-ID: <38dh84F5o7e0qU1@individual.net>
Source record: 81375
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

I had a look at the referenced website which claimed up to 4db gain in several directions but NEVER 12 db gain over a dipole. Now here I realise it comes down to semantics. 12db gain over the ENDS of a dipole. Yes. 12db gain over a dipole lying on the back lawn. Perhaps. 12db gain over a similarly installed height, rotatable dipole. No way in Hades.

It's a lot for a 40m end fed dipole which, by the way, is what I am using on 6m at present.

Brad VK2QQ

"Jim - NN7K" <nn7kexk7zfg@NOSPAMsbcglobal.net> wrote in message news:pUaUd.1089$C47.421@newssvr14.news.prodigy.com...
> Funny: try as hard as I can,with EZNEC, can come up with
> 4.12 dBD gain, and a f/b ratio of 1.44 dB (in free
> space), and at 20 ft elevation, has about .1 dB gain
> over the free space amount from ground reflections!
> Does this mean that EZNEC has a BUG ??
> I don't think so! And, at the price-
> could double the amount and get a antenna with REAL gain!
> As for me , I'll stick with my 7 El M2, with "only" 10.5
> dBd gain ! I'd like to see the field, and equipment that
> was used to measure that 12 dBd gain-- I don't think so!
>
> Jim NN7K
>> http://www.uksmg.org/longwire.h>
> KC8QJP KATHY LEE wrote:
tm
>>
>> This is a great working antenna, with 12dB
>> measured gain over a dipole. It isnt a beam, but
>> it sure is better than a dipole!

3037. Re: FT-857D and ASAT-120 question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 13:42:29 UTC
From: Jim <K4SQR@juno.com>
Message-ID: <1109511749.064187.8470@g14g2000cwa.googlegroups.com>
Source record: 81378

Joe;

Only the connecting coax is required to tune the ATAS antenna.
You simply push the tune button on the 857 after changing bands and the
antenna tunes to the frequency of the 857. I briefly used an ATAS-100
with an FT-100D and presume its tune functions are carried over to the
replacement 857.
Good luck,
Jim, K4SQR

3038. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 14:04:01 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <Sxgx8eERNdICFwCR@g3ohx.demon.co.uk>
Source record: 81384
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

But why is there an insulator at the FEEDPOINT of the antenna?
Ian.

In message <38dh84F5o7e0qU1@individual.net>, nana <nana@netscape.net>
writes
>I had a look at the referenced website which claimed up to 4db gain in
>several directions but NEVER 12 db gain over a dipole. Now here I realise it
>comes down to semantics. 12db gain over the ENDS of a dipole. Yes. 12db gain
>over a dipole lying on the back lawn. Perhaps. 12db gain over a similarly
>installed height, rotatable dipole. No way in Hades.
>
>It's a lot for a 40m end fed dipole which, by the way, is what I am using on
>6m at present.
>
>Brad VK2QQ
>
>
>
>"Jim - NN7K" <nn7kexk7zfg@NOSPAMsbcglobal.net> wrote in message
>news:pUaUd.1089$C47.421@newssvr14.news.prodigy.com...
>> Funny: try as hard as I can,with EZNEC, can come up with
>> 4.12 dBD gain, and a f/b ratio of 1.44 dB (in free
>> space), and at 20 ft elevation, has about .1 dB gain
>> over the free space amount from ground reflections!
>> Does this mean that EZNEC has a BUG ??
>> I don't think so! And, at the price-
>> could double the amount and get a antenna with REAL gain!
>> As for me , I'll stick with my 7 El M2, with "only" 10.5
>> dBd gain ! I'd like to see the field, and equipment that
>> was used to measure that 12 dBd gain-- I don't think so!
>>
>> Jim NN7K
>>> http://www.uksmg.org/longwire.h>
>> KC8QJP KATHY LEE wrote:
>tm
>>>
>>> This is a great working antenna, with 12dB
>>> measured gain over a dipole. It isnt a beam, but
>>> it sure is better than a dipole!
>
>

--

3039. Re: Unloaded Transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 14:55:29 UTC
From: Al <aburzynski@satx.nojunk.rr.com>
Message-ID: <BblUd.65547$911.23613@fe2.texas.rr.com>
Source record: 81379

Jerry, I posted to this group because it is one of the most knowledgeable and dependable.

The TV, clock, etc. are not unloaded like the transformer I asked about. I don't know if it is safe to leave an unloaded transformer plugged in, so I asked. I placed a resistive load across the transformer to keep a slight load across it, but not being sure if this is OK or not, I decided to unplug the transformer for safety.

Al

"Jerry Martes" <j.jmartes@verizon.net> wrote in message news:sE0Ud.48125$uc.8371@trnddc03...
> Do you unplug your TV? It is always on, drawing some current . Then
> there is the electric clock. The list could go on and on in most
> households.
>
> That is -- If your mind is already made up, why ask a question about
> wallwarts on an antenna news group
>
> Jerry
>
>

3040. Matching , Power Transfer & Bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 15:11:55 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4221e38d_2@newsfeed.slurp.net>
Source record: 81380

Many posts under the drifted thread "1/4 vs 1/2 wavelength antenna" give various views on the physics of generating the maximum safe load power from an RF amplifier. To those posters I present this reality.

Modern, solid-state FM broadcast transmitters WITHOUT TUNING OR OTHER ADJUSTMENT will produce their full rated output power into a 50 ohm load at any frequency in the 88-108MHz FM broadcast band, and with ~uniform, and high PA efficiency (80% or better, typically). These transmitters have no resonant circuits in their entire RF chain except for their output lowpass/harmonic filter. It is possible to slew the tx freq from one end of the band to the other in the time it takes for the exciter to lock up on the new frequency (a second or two).

This reality seems at odds with many of the declarations made in this NG, and perhaps may inspire some posters to further research their opinions and theories.

RF

Visit http://rfry.org for FM transmission system papers.

3041. Re: Unloaded Transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 15:22:25 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <RAlUd.8460$Ba3.1708@newsread2.news.atl.earthlink.net>
Source record: 81385

>
> The TV, clock, etc. are not unloaded like the transformer I asked about. I
> don't know if it is safe to leave an unloaded transformer plugged in, so I
> asked. I placed a resistive load across the transformer to keep a slight
> load across it, but not being sure if this is OK or not, I decided to
unplug
> the transformer for safety.
>
>

Look at it this way, there are millions of unloaded door bell transformers
in the US.
The only time they are activated (loaded) is for about 2 seconds when
someone rings the bell. Mine usually rings once a week for pizza and a
couple of times for visitors.

The transformers will draw a slight ammount of current so you may save a
dollar or two each year if you unplug it.

3042. Re: Matching , Power Transfer & Bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 15:36:09 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cvspd9$5e3$1@hercules.btinternet.com>
Source record: 81386

Very briefly, what's the point of your apparently scary message.

3043. OT, Maybe (Tower)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 15:43:20 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <m0q3211usucovb626cfc6f1snmotmg074v@4ax.com>
Source record: 81383

I recently purchased an old crank-up motor driven 60 foot tower that I would hope someone could help ID for me. The motor belt drives a gearbox, which turns the cable pulley. It has a approximately 1 foot by 18 inch control box which has two high current relays and two glass contained relays. The glass-contained relays are in old 8 pin tube sockets. The tower is in three 20 foot sections.

The tower, itself, is in good shape. I would like to re-build the control circuits and put the tower in service. Any information anyone can give me on this tower will be greatly appreciated. A circuit diagram of that control box at the base of the tower would go a long way. See at www.winlyn.us/tower.jpg.

Win, w0lz

3044. MFJ 1798 Vertcal

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 15:47:41 UTC
From: Jerseyj <jerseyj69@comcast.net>
Message-ID: <jerseyj69-5380CA.10474127022005@comcast.dca.giganews.com>
Source record: 81381

Wonder If anyone has any experience with this vertical...the specs says
it works without radials,I'm just wonderng how well.

Jerry

3045. Re: Matching , Power Transfer & Bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 16:06:11 UTC
From: John Doe <JohnDoe@0.0.0.0>
Message-ID: <4221efb5$0$1025$afc38c87@news.optusnet.com.au>
Source record: 81382

Hi Richard,
You may have meant this to go to a different group,
But I must point out the resonant circuits in the output of the exciter.
Usually the exciter has an output lowpass/harmonic filter.
But you knew this anyway;)

"Richard Fry" <rfry@adams.net> wrote in message
news:4221e38d_2@newsfeed.slurp.net...
> Many posts under the drifted thread "1/4 vs 1/2 wavelength antenna" give
> various views on the physics of generating the maximum safe load power
from
> an RF amplifier. To those posters I present this reality.
>
> Modern, solid-state FM broadcast transmitters WITHOUT TUNING OR OTHER
> ADJUSTMENT will produce their full rated output power into a 50 ohm load
at
> any frequency in the 88-108MHz FM broadcast band, and with ~uniform, and
> high PA efficiency (80% or better, typically). These transmitters have no
> resonant circuits in their entire RF chain except for their output
> lowpass/harmonic filter. It is possible to slew the tx freq from one end
of
> the band to the other in the time it takes for the exciter to lock up on
the
> new frequency (a second or two).
>
> This reality seems at odds with many of the declarations made in this NG,
> and perhaps may inspire some posters to further research their opinions
and
> theories.
>
> RF
>
> Visit http://rfry.org for FM transmission system papers.
>

3046. Re: Matching , Power Transfer & Bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 16:15:13 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <lmmUd.1158$C47.756@newssvr14.news.prodigy.com>
Source record: 81377

Richard Fry wrote:
> Many posts under the drifted thread "1/4 vs 1/2 wavelength antenna" give
> various views on the physics of generating the maximum safe load power
> from an RF amplifier. To those posters I present this reality.
>
> Modern, solid-state FM broadcast transmitters WITHOUT TUNING OR OTHER
> ADJUSTMENT will produce their full rated output power into a 50 ohm load
> at any frequency in the 88-108MHz FM broadcast band, and with ~uniform,
> and high PA efficiency (80% or better, typically). These transmitters
> have no resonant circuits in their entire RF chain except for their
> output lowpass/harmonic filter. It is possible to slew the tx freq from
> one end of the band to the other in the time it takes for the exciter to
> lock up on the new frequency (a second or two).
>
> This reality seems at odds with many of the declarations made in this
> NG, and perhaps may inspire some posters to further research their
> opinions and theories.
>
> RF
>
> Visit http://rfry.org for FM transmission system papers.

Read the book _Radio Frequency Transistors Principles and
Practical Applications_, by Norm Dye and Helge Granberg. At
some point in the book, they go to great lengths dealing
with "matching" the input and output of transistors and how
to effect broadband matching schemes. They even mention some
transistors that are manufactured in such a way as to be
internally matched over a particular range of frequencies.
It doesn't hurt to read books by guys who know what they're
talking about.
73,
Tom Donaly, KA6RUH

3047. Re: Matching , Power Transfer & Bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 16:39:08 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4221f7fd_5@newsfeed.slurp.net>
Source record: 81376

"John Doe" wrote:
> You may have meant this to go to a different group,

No, this is the group with the "1/4 vs 1/2 wavelength antenna" thread I referenced, and all the statements under it about matching RF amps and loads across different bandwidths.

> But I must point out the resonant circuits in the output of the exciter.
> Usually the exciter has an output lowpass/harmonic filter.

The practice in top-of-the-line FM systems these days is to use a harmonic filter on the exciter output only if/when it is used as a low-power transmitter directly on the air. Otherwise that filter is redundant, and can reduce the performance of the exciter by a small amount.

RF

3048. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 17:07:02 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <78v3211n80v4j6h1ca62rkgn29gbsihsqa@4ax.com>
Source record: 81389
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

On Sun, 27 Feb 2005 14:04:01 +0000, Ian Jackson
<IanJacksonRemoveThisBit@g3ohx.demon.co.uk> wrote:

>But why is there an insulator at the FEEDPOINT of the antenna?
>Ian.

I wondered about that. According to the text, I believe the feedpoint
insulator is actually an insulating sleeve to get the antenna inside
the author's attic.

Basically it appears to be nothing but a 65 foot long wire for 6
meters. If I attached a 65 foot wire to the random wire terminal of my
antenna tuner, I'm guessing I'd have the same thing.

And I'd save $140 :-)

bob
k5qwg

>
>
>In message <38dh84F5o7e0qU1@individual.net>, nana <nana@netscape.net>
>writes
>>I had a look at the referenced website which claimed up to 4db gain in
>>several directions but NEVER 12 db gain over a dipole. Now here I realise it
>>comes down to semantics. 12db gain over the ENDS of a dipole. Yes. 12db gain
>>over a dipole lying on the back lawn. Perhaps. 12db gain over a similarly
>>installed height, rotatable dipole. No way in Hades.
>>
>>It's a lot for a 40m end fed dipole which, by the way, is what I am using on
>>6m at present.
>>
>>Brad VK2QQ
>>
>>
>>
>>"Jim - NN7K" <nn7kexk7zfg@NOSPAMsbcglobal.net> wrote in message
>>news:pUaUd.1089$C47.421@newssvr14.news.prodigy.com...
>>> Funny: try as hard as I can,with EZNEC, can come up with
>>> 4.12 dBD gain, and a f/b ratio of 1.44 dB (in free
>>> space), and at 20 ft elevation, has about .1 dB gain
>>> over the free space amount from ground reflections!
>>> Does this mean that EZNEC has a BUG ??
>>> I don't think so! And, at the price-
>>> could double the amount and get a antenna with REAL gain!

>>> As for me , I'll stick with my 7 El M2, with "only" 10.5
>>> dBd gain ! I'd like to see the field, and equipment that
>>> was used to measure that 12 dBd gain-- I don't think so!
>>>
>>> Jim NN7K
>>>> http://www.uksmg.org/longwire.h>
>>> KC8QJP KATHY LEE wrote:
>>tm
>>>>
>>>> This is a great working antenna, with 12dB
>>>> measured gain over a dipole. It isnt a beam, but
>>>> it sure is better than a dipole!
>>
>>

3049. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 17:08:23 UTC
From: kensmith@green.rahul.net
Message-ID: <cvsuq7$k9$2@blue.rahul.net>
Source record: 81387
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <42214c3d$1_1@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com> wrote:
>Ken Smith wrote:
>> At the point where it fails, the output goes to zero, I assume. If so,
>> wouldn't that be the impedance as I've been defining it.
>
>Is an amp that fails at one minute with 100w FM
>better matched than an amp that fails at two minutes
>with 100w CW?

No, you've got the concept backwards. Obviously the worst matched is the
1 o=minute case, next would be the 2 minute case and so on up to one which
runs for about its MTBF at the connected load. This last case would
likely be the one the designer was targeting.

--
--
kensmith@rahul.net forging knowledge

3050. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 17:12:46 UTC
From: kensmith@green.rahul.net
Message-ID: <cvsv2e$k9$3@blue.rahul.net>
Source record: 81392
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <CVcFzUAFBXICFwjZ@jmwa.demon.co.uk>,
John Woodgate <noone@yuk.yuk> wrote:
[...]
>If the FM is what passes for music these days, it's MUCH better IMHO.

There is very little that is sent in the form of radio waves that is worth
the electrical power to send it. The really sad thing is that much of
what is send via FM is really "voice grade" material. When FM was new,
the material for FM was specially produced to take advantage of the wide
bandwidth and large dynamic range.

--
--
kensmith@rahul.net forging knowledge

3051. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 17:16:19 UTC
From: Jim Thompson <thegreatone@example.com>
Message-ID: <kuv321dou23k2p02788nrmfup2h0m5aejr@4ax.com>
Source record: 81391
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Sun, 27 Feb 2005 17:08:23 +0000 (UTC), kensmith@green.rahul.net
(Ken Smith) wrote:

>In article <42214c3d$1_1@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com> wrote:
>>Ken Smith wrote:
>>> At the point where it fails, the output goes to zero, I assume. If so,
>>> wouldn't that be the impedance as I've been defining it.
>>
>>Is an amp that fails at one minute with 100w FM
>>better matched than an amp that fails at two minutes
>>with 100w CW?
>
>No, you've got the concept backwards. Obviously the worst matched is the
>1 o=minute case, next would be the 2 minute case and so on up to one which
>runs for about its MTBF at the connected load. This last case would
>likely be the one the designer was targeting.
>
>--

It's been thirty years since I "hammed". I was only interested in the
electronics, not the talking, so I dropped out after I got a homemade
solid-state 2-meter rig running.

But I vaguely recall a 5/8 wavelength antenna that had a good
low-angle pattern.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

3052. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 17:52:52 UTC
From: kensmith@green.rahul.net
Message-ID: <cvt1dk$2p0$1@blue.rahul.net>
Source record: 81390
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <kuv321dou23k2p02788nrmfup2h0m5aejr@4ax.com>,
Jim Thompson <thegreatone@example.com> wrote:
[....]
>
>But I vaguely recall a 5/8 wavelength antenna that had a good
>low-angle pattern.

Unfortunately, the OP (is he still here?) was stuck with a box to short to
even fit a 1/4 wave whip. I also think that this box could not be assumed
to be resting on the ground

If you squint at the ASCII art below, you will see more or less the
radiation pattern of a 5/8 whip over a large ground plain.

```
..............................
..............!...............
.........******!*****.........
.........*......!......*........
.........*......!......*........
.........****..!..****...A.....
.......*******..!..*******......
....***.........!.........***...
..*.............!.............*B
********************************
```

If you don't have a large enough ground plain, the notch in the side
labeled "A" starts to go away and the peak at "B" reduces.

--
--
kensmith@rahul.net forging knowledge

3053. Re: Unloaded Transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 17:58:00 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cvt1n8$i3i$1@hercules.btinternet.com>
Source record: 81388

Wealthy, energy-rich Americans, Europeans and Japanese have no idea that a cent a day can save the lives of millions of starving and waterless people on this small, over-populated Earth of ours.

Or should we rely on Aids, influenza virus, malaria, American deployed weapons of mass-destruction, hurricanes, earthquakes, floods and suicide bombers to solve the problem?

Perhaps the 6000-year old, modernised, Chinese and Babylonian wisdoms should be allowed to predominate in the media over the piffle George and Tony said last week.

3054. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 18:55:12 UTC
From: Jim Thompson <thegreatone@example.com>
Message-ID: <un5421l6t751uknhg5j9pgqoaeo6dtda3k@4ax.com>
Source record: 81393
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Sun, 27 Feb 2005 17:52:52 +0000 (UTC), kensmith@green.rahul.net
(Ken Smith) wrote:

>In article <kuv321dou23k2p02788nrmfup2h0m5aejr@4ax.com>,
>Jim Thompson <thegreatone@example.com> wrote:
>[....]
>>
>>But I vaguely recall a 5/8 wavelength antenna that had a good
>>low-angle pattern.
>
>Unfortunately, the OP (is he still here?) was stuck with a box to short to
>even fit a 1/4 wave whip. I also think that this box could not be assumed
>to be resting on the ground
>
>
>If you squint at the ASCII art below, you will see more or less the
>radiation pattern of a 5/8 whip over a large ground plain.
>.............................
>.............!.............
>.........******!*****.........
>.........*......!......*.......
>.........*......!......*.......
>.........****..!..****...A.....
>.......*******..!..*******.....
>....***.........!.........***...
>..*.............!.............*B
>*******************************
>
>If you don't have a large enough ground plain, the notch in the side
>labeled "A" starts to go away and the peak at "B" reduces.
>
>
>--

The rain in Spain falls mainly on the plain ;-)

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

3055. Re: help me out with my wire ant farm idea please?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 18:58:33 UTC
From: dx440@webtv.net
Message-ID: <27589-42221859-94@storefull-3277.bay.webtv.net>
Source record: 81394

pssst ok doctor phil about 30 ft high

3056. AM Radio reception

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 19:21:27 UTC
From: Joe McSweeney <jmcsween@maine.rr.com>
Message-ID: <X4pUd.32350$vK5.23721@twister.nyroc.rr.com>
Source record: 81395

This may not be the best pace to post this, but I figured it would be a good place to start. I live in Maine and am trying to get a Massachusetts AM station can anyone recommend a good AM radio or better alternatives to the regular AM antenna that comes with my AM radio from Radioshack? If there are other newsgroups to check please let me know.

3057. Re: AM Radio reception

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 19:46:33 UTC
From: sombra <sombra@escondido.com>
Message-ID: <tspUd.43136$xt.30982@fed1read07>
Source record: 81396

GE Super Radio is a good one

And this works well for an indoor antenna Select-A-Tenna AM Antenna

http://www.ccrane.com/select-am-antenna.aspx

--
Lamont Cranston

"Joe McSweeney" <jmcsween@maine.rr.com> wrote in message
news:X4pUd.32350$vK5.23721@twister.nyroc.rr.com...
> This may not be the best pace to post this, but I figured it would be a
> good
> place to start. I live in Maine and am trying to get a Massachusetts AM
> station can anyone recommend a good AM radio or better alternatives to the
> regular AM antenna that comes with my AM radio from Radioshack? If there
> are other newsgroups to check please let me know.
>
>

3058. Re: Matching , Power Transfer & Bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 21:15:05 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <tLqUd.34117$ya6.21654@trndny01>
Source record: 81397

So what IS your point?...

Joe
W3JDR

"Richard Fry" <rfry@adams.net> wrote in message
news:4221f7fd_5@newsfeed.slurp.net...
> "John Doe" wrote:
>> You may have meant this to go to a different group,
>
> No, this is the group with the "1/4 vs 1/2 wavelength antenna" thread I
> referenced, and all the statements under it about matching RF amps and
> loads across different bandwidths.
>
>> But I must point out the resonant circuits in the output of the exciter.
>> Usually the exciter has an output lowpass/harmonic filter.
>
> The practice in top-of-the-line FM systems these days is to use a harmonic
> filter on the exciter output only if/when it is used as a low-power
> transmitter directly on the air. Otherwise that filter is redundant, and
> can reduce the performance of the exciter by a small amount.
>
> RF

3059. Re: Unloaded Transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 22:00:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1124gnhr6itrm7a@corp.supernews.com>
Source record: 81398

Reg Edwards wrote:
> Wealthy, energy-rich Americans, Europeans and Japanese have no idea that a
> cent a day can save the lives of millions of starving and waterless people
> on this small, over-populated Earth of ours. . .

But our wise commentator doesn't have any idea how many lives can be
saved for the price of a year's wine consumption?

Roy Lewallen, W7EL

3060. Cold Water Pipe Ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 22:01:14 UTC
From: wizard12342002@yahoo.com
Message-ID: <1109538899.210441.152600@o13g2000cwo.googlegroups.com>
Source record: 81399

It appears that my cold water pipe is made completely of copper (no PVC). If I attach to it right where it enters the house (but on the inside), will this be an effective lightning ground? The electrical panel connects at this point also.

Thanks,

-JJ

3061. Re: Matching , Power Transfer & Bandwidth

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 22:02:24 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <422243c1_5@newsfeed.slurp.net>
Source record: 81400

"W3JDR" wrote
> So what IS your point?...

To show by example that circuits and transmitters exist with capabilities said to be impossible by some posters to this newsgroup.

RF

3062. Re: AM Radio reception

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 22:13:50 UTC
From: nm5k@wt.net
Message-ID: <1109542430.868135.199700@o13g2000cwo.googlegroups.com>
Source record: 81401

Joe McSweeney wrote:
> This may not be the best pace to post this, but I figured it would be
a good
> place to start. I live in Maine and am trying to get a Massachusetts
AM
> station can anyone recommend a good AM radio or better alternatives
to the
> regular AM antenna that comes with my AM radio from Radioshack? If
there
> are other newsgroups to check please let me know.

As far as the antenna, I'd build a small loop. Small, meaning
less than a full wave, which would be huge for MW...
The good part, is you don't even need a direct connection to
the radio to use them, although you can if you want, usually
using a 2nd coupling loop. So it can be used with *any* radio.
Most smaller radios, it will be like adding a dose of steroids..
And the nulls are very sharp, so you can null out noise, or
other stations. You can build one cheap. The variable cap will
cost the most if you buy it, and you can find them in many old
junk radios, and also old stereo receivers. The ones in receivers
are usually pretty good, cuz they have multi gangs, and if you
tie them all together, you can get a pretty large value.
You can also use switches. If you wanted to tune a freq on
the upper range of the loops design, it's handy to be able
to use just a single small gang, and have a low value...
There are a gazillion designs on the web. I have one at
http://web.wt.net/~nm5k/loop5.jpg
using PVC parts you can get at any hardware, or home depot,
etc.. BTW, the loops work pretty well any time of day, but
where they really shine is in the daytime, and you are receiving
ground wave signals. I can listen all over the state, and it's
almost like being local..My main loop is a diamond, 44 inches
per side, using 5 turns of wire. I have it on a floor stand,
and it rotates. I just lean over and grab it , if I want to
change direction. MK

3063. Re: AM Radio reception

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 22:17:30 UTC
From: nm5k@wt.net
Message-ID: <1109542650.424068.272370@o13g2000cwo.googlegroups.com>
Source record: 81402

Hummm..Actually just thinking about it, I think they
usually classify a "small loop" as 1/10 wave or less...
But I'd have to refresh myself...MK

3064. Re: Cold Water Pipe Ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 22:50:00 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <t8sUd.23639$7z6.17886@lakeread04>
Source record: 81403

<wizard12342002@yahoo.com> wrote
> It appears that my cold water pipe is made completely of copper (no
> PVC). If I attach to it right where it enters the house (but on the
> inside), will this be an effective lightning ground? The electrical
> panel connects at this point also.
>
> Thanks,
>
> -JJ

The simple answer is "Yes".

The simple reason is because having a station ground (or any antenna ground) tied to the same point of the building's electrical ground is mandatory, not just an option.

As far as the attachment point being "inside the house", that's not the best arrangement for some situations. It's really phenomenal luck for your station-ground to be close enough to make the home's service entrance ground your station's "single point ground". But not so good to route grounding (down conductor) from a rooftop antenna [inside the house] to reach the same point.

For your electrical service to be grounded at the cold water pipe, this implies an inspector approved the connection, and there must be no break in the bond (all metal continuous) for at least 10' underground. That's an excellent ground btw, better than any driven (10') ground rod could provide. If your station equipment is located very close to the service-entrance ground, you are so lucky! If it's not, like most of us, additional planning is required to have a safe grounding system.

Remember that anything you connect to ground from a rooftop antenna could feel hundreds of thousands of volts potential from a strike. That connection should normally be made straight to an earth-driven grounding electrode outside the home. You would then bond that grounding electrode to the service-entrance ground and your station ground, were they separated.

You can review this in greater detail at:
http://members.cox.net/pc-usa/station/ground0.htm

73,
Jack Painter
Virginia Beach, Virginia

3065. Re: MFJ 1798 Vertcal

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-27 23:19:07 UTC
From: jgboyles@aol.com
Message-ID: <1109546347.574937.227690@f14g2000cwb.googlegroups.com>
Source record: 81404

Jerseyj wrote:
> Wonder If anyone has any experience with this vertical...the specs
says
> it works without radials,I'm just wonderng how well.
>
> Jerry
Hi Jerry, Let me first say that I have never used a 1798, but can
offer some comments for what they are worth.
I have seen the 1798 at hamfests. It is large, and although 20'
tall, it will require guying, and a sturdy bottom support. It will
require a lot of assembly and tuning time. It costs $300.
As for performance, a low dipole, or inverted vee (30'-35') will
probably exceed the 1798 on 80m and 40m. 20m-10m toss-up. 6m and 2m??
As a less expensive alternative, a 100' dipole or inverted vee fed
with 450 ohm ladder line and an antenna tuner will provide equal or
better results 80m-10m. 6m and 2m require additional attention. Since
you will need to guy the 1798, the space required will be larger than
you think.
Gary N4AST

3066. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 00:27:47 UTC
From: Jim <junk@junk.com>
Message-ID: <7AtUd.4245$xm5.1966@fe1.columbus.rr.com>
Source record: 81406
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

```
"Won Hung Lo" <me@home.org> wrote in message
news:nBtUd.21181$Sa6.16789@fe2.columbus.rr.com...
> Wow,
> So tell me princess, will you lick the sweat off my sack after I install
> this antenna, or will you be busy servicing the boyz on channel 20?
>
> With luv, your Pimp!
>
> "KC8QJP KATHY LEE" <N8WWM@ARRL.NET> wrote in message
> news:svc1219h100jvf50he98s6baes2hpaqhlb@4ax.com...
>> Nice antenna, designed after the UKSMG design I
>> "borrowed" (tee hee) from GW0WFH.
>>
>> http://www.uksmg.org/longwire.htm
>>
>> This is a great working antenna, with 12dB
>> measured gain over a dipole. It isnt a beam, but
>> it sure is better than a dipole!
>>
>> $140.00 plus $6.50 shipping in lower 48 states.
>>
>> Email N8WWM@arrl.net for more information and
>> photos. I'll take paypal, a check, money order,
>> whatever.
>>
>>
>> ----------------------------------------
>> Usenet Zone Free Binaries Usenet Server
>> More than 120,000 groups
>> Unlimited download
>> http://www.usenetzone.com to open account
>
>

Man your mother did a real fine job raising you didn't she? She must be so
proud of you and the way you speak to women...
```

3067. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 00:29:07 UTC
From: Won Hung Lo <me@home.org>
Message-ID: <nBtUd.21181$Sa6.16789@fe2.columbus.rr.com>
Source record: 81405
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

Wow,
So tell me princess, will you lick the sweat off my sack after I install
this antenna, or will you be busy servicing the boyz on channel 20?

With luv, your Pimp!

"KC8QJP KATHY LEE" <N8WWM@ARRL.NET> wrote in message
news:svc1219h100jvf50he98s6baes2hpaqhlb@4ax.com...
> Nice antenna, designed after the UKSMG design I
> "borrowed" (tee hee) from GW0WFH.
>
> http://www.uksmg.org/longwire.htm
>
> This is a great working antenna, with 12dB
> measured gain over a dipole. It isnt a beam, but
> it sure is better than a dipole!
>
> $140.00 plus $6.50 shipping in lower 48 states.
>
> Email N8WWM@arrl.net for more information and
> photos. I'll take paypal, a check, money order,
> whatever.
>
>
> _____________________________________
> Usenet Zone Free Binaries Usenet Server
> More than 120,000 groups
> Unlimited download
> http://www.usenetzone.com to open account

3068. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 00:38:08 UTC
From: Won Hung Lo <me@home.org>
Message-ID: <QJtUd.40$Mu2.16@fe2.columbus.rr.com>
Source record: 81407
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

```
"Jim" <junk@junk.com> wrote in message
news:7AtUd.4245$xm5.1966@fe1.columbus.rr.com...
>
> "Won Hung Lo" <me@home.org> wrote in message
> news:nBtUd.21181$Sa6.16789@fe2.columbus.rr.com...
> > Wow,
> > So tell me princess, will you lick the sweat off my sack after I install
> > this antenna, or will you be busy servicing the boyz on channel 20?
> >
> > With luv, your Pimp!
> >
> > "KC8QJP KATHY LEE" <N8WWM@ARRL.NET> wrote in message
> > news:svc1219h100jvf50he98s6baes2hpaqhlb@4ax.com...
> >> Nice antenna, designed after the UKSMG design I
> >> "borrowed" (tee hee) from GW0WFH.
> >>
> >> http://www.uksmg.org/longwire.htm
> >>
> >> This is a great working antenna, with 12dB
> >> measured gain over a dipole. It isnt a beam, but
> >> it sure is better than a dipole!
> >>
> >> $140.00 plus $6.50 shipping in lower 48 states.
> >>
> >> Email N8WWM@arrl.net for more information and
> >> photos. I'll take paypal, a check, money order,
> >> whatever.
> >>
> >>
> >> ________________________________________
> >> Usenet Zone Free Binaries Usenet Server
> >> More than 120,000 groups
> >> Unlimited download
> >> http://www.usenetzone.com to open account
> >
> >
>
> Man your mother did a real fine job raising you didn't she? She must be
so
> proud of you and the way you speak to women...
>
Jim,
Kathy Lee is not a woman, she is a filthy ho.
```

Read her musings and see for yourself.

And for the record, mom is very proud of her son. :-)

3069. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 00:51:20 UTC
From: Jim <junk@junk.com>
Message-ID: <cWtUd.21244$Sa6.2053@fe2.columbus.rr.com>
Source record: 81408
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

```
"Won Hung Lo" <me@home.org> wrote in message
news:QJtUd.40$Mu2.16@fe2.columbus.rr.com...
>
> "Jim" <junk@junk.com> wrote in message
> news:7AtUd.4245$xm5.1966@fe1.columbus.rr.com...
>>
>> "Won Hung Lo" <me@home.org> wrote in message
>> news:nBtUd.21181$Sa6.16789@fe2.columbus.rr.com...
>> > Wow,
>> > So tell me princess, will you lick the sweat off my sack after I
>> > install
>> > this antenna, or will you be busy servicing the boyz on channel 20?
>> >
>> > With luv, your Pimp!
>> >
>> > "KC8QJP KATHY LEE" <N8WWM@ARRL.NET> wrote in message
>> > news:svc1219h100jvf50he98s6baes2hpaqhlb@4ax.com...
>> >> Nice antenna, designed after the UKSMG design I
>> >> "borrowed" (tee hee) from GW0WFH.
>> >>
>> >> http://www.uksmg.org/longwire.htm
>> >>
>> >> This is a great working antenna, with 12dB
>> >> measured gain over a dipole. It isnt a beam, but
>> >> it sure is better than a dipole!
>> >>
>> >> $140.00 plus $6.50 shipping in lower 48 states.
>> >>
>> >> Email N8WWM@arrl.net for more information and
>> >> photos. I'll take paypal, a check, money order,
>> >> whatever.
>> >>
>> >>
>> >> _______________________________________
>> >> Usenet Zone Free Binaries Usenet Server
>> >> More than 120,000 groups
>> >> Unlimited download
>> >> http://www.usenetzone.com to open account
>> >
>> >
>>
>> Man your mother did a real fine job raising you didn't she? She must be
> so
```

>> proud of you and the way you speak to women...
>>
> Jim,
> Kathy Lee is not a woman, she is a filthy ho.
> Read her musings and see for yourself.
>
> And for the record, mom is very proud of her son. :-)
>
>

Personally I don't care if she's a prostitute, I wouldn't talk like that to her! As for what she's done before, it's not apparent in this posting, and even if it was we should attempt to hold our selves to a higher level... Would you have said that on the air? Probably not and why, because people would have attached it to you and thought you a small ignorant person... Whether or not you like her or hate her she's still a woman who deserves at least a business like approach... Jesus! do you talk to you ex-girlfriends like that... You probably don't much like them either...

3070. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 00:53:44 UTC
From: Won Hung Lo <me@home.org>
Message-ID: <sYtUd.4248$xm5.3958@fe1.columbus.rr.com>
Source record: 81409
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

```
"Jim" <junk@junk.com> wrote in message
news:cWtUd.21244$Sa6.2053@fe2.columbus.rr.com...
>
> "Won Hung Lo" <me@home.org> wrote in message
> news:QJtUd.40$Mu2.16@fe2.columbus.rr.com...
> >
> > "Jim" <junk@junk.com> wrote in message
> > news:7AtUd.4245$xm5.1966@fe1.columbus.rr.com...
> >>
> >> "Won Hung Lo" <me@home.org> wrote in message
> >> news:nBtUd.21181$Sa6.16789@fe2.columbus.rr.com...
> >> > Wow,
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> >> >> Nice antenna, designed after the UKSMG design I
> >> >> "borrowed" (tee hee) from GW0WFH.
> >> >>
> >> >> http://www.uksmg.org/longwire.htm
> >> >>
> >> >> This is a great working antenna, with 12dB
> >> >> measured gain over a dipole. It isnt a beam, but
> >> >> it sure is better than a dipole!
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> >> >> $140.00 plus $6.50 shipping in lower 48 states.
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> >> >> Email N8WWM@arrl.net for more information and
> >> >> photos. I'll take paypal, a check, money order,
> >> >> whatever.
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> >>
> >> Man your mother did a real fine job raising you didn't she? She must
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> >> proud of you and the way you speak to women...
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> > Kathy Lee is not a woman, she is a filthy ho.
> > Read her musings and see for yourself.
> >
> > And for the record, mom is very proud of her son. :-)
> >
> >
>
> Personally I don't care if she's a prostitute, I wouldn't talk like that
to
> her! As for what she's done before, it's not apparent in this posting,
and
> even if it was we should attempt to hold our selves to a higher level...
> Would you have said that on the air? Probably not and why, because people
> would have attached it to you and thought you a small ignorant person...
> Whether or not you like her or hate her she's still a woman who deserves
at
> least a business like approach... Jesus! do you talk to you ex-girlfriends
> like that... You probably don't much like them either...
>
I don't much care for any woman who can't keep her mouth shut. That's what
is wrong with this country now, women need to be home and know their place.

You sound like one of the spineless weasels who are trained to be
"sensitive" and "attentive" to a woman's needs.

You and you ilk will be the downfall of the once great country.

June Cleaver, where are you when we need you?

3071. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 01:00:54 UTC
From: Jim <junk@junk.com>
Message-ID: <a3uUd.4249$xm5.1152@fe1.columbus.rr.com>
Source record: 81410
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

```
"Won Hung Lo" <me@home.org> wrote in message
news:sYtUd.4248$xm5.3958@fe1.columbus.rr.com...
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> "Jim" <junk@junk.com> wrote in message
> news:cWtUd.21244$Sa6.2053@fe2.columbus.rr.com...
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>> "Won Hung Lo" <me@home.org> wrote in message
>> news:QJtUd.40$Mu2.16@fe2.columbus.rr.com...
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>> >> >> $140.00 plus $6.50 shipping in lower 48 states.
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>> >> >> Email N8WWM@arrl.net for more information and
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>> >> >> _____________________________________
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>> >> >> http://www.usenetzone.com to open account
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>> Would you have said that on the air? Probably not and why, because people
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>> Whether or not you like her or hate her she's still a woman who deserves
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>> like that... You probably don't much like them either...
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> I don't much care for any woman who can't keep her mouth shut. That's what
> is wrong with this country now, women need to be home and know their
> place.

You have a lot in common with Muslims and Goreans don't you?

> You sound like one of the spineless weasels who are trained to be
> "sensitive" and "attentive" to a woman's needs.
>
> You and you ilk will be the downfall of the once great country.
>
> June Cleaver, where are you when we need you?
>
>

I'm a republican and Christian.. be hard to place me in the left wing....

3072. Re: MFJ 1798 Vertcal

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 01:35:59 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <1124tc95reel834@news.supernews.com>
Source record: 81411

You might want to consider the Hustler 4,5 or 6 - BTV. Requires no guying and is easy to assemble (30 mins) and tune (15mins). It is sleek in appearance and with ample radials it is a very usable DX antenna on all it's bands.

1. http://www.ad5th.com/5-BTV.html
--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

<jgboyles@aol.com> wrote in message
news:1109546347.574937.227690@f14g2000cwb.googlegroups.com...
>
> Jerseyj wrote:
>> Wonder If anyone has any experience with this vertical...the specs
> says
>> it works without radials,I'm just wonderng how well.
>>
>> Jerry
> Hi Jerry, Let me first say that I have never used a 1798, but can
> offer some comments for what they are worth.
> I have seen the 1798 at hamfests. It is large, and although 20'
> tall, it will require guying, and a sturdy bottom support. It will
> require a lot of assembly and tuning time. It costs $300.
> As for performance, a low dipole, or inverted vee (30'-35') will
> probably exceed the 1798 on 80m and 40m. 20m-10m toss-up. 6m and 2m??
> As a less expensive alternative, a 100' dipole or inverted vee fed
> with 450 ohm ladder line and an antenna tuner will provide equal or
> better results 80m-10m. 6m and 2m require additional attention. Since
> you will need to guy the 1798, the space required will be larger than
> you think.
> Gary N4AST
>

3073. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 02:05:36 UTC
From: yahdjt@bigfoot.com
Message-ID: <1109556336.672473.133180@f14g2000cwb.googlegroups.com>
Source record: 81412
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Still here, not quite sure who to believe, but enjoying the ride :-)

3074. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 02:15:10 UTC
From: keith <krw@att.bizzzz>
Message-ID: <pan.2005.02.28.02.15.08.933643@att.bizzzz>
Source record: 81413
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Sun, 27 Feb 2005 17:12:46 +0000, Ken Smith wrote:

> In article <CVcFzUAFBXICFwjZ@jmwa.demon.co.uk>,
> John Woodgate <noone@yuk.yuk> wrote:
> [...]
>>If the FM is what passes for music these days, it's MUCH better IMHO.
>
> There is very little that is sent in the form of radio waves that is worth
> the electrical power to send it.

Hmm, many advertisers would disagree. Since they have real money at stake
and you don't...

> The really sad thing is that much of
> what is send via FM is really "voice grade" material. When FM was new,
> the material for FM was specially produced to take advantage of the wide
> bandwidth and large dynamic range.

Bandwidth, perhaps. Wide dynamic range? The FCC rules seem to
suggest otherwise.

--
Keith

3075. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 02:19:18 UTC
From: keith <krw@att.bizzzz>
Message-ID: <pan.2005.02.28.02.19.16.798887@att.bizzzz>
Source record: 81414
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Sun, 27 Feb 2005 10:16:19 -0700, Jim Thompson wrote:

> On Sun, 27 Feb 2005 17:08:23 +0000 (UTC), kensmith@green.rahul.net
> (Ken Smith) wrote:
>
>>In article <42214c3d$1_1@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com> wrote:
>>>Ken Smith wrote:
>>>> At the point where it fails, the output goes to zero, I assume. If so,
>>>> wouldn't that be the impedance as I've been defining it.
>>>
>>>Is an amp that fails at one minute with 100w FM
>>>better matched than an amp that fails at two minutes
>>>with 100w CW?
>>
>>No, you've got the concept backwards. Obviously the worst matched is the
>>1 o=minute case, next would be the 2 minute case and so on up to one which
>>runs for about its MTBF at the connected load. This last case would
>>likely be the one the designer was targeting.
>>
>>--
>
> It's been thirty years since I "hammed". I was only interested in the
> electronics, not the talking, so I dropped out after I got a homemade
> solid-state 2-meter rig running.

I did the same after putting together a HF setup. The electronics was fun,
but the chirping was booorrring.

> But I vaguely recall a 5/8 wavelength antenna that had a good low-angle
> pattern.

I didn't know the height affected the pattern that much. IIRC 5/8
wavelength seems to be what the AM stations around here. Though they'd
load up a barn if it worked.

--
Keith

3076. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 02:21:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <aev4211sdt3vdmh2mis45dk3e3rtsgfhen@4ax.com>
Source record: 81415
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On 27 Feb 2005 18:05:36 -0800, yahdjt@bigfoot.com wrote:

>Still here, not quite sure who to believe, but enjoying the ride :-)

Hi OM,

The long and short of it (apropos of your antenna spec), is that your shorter antenna will need a new matching circuit (apropos of the smaller antenna's size) for the related issues of maximum transfer of power. The reasons for matching may vary (and with it, efficiency), but not so you would notice. If you did notice, then your production tolerance (if not customer application) variations will kill you in the marketplace (fact of life in a Kapitalistic world). No amount of armchair philosophies about Thevenin's theorem will replace that loss.

73's
Richard Clark, KB7QHC

3077. ATAS-120 mobile HF antenna mount question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 02:41:31 UTC
From: "Joe S." <nobody@nowhere.net>
Message-ID: <cvu0cb0k5f@news2.newsguy.com>
Source record: 81416

Okay, one more question about the Yaesu ATAS-120 before I order the FT-857 and ATAS-120.

How do I mount the ATAS-120? As I understand it, the antenna has a type M connector built into the base so it will screw into a standard SO-239 connector. The antenna is 53-plus inches high so I'll need a fairly sturdy mount.

I drive a small pickup with an aluminum cap on the bed. There is a ladder rack attached to the cap -- the ladder rack consists of 3/4-inch square aluminum tubing -- I can clamp a mount to the ladder rack but I really need an adjustable mount so I can lay the antenna down when need be. I have figured out how to tie everything together with ground straps to ensure good grounding to the frame but now I need suggestions on which mobile mount to use.

I was looking at some Diamond mounts but they all say not recommended for antennas over 45 inches high.

I could fabricate something out of thick sheet aluminum and galvanized corner brackets but a commercial mount would look a lot better.

Thanks.

--

Joe S.

3078. Re: ATAS-120 mobile HF antenna mount question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 03:47:46 UTC
From: Korbin Dallas <korbindallas@yahoo.com>
Message-ID: <pan.2005.02.28.03.47.35.901740@yahoo.com>
Source record: 81417

On Sun, 27 Feb 2005 20:41:31 -0600, Joe S. wrote:

> Okay, one more question about the Yaesu ATAS-120 before I order the FT-857
> and ATAS-120.
>
> How do I mount the ATAS-120? As I understand it, the antenna has a type M
> connector built into the base so it will screw into a standard SO-239
> connector. The antenna is 53-plus inches high so I'll need a fairly sturdy
> mount.
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> rack attached to the cap -- the ladder rack consists of 3/4-inch square
> aluminum tubing -- I can clamp a mount to the ladder rack but I really need
> an adjustable mount so I can lay the antenna down when need be. I have
> figured out how to tie everything together with ground straps to ensure good
> grounding to the frame but now I need suggestions on which mobile mount to
> use.
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> I was looking at some Diamond mounts but they all say not recommended for
> antennas over 45 inches high.
>
> I could fabricate something out of thick sheet aluminum and galvanized
> corner brackets but a commercial mount would look a lot better.
>
> Thanks.

I built my ATAS bracket out of aluminum. It was the only why I could find
to get something that would hold up. I broke a couple of Diamond antenna
brackets on my Motorcycle trying to hold up dual band antennas until I
built on from scratch.

3079. Proper Phasing of two Andrew DB224 Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 03:55:39 UTC
From: af4z@cfl.rr.com
Message-ID: <%CwUd.94017$pc5.93385@tornado.tampabay.rr.com>
Source record: 81418

I would like to install two Andrew DB224 4-element colinear antennas as a DB228 (8 element). When the antennas were ordered to replace a Celwave P654, I was told that two 224 and and the proper phasing harness would be the same. The antennas and harness were ordered but I have a problem. The antennas were shipped but I'm now told the phasing harness for the amateur frequencies (-007) is no longer available. I have received some information on the phasing harness but from the drawings provided, the two outputs are not the same length therefore will not be in phase. Since the antennas are the same, wouldn't the two outputs of the phasing harness be in phase or is it normal to provide some downward tilt. Unless I'm badly mistaken,the antenna element should be fed in-phase giving maximun gain in the horz.direction.
Don AF4Z

3080. Sign up for a great free science e-newsletter!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 04:06:41 UTC
From: neutrino750@yahoo.com
Message-ID: <1109563601.490293.138250@z14g2000cwz.googlegroups.com>
Source record: 81419
Cross-posted to: rec.photo.digital,rec.photo.technique.misc,rec.photo.technique.nature,rec.ponds,rec.radio.amateur.antenna

We'd like to invite you to join our free
WORLD SCIENCE e-newsletter, which
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science news and photos long before they're
in the papers and magazines. A sample
newsletter is below.

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in the subject line to:
neutrino750 @ yahoo.com (remove the spaces).

The newsletter, sent out about every 3-10
days, contains short summaries of our new
stories, with links to web pages containing
the full stories. It's free: no pop-ups, passwords,
spam, or gimmicks -- that's our pledge! The full
story pages do contain small side ads (non
pop-up), which are what supports our news-
letter. YOU pay nothing ever. You can cancel
anytime simply by replying to a newsletter
email and typing "unsubscribe" in the subject
line.

Below is a sample newsletter. It doesn't
contain the full story links because we're not
allowed to provide them here, but the real
newsletter will contain working links.

****
LAST WEEK'S WORLD SCIENCE EMAIL
NEWSLETTER

* Possible dinosaur-bird missing link found:
It's not the first bird-like dinosaur ever found --
but it is the closest yet found to the actual
dinosaur ancestor of birds, researchers say.

Click here for full story (link will work in the real newsletter)

* Science in Images - A more life-friendly Mars:
Most Mars photos show a rocky, dry-looking land-
scape. This is another view: an area of the planet
that researchers think might have once been
habitable. They plan to explore further.

Click here for full story (link will work in the real newsletter)

* Another record: biggest blast ever in our
galaxy:
The most powerful explosion in our galaxy ever
recorded occurred recently when an exotic star's
magnetic field snapped, astronomers say.

Click here for full story (link will work in the real newsletter)

* New robots walk nearly like humans:
An older robot does it too, but it used 10 times as
much energy as humans do, researchers say; that is
changing.

Click here for full story (link will work in the real newsletter)

* Brain doesn't have universal language rules,
researchers claim:
Some researchers argue that language is more like
a creation of itself than a creation of our brains.

Click here for full story (link will work in the real newsletter)

3081. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 04:11:01 UTC
From: Steveo <steveoparks@yahoo.com>
Message-ID: <1109563861.041482.153970@f14g2000cwb.googlegroups.com>
Source record: 81420
Cross-posted to: rec.radio.amateur.antenna,rec.autos.sport.nascar,rec.radio.cb,alt.flame.jews,alt.ham-radio.vhf-uhf

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> >> >> >> http://www.uksmg.org/longwire.htm
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> >> >> >> This is a great working antenna, with 12dB
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> >> >> >>
> >> >> >> Email N8WWM@arrl.net for more information and
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She must
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> >> >
> >> > And for the record, mom is very proud of her son. :-)
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> >> >
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> You have a lot in common with Muslims and Goreans don't you?
>
> > You sound like one of the spineless weasels who are trained to be

> > "sensitive" and "attentive" to a woman's needs.
> >
> > You and you ilk will be the downfall of the once great country.
> >
> > June Cleaver, where are you when we need you?
> >
> >
>
> I'm a republican and Christian.. be hard to place me in the left
wing....

3082. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 04:11:22 UTC
From: Jim <junk@junk.com>
Message-ID: <KRwUd.4498$xm5.2886@fe1.columbus.rr.com>
Source record: 81421
Cross-posted to: rec.radio.amateur.antenna,rec.autos.sport.nascar,rec.radio.cb,alt.flame.jews,alt.ham-radio.vhf-uhf

```
"Steveo" <steveoparks@yahoo.com> wrote in message
news:1109563861.041482.153970@f14g2000cwb.googlegroups.com...
>
> Jim wrote:
>> "Won Hung Lo" <me@home.org> wrote in message
>> news:sYtUd.4248$xm5.3958@fe1.columbus.rr.com...
>> >
>> > "Jim" <junk@junk.com> wrote in message
>> > news:cWtUd.21244$Sa6.2053@fe2.columbus.rr.com...
>> >>
>> >> "Won Hung Lo" <me@home.org> wrote in message
>> >> news:QJtUd.40$Mu2.16@fe2.columbus.rr.com...
>> >> >
>> >> > "Jim" <junk@junk.com> wrote in message
>> >> > news:7AtUd.4245$xm5.1966@fe1.columbus.rr.com...
>> >> >>
>> >> >> "Won Hung Lo" <me@home.org> wrote in message
>> >> >> news:nBtUd.21181$Sa6.16789@fe2.columbus.rr.com...
>> >> >> > Wow,
>> >> >> > So tell me princess, will you lick the sweat off my sack
> after I
>> >> >> > install
>> >> >> > this antenna, or will you be busy servicing the boyz on
> channel 20?
>> >> >> >
>> >> >> > With luv, your Pimp!
>> >> >> >
>> >> >> > "KC8QJP KATHY LEE" <N8WWM@ARRL.NET> wrote in message
>> >> >> > news:svc1219h100jvf50he98s6baes2hpaqhlb@4ax.com...
>> >> >> >> Nice antenna, designed after the UKSMG design I
>> >> >> >> "borrowed" (tee hee) from GW0WFH.
>> >> >> >>
>> >> >> >> http://www.uksmg.org/longwire.htm
>> >> >> >>
>> >> >> >> This is a great working antenna, with 12dB
>> >> >> >> measured gain over a dipole. It isnt a beam, but
>> >> >> >> it sure is better than a dipole!
>> >> >> >>
>> >> >> >> $140.00 plus $6.50 shipping in lower 48 states.
>> >> >> >>
>> >> >> >> Email N8WWM@arrl.net for more information and
>> >> >> >> photos. I'll take paypal, a check, money order,
>> >> >> >> whatever.
```

>> >> >> >>
>> >> >> >>
>> >> >> >> _____
>> >> >> >> Usenet Zone Free Binaries Usenet Server
>> >> >> >> More than 120,000 groups
>> >> >> >> Unlimited download
>> >> >> >> http://www.usenetzone.com to open account
>> >> >> >
>> >> >> >
>> >> >>
>> >> >> Man your mother did a real fine job raising you didn't she?
> She must
>> > be
>> >> > so
>> >> >> proud of you and the way you speak to women...
>> >> >>
>> >> > Jim,
>> >> > Kathy Lee is not a woman, she is a filthy ho.
>> >> > Read her musings and see for yourself.
>> >> >
>> >> > And for the record, mom is very proud of her son. :-)
>> >> >
>> >> >
>> >>
>> >> Personally I don't care if she's a prostitute, I wouldn't talk
> like that
>> > to
>> >> her! As for what she's done before, it's not apparent in this
> posting,
>> > and
>> >> even if it was we should attempt to hold our selves to a higher
> level...
>> >> Would you have said that on the air? Probably not and why, because
> people
>> >> would have attached it to you and thought you a small ignorant
> person...
>> >> Whether or not you like her or hate her she's still a woman who
> deserves
>> > at
>> >> least a business like approach... Jesus! do you talk to you
>> >> ex-girlfriends
>> >> like that... You probably don't much like them either...
>> >>
>> > I don't much care for any woman who can't keep her mouth shut.
> That's what
>> > is wrong with this country now, women need to be home and know
> their
>> > place.
>>
>>

>> You have a lot in common with Muslims and Goreans don't you?
>>
>> > You sound like one of the spineless weasels who are trained to be
>> > "sensitive" and "attentive" to a woman's needs.
>> >
>> > You and you ilk will be the downfall of the once great country.
>> >
>> > June Cleaver, where are you when we need you?
>> >
>> >
>>
>> I'm a republican and Christian.. be hard to place me in the left
> wing....
>

Dude, there's no response here! Just a quoted message...

3083. Speaking of ground rods - was: Cold Water...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 04:21:10 UTC
From: Buck <iam@this.site>
Message-ID: <tg4521h8udqsafsu6ooq9dc57bl8fp9dos@4ax.com>
Source record: 81272

On 27 Feb 2005 14:01:14 -0800, wizard12342002@yahoo.com wrote:

>It appears that my cold water pipe is made completely of copper (no

I get a lot of flack when I mention using a ground for my radio and antenna because of electrical code. I don't believe that my station causes a ground loop because of it's design, but there is the issue for other places as well.

First of all, I have a deep cycle battery for a power supply for my Icom 706 MKII. I use a smart charger to keep the battery charged. The charger only uses two wires. The radio is grounded through a lightning/static arrestor by way of the outer brass casing that screws into the SO-239 connector on the radio. My ground is a copper pipe stuck about 5 or 6 feet deep next to the window where the radio is located. A large wire goes from the radio to the ground-rod.

The reason I feel this does not create a ground loop, is that the only electricity is run through an isolation transformer (the charger) to the twelve volt battery which powers only the rig and an emergency light.

However, there are others with this issue. Assuming they have 'normal' stations, they are likely to have a 3-wire grounded power supply or a radio with a grounded power supply built in. For these people (and possibly me in the future) I am wondering about the best means of a ground especially when the rig is far away from the electrical panel.

My thought is to run a solid #8 wire underground from the electrical ground rod to the closest point to the radio. There, set an 8 foot ground rod giving a close to zero loss from the radio ground to the electrical ground. The fact that the copper lead between the two rods is buried will only improve the radio ground rather than create a resonant loop.

Any thoughts?

Buck
N4PGW

--
73 for now
Buck
N4PGW

3084. Re: Proper Phasing of two Andrew DB224 Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 04:25:48 UTC
From: Steveo <steveoparks@yahoo.com>
Message-ID: <1109564748.348940.70200@l41g2000cwc.googlegroups.com>
Source record: 81273
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,alt.personals.gay,alt.flame.jews,alt.ham-radio.vhf-uhf

Don Winn wrote:
> I would like to install two Andrew DB224 4-element colinear antennas
as a
> DB228 (8 element). When the antennas were ordered to replace a
Celwave P654, I
> was told that two 224 and and the proper phasing harness would be the
same. The
> antennas and harness were ordered but I have a problem. The antennas
were
> shipped but I'm now told the phasing harness for the amateur
frequencies (-007)
> is no longer available. I have received some information on the
phasing harness
> but from the drawings provided, the two outputs are not the same
length
> therefore will not be in phase. Since the antennas are the same,
wouldn't the
> two outputs of the phasing harness be in or is it normal to provide
some
> downward tilt. Unless I'm badly mistaken,the antenna element should
be fed
> in-phase giving maximun gain in the horz.direction.
> Don AF4Z

on several occasions i have had two cocks in my ass in-phase at the
same time. sometimes we use a double dong as a phasing harness.

3085. Re: G5RV (Yet Again)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 05:04:34 UTC
From: Photoman <photomanxaa@hotmail.com>
Message-ID: <9KudnVznEZXMO7_fRVn-qg@adelphia.com>
Source record: 81274

After years of using a tri-bander and high inverted vees for 40 and 80 I found myself in a situation of putting up a G5RV through a auto tuner from my old TS-820S. It is only 30 feet off the ground and it is a shortened version I bought off Ebay. I figured I had a good dummy load but two nights ago I worked four stations on 75 meters in Europe with 100 watts from Virginia (on SSB) so I'm not so displeased. Got 59, 59, 58, and 59+15 reports. Maybe I can finish up 5Band DXCC after all!
Good luck & 73,
Ken

<wizard12342002@yahoo.com> wrote in message
news:1109291271.142059.158490@g14g2000cwa.googlegroups.com...
> As someone who is relatively inexperienced with the hobby, I am amazed
> at the confusion and mysticism surrounding the "G5RV" antenna. It
> appears to be nothing but a dipole, with a length of "balanced line" to
> transform the impedance to a better match for coax at certain
> frequencies.
>
> A little consideration reveals that this antenna should suffer from
> unwanted return currents unless a balun is used (like any coax-fed
> dipole), and substantial loss in the coax at certain frequencies. So
> why is this antenna better than two pieces of reasonably long wire
> driven with balanced line and a tuner? What am I missing?
>
> -JJ
>

3086. Re: Speaking of ground rods - was: Cold Water...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 05:29:42 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <a%xUd.9283$Ba3.3363@newsread2.news.atl.earthlink.net>
Source record: 81275

> My thought is to run a solid #8 wire underground from the electrical
> ground rod to the closest point to the radio. There, set an 8 foot
> ground rod giving a close to zero loss from the radio ground to the
> electrical ground. The fact that the copper lead between the two rods
> is buried will only improve the radio ground rather than create a
> resonant loop.
>
> Any thoughts?
>
> Buck
> N4PGW

Tie them together at a common point. In one of the radio stations I worked at, I was always trying to second guess the engineer who was before me. There were plenty of grounds loops that the RF loved to bug us with. That was a 10KW AM'er, RF getting into an audio console was a real source of irritation for the production people as well as me. We resorted to screening one control room with copper screening. THAT was cool, we got 30 DB of isolation when the door was closed. Wish I had that screened room for my SHACK!!!!

73
WB7FFI

3087. Re: Speaking of ground rods - was: Cold Water...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 05:38:18 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <i7yUd.24013$7z6.8330@lakeread04>
Source record: 81276

"Buck" <iam@this.site> wrote
>
> I get a lot of flack when I mention using a ground for my radio and
> antenna because of electrical code. I don't believe that my station
> causes a ground loop because of it's design, but there is the issue
> for other places as well.
>
> First of all, I have a deep cycle battery for a power supply for my
> Icom 706 MKII. I use a smart charger to keep the battery charged.
> The charger only uses two wires. The radio is grounded through a
> lightning/static arrestor by way of the outer brass casing that screws
> into the SO-239 connector on the radio. My ground is a copper pipe
> stuck about 5 or 6 feet deep next to the window where the radio is
> located. A large wire goes from the radio to the ground-rod.
>
> The reason I feel this does not create a ground loop, is that the only
> electricity is run through an isolation transformer (the charger) to
> the twelve volt battery which powers only the rig and an emergency
> light.
>
> However, there are others with this issue. Assuming they have
> 'normal' stations, they are likely to have a 3-wire grounded power
> supply or a radio with a grounded power supply built in. For these
> people (and possibly me in the future) I am wondering about the best
> means of a ground especially when the rig is far away from the
> electrical panel.
>
> My thought is to run a solid #8 wire underground from the electrical
> ground rod to the closest point to the radio. There, set an 8 foot
> ground rod giving a close to zero loss from the radio ground to the
> electrical ground. The fact that the copper lead between the two rods
> is buried will only improve the radio ground rather than create a
> resonant loop.
>
> Any thoughts?
>
> Buck
> N4PGW

Hi Buck,

You do not have a ground loop or avoid one because you are on or off the grid, or using a separate station ground system, even when bonded to the service entrance ground as code requires.

Grounding multiple pieces of equipment in series before the common ground is what allows ground loops. That can happen whether the building's three wire 120v system is the only ground, or a station ground is also involved. Avoid it by not daisy-chaining the bonds of individual equipments with the station single point ground. As awkward as it seems to individually bond equipment to the single point ground, this is how to avoid a ground loop. Practicality often overrides this design concept (using a bus-bar for multiple equipment grounding, etc). But if noise could be isolated as caused by such series-grounding, then you know how to eliminate it.

The station ground IS an awful thing to have, and a major cause of lightning damage to the station IF it is both: 1. separate from the service entrance ground, and 2. not properly bonded to the service entrance ground. We would avoid most of the outdoor grounding and bonding systems required to control this condition IF we just brought all antenna feeds into the structure AT the service entrance ground. And then shield grounded and used arrestors right there.

For HF-only feedlines (where an extra 40-60' of coax would add superficial loss) there should be no excuse for not bringing all feedlines into the structure only at the service entrance. UHF systems that suffer much higher line loss tempt us to bring antenna feedlines directly into the radio shack. THAT causes a major bonding headache. This is because we have to achieve such low impedance connections to the service ground that lightning will never choose a path up from ground, through our equipment, and out via the house wiring to get back to the service entrance ground. We are never fully protected from such occurrence if the station ground and service ground are apart from each other, no matter how well they are bonded. But we can be reasonably protected in that respect, when the bonding jumper is of significantly lower impedance than the AC wiring in the home.

#8 copper is no where near the "significantly lower impedance" we're talking about. Either wide copper strapping or #2 or #4 copper would be a better example for the bonding connection between service entrance and station ground. The more places along the way that bonding jumper is also bonded to the outdoor antenna ground fields, radials, etc, the better. Voltage division plays a big part when everything is bonded and many grounding electrodes are used.

Hope this helps,
73,
Jack Painter
Virginia Beach, Virginia

3088. Re: Proper Phasing of two Andrew DB224 Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 06:01:47 UTC
From: dug88 <dug88@shaw.ca>
Message-ID: <ftyUd.524337$6l.231290@pd7tw2no>
Source record: 81277
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,alt.personals.gay,alt.flame.jews,alt.ham-radio.vhf-uhf

i think u forgot to delete the gay sites
from oversite
speaking as an electro tech
you have no problem of your antennae coverage
unless u figure 50 foot differenece is gonna be big time

i promise i will put my unit in the van sometime.

have a good time the guys on radio
anyway

now will you please fuck off and have a good life

dug88

"Steveo" <steveoparks@yahoo.com> wrote in message
news:1109564748.348940.70200@l41g2000cwc.googlegroups.com...
>
> Don Winn wrote:
>> I would like to install two Andrew DB224 4-element colinear antennas
> as a
>> DB228 (8 element). When the antennas were ordered to replace a
> Celwave P654, I
>> was told that two 224 and and the proper phasing harness would be the
> same. The
>> antennas and harness were ordered but I have a problem. The antennas
> were
>> shipped but I'm now told the phasing harness for the amateur
> frequencies (-007)
>> is no longer available. I have received some information on the
> phasing harness
>> but from the drawings provided, the two outputs are not the same
> length
>> therefore will not be in phase. Since the antennas are the same,
> wouldn't the
>> two outputs of the phasing harness be in or is it normal to provide
> some
>> downward tilt. Unless I'm badly mistaken,the antenna element should
> be fed
>> in-phase giving maximun gain in the horz.direction.
>> Don AF4Z
>
> on several occasions i have had two cocks in my ass in-phase at the
> same time. sometimes we use a double dong as a phasing harness.
>

3089. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 06:13:28 UTC
From: Adair Winter <drummer_adair@mail.com>
Message-ID: <cEyUd.57994$iC4.6537@newssvr30.news.prodigy.com>
Source record: 81278
Cross-posted to: rec.radio.amateur.antenna,rec.autos.sport.nascar,rec.radio.cb,alt.flame.jews,alt.ham-radio.vhf-uhf

"Jim" <junk@junk.com> wrote in message
> Dude, there's no response here! Just a quoted message...

A bunch of quoted messages that should have been trimmed....

Adair - KD5DYP

3090. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 06:28:24 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <cSyUd.85614$Th1.51655@bgtnsc04-news.ops.worldnet.att.net>
Source record: 81279

True, but only in a linear system representable by a Thevenin source having a resistive component that is dissipative. But an r-f amplifier is a non-linear system with a non-dissipationless "internal resistance" and cannot be modeled with a Thevinin dissipative source.

IF the Thevenin source approach worked, we would have to be content with max 50% efficient amplifiers. We know we can do better than that substantially.

The latest QEX has a revealing examination of impedance and conjugate matching matters.

Bottom line seems to be that one concentrates upon the specific load *resistance* specified for all other specs to be met. Such a load permits the amplifier to deliver maximum power within specifications and as such is conjugately matched to its load.

--
73, George W5YR
Fairview, TX
w5yr@att.net
http://www.w5yr.com

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:4701-4220B952-541@storefull-3258.bay.webtv.net...
> John Woodgate wrote:
> "The problem is that people say "output impedance" when they mean "load
> impedance".
>
> Quite right. I`ll use "source" and "load".
>
> Current through a load depends on the voltage. Ratio of volts to amps is
> the impedance. A source with the same resistance and offsetting
> reactance to the load enjoys a Goldilocks relationship with its load.
> The source`s volts and amps perfectly match the demands of the load.
> It`s just right. There`s no surplus of either volts or amps when source
> and load are connected. Its a match. Only a matched source and load
> deliver all the power available in a source.
>
> If we have too much resistance in our load, it doesn`t take as much
> power as it could.
>
> If we have too little resistance in our load, too much power is lost in
> our source.
>
> The perfect match of equal source and load resistances, with the
> reactance neutralized, is the only condition permitting maximum power

> transfer.
>
> Somme amateurs want all the power they can get from their transmitters.
>
> Best regards, Richard Harrison, KB5WZI
>

3091. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 07:49:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dnf5219qaun6ohts7q6j8k6lne405lg06m@4ax.com>
Source record: 81280

On Mon, 28 Feb 2005 06:28:24 GMT, "George, W5YR" <w5yr@att.net>
wrote:

>IF the Thevenin source approach worked, we would have to be content with max
>50% efficient amplifiers. We know we can do better than that substantially.

Hi George,

I know you won't appreciate this, but it is a telling, simple test of
a practical situation with a practical Amateur grade transistor model
100W transmitter commonly available for more than 20-30 years now:
1. Presuming CW mode into a "matched load" (any definition will do);
2. Report the DC power consumed before hitting the key;
3. Report the DC power consumed while holding the key.

Concurrently note:
A. Report Heat Sink Temperature for a previously idle/rcv condition;
B. Report Heat Sink Temperature after 10 minute key-down.

For a hypothetical "100W" model (again, a contemporary, common example
for Amateur use) available through standard commercial venues:
2. About 20W - 30W
3. About 200W - 250W
A. About 20 degrees C (or room temperature)
B. Well above 37 degrees C (or skin temperature)

Now, if we are to be any judge of efficiency (Thevenin does not have
to be invoked, condemned, or venerated); then it runs close to 50%
(ï¿½10%). Others can invoke their favorite deity to explain.

Now, if we are to be any judge of dissipation (no requirement for
advanced degree); then heat as a loss by virtue of less than 100%
efficiency is quite evident. Others can invoke photons to describe
why.

To forestall any armchair engineers, yes, this efficiency is System
efficiency. However, I would be surprised if a practical common
Amateur grade transistor model transmitter commonly available for more
than 20-30 years now has any configuration that does not apply supply
voltage directly to the final transistors; and instead adds a
significant current path outside of this load (citations to available
schematics would be compelling, but any argument without this would be
speculation). It takes very little effort to subtract out the power
drain of the receive mode (being very representative of the similar
power demand of supporting circuitry for transmit up to the driver
stage). Barring such amazing evidence of a significant power drain
not found in the finals, it follows that a simple computation of

efficiency has its merit and has been met.

73's
Richard Clark, KB7QHC

3092. EZNEC Model of a Tilted Half Rhombic Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 13:34:30 UTC
From: "William M. Bickley" <bickley@dmv.com>
Message-ID: <11267f79h41mrc0@corp.supernews.com>
Source record: 81281

I still have my training wheels on, but I am trying to model the subject antenna, as described in the ARRL's Antenna Classics.

The feed end at ground level calls for a 9:1 transformer. The opposite end (also at ground level)calls for a 9:1 transformer with a 50 ohm dummy load attached. How would I include these in the model?

Thanks for your patience and help.

Bill

3093. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 13:58:36 UTC
From: Psychiatrist to keyclowns <keyklonzrnutjobs@yahoo.com>
Message-ID: <1109599116.786094.225850@o13g2000cwo.googlegroups.com>
Source record: 81282
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

All posts that say they are from Kathy Lee are forges done by a warped
freak who is mad because he got his previous ISP yanked for making
violent threats to people.
Jerry Martes wrote:
> Kathy
>
> Thats a really interesting antenna. And it isnt too expensive
either.
> Could 8 of them be connected in parallel to get 21 db gain over a
dipole?
>
> Jerry
>
>
> "KC8QJP KATHY LEE" <N8WWM@ARRL.NET> wrote in message
> news:svc1219h100jvf50he98s6baes2hpaqhlb@4ax.com...
> > Nice antenna, designed after the UKSMG design I
> > "borrowed" (tee hee) from GW0WFH.
> >
> > http://www.uksmg.org/longwire.htm
> >
> > This is a great working antenna, with 12dB
> > measured gain over a dipole. It isnt a beam, but
> > it sure is better than a dipole!
> >
> > $140.00 plus $6.50 shipping in lower 48 states.
> >
> > Email N8WWM@arrl.net for more information and
> > photos. I'll take paypal, a check, money order,
> > whatever.
> >
> >
> > _____________________________________
> > Usenet Zone Free Binaries Usenet Server
> > More than 120,000 groups
> > Unlimited download
> > http://www.usenetzone.com to open account

3094. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 14:21:38 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_422329d1@fidonet.org>
Source record: 81287

"Richard Clark" bravely wrote to "All" (27 Feb 05 23:49:44)
--- on the heady topic of "Re: Say what you mean."

RC> From: Richard Clark <kb7qhc@comcast.net>
RC> Xref: aeinews rec.radio.amateur.antenna:26138

RC> On Mon, 28 Feb 2005 06:28:24 GMT, "George, W5YR" <w5yr@att.net>
RC> wrote:

>IF the Thevenin source approach worked, we would have to be content with max
>50% efficient amplifiers. We know we can do better than that substantially.

RC> Hi George,

RC> I know you won't appreciate this, but it is a telling, simple test of
RC> a practical situation with a practical Amateur grade transistor model
RC> 100W transmitter commonly available for more than 20-30 years now:
RC> 1. Presuming CW mode into a "matched load" (any definition will do);
RC> 2. Report the DC power consumed before hitting the key;
RC> 3. Report the DC power consumed while holding the key.

RC> Concurrently note:
RC> A. Report Heat Sink Temperature for a previously idle/rcv condition;
RC> B. Report Heat Sink Temperature after 10 minute key-down.

RC> For a hypothetical "100W" model (again, a contemporary, common example
RC> for Amateur use) available through standard commercial venues:
RC> 2. About 20W - 30W
RC> 3. About 200W - 250W
RC> A. About 20 degrees C (or room temperature)
RC> B. Well above 37 degrees C (or skin temperature)

RC> Now, if we are to be any judge of efficiency (Thevenin does not have
RC> to be invoked, condemned, or venerated); then it runs close to 50%
RC> (110%). Others can invoke their favorite deity to explain.

The maximum power transfer 50% efficiency Po/Pin figure is only valid
for a "linear" amplifier termed Class A (current flows through the
whole cycle). Other amplifier classes were invented which improved on
that 50%. i.e. Class B (push-pull) can approach just shy of 70%
(current flows through 50% of cycle), and Class C close to 90%
(current flow less than 50% of cycle). Did I misunderstand the
problem?

A*s*i*m*o*v

... "Beware of all enterprises that require new clothes." -- THOREAU

3095. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 14:23:53 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42232a4f$1_1@127.0.0.1>
Source record: 81283

Richard Clark wrote:
> To forestall any armchair engineers, yes, this efficiency is System
> efficiency...

... which is not the definition of "plate (anode) efficiency"
from the IEEE Dictionary: "The ratio of load circuit power
(alternating current) to the *plate* power input (direct current)."
For amplifier efficiency calculations, only the DC power input
to the plate-collector-drain is considered, by definition. The
power dissipated in the surrounding support circuitry is not
included in the definition of "plate efficiency".

Reference: _Electronic_Fundamentals_and_Applications_ by
John D. Ryder, Copyright 1954, by Prentice-Hall, page 348,
Section 10-6. Plate-Circuit Efficiency
--
73, Cecil http://www.qsl.net/w5dxp

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3096. Re: EZNEC Model of a Tilted Half Rhombic Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 14:57:44 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <vub621tfchhkota5cu8j1augv6ukst9jen@4ax.com>
Source record: 81284

On Mon, 28 Feb 2005 08:34:30 -0500, "William M. Bickley"
<bickley@dmv.com> wrote:

>I still have my training wheels on, but I am trying to model the subject
>antenna, as described in the ARRL's Antenna Classics.
>
>The feed end at ground level calls for a 9:1 transformer. The opposite end
>(also at ground level)calls for a 9:1 transformer with a 50 ohm dummy load
>attached. How would I include these in the model?

I would include a one-segment wire at each end to hold the source and
load. Use a 450 ohm load and set the alternate SWR Z to 450 if you
want to see the SWR normalized to that value.

This assumes that the 9:1 transformers don't add any reactive effects,
something you can't know anyway without some measurement
characterization.

3097. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 15:55:34 UTC
From: richardharrison@webtv.net
Message-ID: <17079-42233EF6-205@storefull-3254.bay.webtv.net>
Source record: 81286

Richard Clark, KB7QHC wrote:
"However, I would be surprised if a practical common Amateur grade transistor model transmitter commonly available for more than 30 years now has any configuration that does not supply voltage directly to the final transistors---."

My Kenwood TS-130S manual has specifications on page 2. Transmitter output impedance is specified as: 50 OHMS!

Om page 30 is a level diagram. Output from the transmitter`s low-pass filter is measured as 70.7 volts at 14.25 MHz, which is 100 watts into 50 ohms (square root of PR).

D-C power is fed to the center-tap of a push-pull output transformer to the final transistors.

From the specifications page also, the power reguirement is TX: 18A 13.8V DC. It`s a linear amplifier. Only 40% efficiency. The designer probably was more interested in low harmonics than efficiency. The final by itself only takes part of the 18A ao its efficiency is more than 40%.

Kenwood says its transmitter presents an impedance of 50 ohms at its "OUT" terminals in the diagram on page 30. 100 watts at 70.7 volts.

Best regards, Richard Harrison, KB5WZI

3098. WTD: ROLLER INDUCTORS, VACUUM VARIABLE

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 15:56:07 UTC
From: dt <spammenot@hotmail.com>
Message-ID: <jnf621l3ofaidim9le7n86kqo2ju3kilsa@4ax.com>
Source record: 81285

Wanted for antenna project...

WTD: ROLLER INDUCTORS, VACUUM VARIABLE

Wanted for tuner project:

Pair of matched roller inductors, min. 18-28 uH, #12 AWG or larger

Vacuum variable, min. 500-1000 pF, 5KV

Please advise your sell price or will trade for ????

Please reply to

" k0dan @ arrl . net " <--- remove spaces

73
Dan

3099. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 16:43:05 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42234bb4_1@127.0.0.1>
Source record: 81289

Asimov wrote:
.> The maximum power transfer 50% efficiency Po/Pin figure is only valid
> for a "linear" amplifier termed Class A (current flows through the
> whole cycle). Other amplifier classes were invented which improved on
> that 50%. i.e. Class B (push-pull) can approach just shy of 70%
> (current flows through 50% of cycle), and Class C close to 90%
> (current flow less than 50% of cycle). Did I misunderstand the
> problem?

What you missed is Richard C. trying to redefine the
efficiency of a final amp. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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3100. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 16:46:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6mi6219k79un31leto7m8j1cj7fjekplod@4ax.com>
Source record: 81288

On Mon, 28 Feb 2005 08:23:53 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:
>Reference:
An obscure deity indeed....

3101. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 16:51:16 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42234d9f_2@127.0.0.1>
Source record: 81290

George, W5YR wrote:
> The latest QEX has a revealing examination of impedance and conjugate
> matching matters.

Hi George, what's the title and who's the author?
--
73, Cecil http://www.qsl.net/w5dxp

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3102. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 16:57:24 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42234ec4_1@127.0.0.1>
Source record: 81291

Richard Clark wrote:

> Cecil Moore <w5dxp@hotmail.com> wrote:
>>Reference: John D. Ryder
>
> An obscure deity indeed....

He authored three of Prentice-Hall's Electrical
Engineering Series books back in the 50's. He
was Michigan State's Dean of Engineering at the
time.
--
73, Cecil http://www.qsl.net/w5dxp

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3103. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 17:14:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jri621hlv4e76en43il5mlcm7rgq9fi99m@4ax.com>
Source record: 81292

On Mon, 28 Feb 2005 09:55:34 -0600, richardharrison@webtv.net (Richard Harrison) wrote:

>From the specifications page also, the power reguirement is TX: 18A >13.8V DC. It`s a linear amplifier. Only 40% efficiency. The designer >probably was more interested in low harmonics than efficiency. The final >by itself only takes part of the 18A ao its efficiency is more than 40%.

Hi Richard,

My point exactly. However, how much more than 40% and how much of that 18A (248W) is not devoted to the finals? Your "typical" rig would most like be composed of a three stage design with 5W/20W/100W kind of progression - very common.

The manufacturer of your finals transistors would be quick to spec them with a ballpark of 45% efficiency (Class AB, in a CW application) in the best of circumstances for full power.

Perhaps someone else has better Pout/Pin figures for a commonly available, retail Amateur 100W multi-mode HF rig? Say like 13.8V @ 10A for 100W CW?

Again, appeals to deities are always amusing (say what you pray), but we are missing the photon (sic) explanation (see what you mean) to completely round this out.

73's
Richard Clark, KB7QHC

3104. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 17:14:42 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <33j621l8mjul520avjji447u5ue7scjhp9@4ax.com>
Source record: 81293

On Monday, 28 Feb 2005 09:21:38 -500, "Asimov"
<Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote:

> Did I misunderstand the problem?

Hi Isaac,

Probably. It only asked two things (both power readings).

73's
Richard Clark, KB7QHC

3105. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 17:27:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3qk621toek8bq0v479t62dv2v8eojvov90@4ax.com>
Source record: 81294

On Mon, 28 Feb 2005 10:57:24 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:
>> An obscure deity indeed....
>He authored three
What an impoverished disciple of an obscure deity. Did he get his
ankles wet measuring supply current - or are we talking water level
above the knees?

3106. Re: Proper Phasing of two Andrew DB224 Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 17:33:12 UTC
From: munterlap@hotmail.com
Message-ID: <cvvkku$k1m$1@news6.svr.pol.co.uk>
Source record: 81295
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

right me old Hubert, don't know what the grief is for? The bloke asked a simple antenna question!

If you take and erect at ground level, two 1/4 wave vertical antenna elements,
spaced 1/2 wavelength apart.
Install a good radial earth.
Fit both vertical elements with 1/4 wavelengths pieces of 50 ohm coax cable,
Take both cables to a, 2 female / 1 male, pl259 T piece, in the middle at 1/4 wavelength .
The T out cable goes to rig.
Then take a 1/2 wave piece of coax with a PL female plug on one end, and a male on the other.
Insert this 'stub' between the vertical element and the T piece.
this make one side of the array feeder, 1/2 wavelength longer, making it 3/4 wavelength,
this will alter phase and direction from end fire, to broadside.

Clear as mud?

3107. Re: Unloaded Transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 17:42:36 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1109612556.142609.105990@z14g2000cwz.googlegroups.com>
Source record: 81296

You may save a few kWh a year by unplugging such a transformer...or maybe not. How cold a climate do you live in? How do you heat your house? Would the energy spent plugging and unplugging it (and wearing out the socket so it has to be replaced sooner, with the associated consumption of materials and power to make new sockets, would that energy be better spent being a bit more diligent about turning off other much larger power consumers?

I wonder, considering how much electronics you buy in compact fluorescent lights, how much it would add to the cost of the transformer-type wall-warts to add a circuit to disconnect the transformer from the line when there is no load, or just use a switching design that draws very little power when unloaded.

Cheers,
Tom

3108. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 18:09:32 UTC
From: richardharrison@webtv.net
Message-ID: <17079-42235E5C-218@storefull-3254.bay.webtv.net>
Source record: 81297

Asimov wrote:
"The maximum power transfer 50% efficiency figure is only valid for a "linear" amplifier termed Class A (current flows through the whole cycle)."

Maximum power transfer does not care how many degrees of a cycle the power flows. Nor does it care whether the source is electronic. Whether it applies depends entirely on the behavior of the source and load.

It`s true that current in a linear Class A amplifier flows continuously and does not vary in average amplitude over a complete cycle.

When there`s no signal input to a Class A amplifier, its power input is volts x amps and its efficiency is zero. Maximunm undistorted output requires 1/2 the d-c input to the stage. As this power exits the stage, it cools as the remaining dissipation is only 1/2 the no-signal dissipation.

An amplifier can be a linear source without operating under Class A conditions. Higher efficiency is the main reason for not operating in Class A. By turning the amplifier devices off
for part of each cycle, efficiency can be raised significantly beyond 50%.

Best regards, Richard Harrison, KB5WZI

3109. Re: Emtech ZM-2 bind post spacing?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 18:23:36 UTC
From: Ted Bruce <kilocycles**@**yahoo.com>
Message-ID: <3vn621hqkf2jvnbcvuusjpb3gfd5672e7n@4ax.com>
Source record: 81298

Insulation and dielectric properties are not the same things, are they? The volume resistivity of a material is particularly important in dielectric applications, but not necessarily so in insulation applications. PVC may be okay as an antenna insulator, but not so ok as a trombone trap dielectric. Phenolic is a good insulator, but not necessarily a good dielectric.

3110. Re: portable HF antenna for the FT-817

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 18:29:13 UTC
From: Ted Bruce <kilocycles**@**yahoo.com>
Message-ID: <kgo621pgqi7m4mg2aufnkfbjik0ompgrph@4ax.com>
Source record: 81299

If you decide on an MP-1 by SuperAntennas, I have one for sale for $100, shipped to any US address (no 80m add-on coil). I sold my FT-817, and the MP-1 has never been set up outdoors. It has in fact only been out of the box a couple of times. You can contact me direct at my email address (omit the **'s).
On Sun, 20 Feb 2005 09:33:47 GMT, "Manitou" <nospam@netbel.be> wrote:

>Hello,
>
>Search for a good working portable HF antenna 40-10m
>for field work with the FT-817.
>(plus 80m + 6m +VHF and UHF????)
>
>Witch models give good results?
>TNX,
>Ds
>

3111. Re: Velocity factor and impedance of ladder line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 19:26:30 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1109618790.908370.16970@f14g2000cwb.googlegroups.com>
Source record: 81300

You say, "I have no way of actually measuring it." But I wonder about that. Certainly it's not too difficult to find the velocity factor with the simplest of equipment, and with a bit of creativity, you should be able to figure out the impedance as well. In any event, it's pretty common to make at least minor tweaks on matching stubs to get them to do the intended job. Will you have any way to know when it's doing its job properly? That in itself may be all the measurement you need.

Cheers,
Tom

3112. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 20:11:08 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <wVKUd.7965$OU1.7315@newssvr21.news.prodigy.com>
Source record: 81301

Cecil Moore wrote:
> George, W5YR wrote:
>
>> The latest QEX has a revealing examination of impedance and conjugate
>> matching matters.
>
>
> Hi George, what's the title and who's the author?

It's RF Power Amplifier Output Impedance Revisited, by
Robert L. Craiglow. Take it with a grain of salt, Cecil.
There is more than one conceptual mistake contained in
the article.
73,
Tom Donaly, KA6RUH

3113. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 20:26:02 UTC
From: Jim Kelley <jwkelley@nospam.edu>
Message-ID: <cvvv3tksp1@news.service.uci.edu>
Source record: 81302
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Rich Grise wrote:

> No, just trying to make the point that it does, in fact, _have_ an
> impedance. (even if it's running class E.) What that exact impedance is,
> of course, is left as an exercise for the reader. :-)

And like any impedance, is a function of frequency.

> And another thing - in a transmitter, the impedance matching only happens
> at the one frequency, which is a lot different scenario from, say, a
> stereo. This could be a confusion factor here.

There may be more similarity than difference over the respective 20 KHz
bandwidth.

ac6xg

3114. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 21:39:07 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <422390b7_1@127.0.0.1>
Source record: 81303

Tom Donaly wrote:
> It's RF Power Amplifier Output Impedance Revisited, by
> Robert L. Craiglow. Take it with a grain of salt, Cecil.
> There is more than one conceptual mistake contained in
> the article.

Shirley, you jest. Conceptual mistakes in QEX? :-)
Unfortunately, I don't have a way to read it. Today
I got my 2004 ARRL Periodicals on CD-ROM but am not
a subscriber to QEX since they refused to publish
my article that would have ended all arguments. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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3115. this single mom asking for help

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 21:54:41 UTC
From: gdfailin@westshore.edu
Message-ID: <1109627681.839265.63040@z14g2000cwz.googlegroups.com>
Source record: 81304

This is currently all over the web. I never thought I would do
something like this
but I just lost my job, I am a single mother of 4 sons, one in Iraq,
one in college and 2 still in school. I should be able to get
unemployment,
but the bills are piling up and I figured what can it hurt.
Gayle

THIS REALLY CAN MAKE YOU EASY MONEY IT WORKS !!!
BUT YOU HAVE TO FOLLOW IT
TO A LETTER FOR IT TO WORK!!!!
JUST AN INVESTMENT OF 6.00!!!
ITS THAT EASY!!

: A little while back, I was browsing through the newsgroups, just like
you are now
and came across an article similar to this that said you could make
thousands
dollars within weeks with only an initial investment of $6.00! So I
thought,
"Yeah, right, this must be a scam", but like most of us, I was curious,
so I
kept reading.

: Anyway, it said that you send $1.00 to each of the 6 names and
addresses
stated in the article. You then place your own name and address in the
bottom of the list at #6, and post the article in at least 200
newsgroup. (There
are thousands) No catch, that was it. So after thinking it over, and
talking to
few people first, I thought about trying it. I figured what have I got
to lose
except 6 stamps and $6.00, right? Like most of us I was a little
skeptical and a
little worried about the legal aspects of it

: All, So I checked it out with the U.S. Post Office (1-800-725-2161)
and
they confirmed that it is indeed legal! Then I invested the measly
$6.00. Well
GUESS WHAT!!?. Within 7 days, I started getting money in the mail! I
was
shocked! I figured it would end soon, but the money just kept coming
in. In

my first week, I made about $25.00. By the end second week I had made a total over $1,000.00! In the third week I had over $10,000.00 and it's still
growing. This is now my fourth week and I have made a total of just over
$42,000.00 and it's still coming in rapidly.
Its

: Certainly worth $6.00, and 6 stamps, I have spent more than that on the
lottery!!

: Let me tell you how this works and most importantly, why it works?.also,
make sure you print a copy of this article NOW, so you can get the information off of it as you need it.

STEP 1: Get 6 separate pieces of
paper and write the following on each piece of
paper "PLEASE PUT ME ON YOUR MAILING
LIST."

Now get 6 US $1.00 bills and place ONE inside EACH
of the 6 pieces of paper so the bill
will not be seen through the envelope to prevent
thievery.

Next, place one paper in each of the 6
envelopes and seal them. You should now have 6 sealed
envelopes, each with a piece of paper
stating the above phrase, your name and address, and a
$1.00 bill. What you are doing is creating
a service by this. THIS IS ABSOLUTELY LEGAL! This program remains
successful because of the honesty and integrity of the
participants. Please
continue its success by carefully adhering to the
instructions. You will now become
part of the Mail Order business. Your product is simply a
service of helping
develop mail lists. Mail the 6 envelopes to the following
addresses:

#1) Chuck Robertson 2262 Jamestown Ln. Carrollton,TX zip 75006

#2) Lenny Viner 1 milestone Rd. Rye Brook NY 10573

#3) G. Koenig 15558 Old Newport Ave. Baton Rouge,La. 70817

#4) Rudy Mahoney 597 Cote St. Antoine Montreal, Quebec H3Y 2K5

#5) Michelle Dunn PO Box 221 Williamson, Ga 30292

#6) Gayle Failing 924 east tinkham av # 206, ludington, mi 49431

STEP 2: Now take the #1 name off the list that you see above, move the other
names up (6 becomes 5, 5 becomes 4, etc?.) and add YOUR Name as
number 6 on the list.

STEP 3: Change anything you need to, but try to keep
this article as close to original as possible. Now, post your amended article to
at least 200 newsgroups, message board. (I think there are close to 24,000
groups) All you need is 200, but remember, the more you post, the more
money you make

!---- DIRECTIONS----HOW TO POST TO
NEWSGROUPS, MESSAGE BOARD----------

Step 1) You do not
need to re-type this entire letter to do your own posting. Simply put your
cursor at the beginning of this letter and drag your
Cursor to the bottom of this document, and select 'copy' from the edit
menu. This will copy the entire letter into the computer memory.

Step 2)
Open a blank 'notepad' file and place your cursor at the top of the
blank page.
>From the 'edit' menu select 'paste'. This will paste a copy of the letter into
notepad so that you can add your name to the list.

Step 3) save your new
notepad file as a .txt file. If you want to do your postings in different sittings,
you'll always have this file to go back to.

Step 4) Use Netscape or Internet explorer and try searching for various
newsgroups (on-line forums, message boards, chat sites, discussions.) Just
example you log on any search engine like
yahoo.com,google.com,altavista.com,excite.com then you search with this
subject ?millionaire message board? or ?money making message board? or
?employment message board? or ?money making discussions? or ?money
making forum? or ?business message board? etc. You will find thousands &
thousands of message boards. Click one by one then you will find the option
post a new message. :

Step 5) Visit these message boards and post this article as a
new message by highlighting the text of this letter and selecting paste from
the edit menu. Fill in the Subject, this will be the header that
everyone sees as

they scroll through the list of postings in a particular group, click
the post
message button. You're done with your first one!.

: Congratulations? THAT'S IT! All you have to do is jump to different
newsgroups and post away, after you get the hang of it, and it will
take about
30 seconds for each newsgroup! ** REMEMBER, THE MORE
NEWSGROUPS OR MESSAGE BOARD YOU POST IN, THE MORE
MONEY YOU WILL
MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200** That's it!
You will begin receiving money from around the world within days! You
may
eventually can rent a P.O. Box due to the large amount of mail you will
receive. If you wish to stay anonymous, you can invent a name to use,
as long
as the postman will deliver it. **JUST MAKE SURE ALL THE
ADDRESSES ARE CORRECT. **

: Now the WHY part: Out of 200 postings, say I receive only 5 replies
(a very
low example). So then I Made $5.00 with my name at #6 on the letter.
Now,
each of the 5 persons who just sent me $1.00 make the MINIMUM 200
postings, each with my name at #5 and only 5 persons respond to each of
the
original 5, that is another $25.00 for me, now those 25 each make 200
MINIMUM posts with my name at #4 and only 5 replies each, I will bring
in
an additional :$125.00! Now, those 125 persons turn around and post the
MINIMUM 200 with my name at #3 and only receive 5 replies each, I will
make an additional $625.00! OK, now here is the fun part, each of those
625
persons post a MINIMUM 200 letters with my name at #2 and they only
receive 5 replies, that just made me $3,125.00!!! Those 3,125 persons
will all
deliver this message to 200 newsgroups with my name at #1 and if still
5
persons per 200 newsgroups react I will receive $15,625.00! With an
original
investment of only $6.00! AMAZING! When your name is no longer on the
list, you just take latest posting in the newsgroups, and send out
another
$6.00 to names on the list, putting your name at number 6 again. And
start
posting again. The thing to remember is, do you realize that thousands
of
people all over the world are joining the internet and reading these
articles
everyday, JUST LIKE YOU are now!! So can you afford $6.. and see if it
really works?? I think so? People have said, 'what if the plan is

played out and
no one sends you: the money? So what are the chances of that happening
when there are tons of new honest users and new honest people who are
joining the internet and newsgroups everyday and are willing to give it
a try?
Estimates are at 20,000 to 50,000 new users, every day, with thousands
of
those joining the actual Internet. Remember, play FAIRLY and HONESTLY
and this will work.

3116. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 22:21:18 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <4223997B.3D4023FD@deadend.com>
Source record: 81305
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

```
Cecil Moore wrote:
>
> Rich Grise wrote:
> > Evidently, the guy's never tuned up a 40 meter pi-net output transmitter. ;-)
> >
> > If that's not impedance matching, I don't know what it is! (Oh, "Load line"
> > matching? What are the two parameters of the load line? Voltage and Current,
> > right? What's the slope of the load line? Impedance!)
>
> And there's the catch. If the load line is the source
> impedance, the load (not the designer) effects the source
> impedance.

Exactly. Pure coincidence.
```

3117. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 22:40:30 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <42239DFB.A923FFD1@deadend.com>
Source record: 81306
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Allan Herriman wrote:
>
> On Sat, 26 Feb 2005 04:53:03 +0000 (UTC), "Reg Edwards"
> <g4fgq.regp@ZZZbtinternet.com> wrote:
>
> >The phrase "output impedance" in connection with amplifiers is ambiguous and
> >likely to result in arguments.
> >
> >The correct description is "internal impedance" or "internal resistance" and
> >should always be used.
>
> S22 is fairly well defined.

Just to bring back to the original discussion and reiterate:

S22 is a small signal (linear) parameter, by definition. It does not apply to the large signal environment.

This idea is somewhat related to the idea that power amps should be tuned for "maximum transfer of power," which is a small signal (s-param) issue, and requires conjugate matching. The idea is incorrect because it ignores the practical large signal non-linearity and *any* consideration of DC to RF efficiency (which is prime for PA design). Linear parameters provide *no* recognition of things like DC to signal power efficiency and therefore practical issues like supply rails.

First order matching of an RF PA to a load involves transforming the load to the optimum point on the AC load line (for example, more or less equal positive and negative swing limits for class A). That's what "matching" is for an RF PA. It makes no statement about actual "output impedance" of the source. What is said is that "such and such RF PA will deliver X power into some specifed impedance within some VSWR circle." That's all. The concept of output impedance begins to break down for large signal devices.

3118. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 22:53:17 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <4223A0FA.46B2DE75@deadend.com>
Source record: 81307
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

```
Tam/WB2TT wrote:
>
> "Rich Grise" <richgrise@example.net> wrote in message
> news:pan.2005.02.26.02.11.30.772360@example.net...
> > On Fri, 25 Feb 2005 17:59:56 -0500, Tam/WB2TT wrote:
> >
> >>
> >> "gwhite" <gwhite@deadend.com> wrote in message
> >> news:421E98CC.6E3BDC78@deadend.com...
> >>> Richard Clark wrote:
> >>>>
> >>>> On Wed, 23 Feb 2005 19:08:20 GMT, gwhite <gwhite@deadend.com> wrote:
> >>>>
> >>>> >RF transmitters are not ....
> >>>>
> >>>> Sorry OM,
> >>>>
> >>>> This was all nonsense.
> >>>
> >>> Nice articulation. I don't know who OM is, but RF transmitter power
> >>> amps
> >>> are
> >>> not "impedance matched." Neither are audio power amps for that matter.
> >>
> >> My stereo amp has a spec on output impedance. As I recall, it was around
> >> 0.16 Ohms. Intended load is 4 - 16 Ohms.
> >>
> >
> > That works because the transmission line is less than 0.01 wavelength.
> > So impedance matching becomes moot. If the speaker line were 1/4
> > wavelength
> > long, there would be almost no signal transferred at all.
> >
> > Cheers!
> > Rich
> >
> >
> There is nothing wrong with driving a transmission line/antenna from a zero
> impedance source. It does NOT change the SWR. The point is that an audio
> amplifier with a damping factor of 50 is NOT conjugate matched.
>
> Somebody mentioned Motorola Application note 721. This is what it says:
>
```

> **
> " ..the load, in first approximation, is not related to the device, except
> for VCE(sat). The load value is primarily dictated by the required output
> power and the peak voltage; it is not matched to the output impedance of the
> device. "
> **
***
>
> When device people talk about "matching", they mean matching the load to
> what the transistor wants to see, which is not the conjugate of the output
> impedance. The way this is done is to build an amplifier, and vary the load
> until maximum output power is reached. The transistor is then removed, and
> the impedance looking into the coupling network is measured. The conjugate
> of this is sometimes listed as "output impedance" on data sheets. Newer data
> sheets will have an asterisk * next to that, and a note explaining what it
> means. If you look at Philips literature, you will see exactly the same
> explanation.

Nice. Exactly: "what it wants to see" is perfect. Of course, "varying the load" requires load pull test equipment and that can be expensive. When load pull equipment is not available, we're stuck with other methodology. In that case, my first order cut is the AC load line, a harmonic short at the device, and enough flexibility in the layout to pull it in by cut and try. I haven't used ADS or Microwave Office's Harmonic Balance simulators. I suppose with good behavioral models and a good simulator, a good deal of cut and try could be circumvented.

Obviously people don't have 100 W (or more!) network analyzers looking into the output and pretending the device is similar to a linear small signal device.

3119. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 23:01:11 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <4223A2D4.61D55C9F@deadend.com>
Source record: 81308
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Cecil Moore wrote:
>
> gwhite wrote:
> > The strongest argument for dropping the impedance matching concept is PA
> > efficiency, and therefore maximum signal swing. Obtaining maximum swing is a
> > load line issue.
>
> So what impedance does the reflected wave encounter?

Don't know. Whatever mismatch there is, at whatever moment in time, it simply results in reflection back towards the load. Reflections could also cause additional non-linearity in the PA. Therefore reflections for higher powered PA's are directed off to a dummy load via a circulator.

3120. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 23:06:36 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <4223A41A.7700105A@deadend.com>
Source record: 81309
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Richard Clark wrote:
>

> No amount of armchair philosophies about
> Thevenin's theorem will replace that loss.

Thevenin's is a linear theorem. Large signal devices are not linear. (Hey, maybe triodes are, but I don't use them for PA's.)

There is no armchair philosophy about Thevenin's theorem because it does not apply in the RF PA situation. Your's is a red herring.

3121. Re: EZNEC Model of a Tilted Half Rhombic Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 23:17:54 UTC
From: "William M. Bickley" <bickley@dmv.com>
Message-ID: <11279l2iql5bp8e@corp.supernews.com>
Source record: 81310

For anyone who's curious, the antenna is described as follows:
The tilted half-rhombic antenna resembles the more familiar "sloping V" antenna. The difference is that the tilted half rhombic is fed at an end, and a sloping V is fed at the center (apex). The feedpoint and terminating point of the antenna are placed on diagonally opposite corners of the given area. To keep the supporting structure from being an obstruction, it is located in one of the remaining corners.

From a bird's eye view, the footprint of the antenna is a letter "L", with the apex at the junction of the two legs. The antenna has 27.2 meters of wire in each leg. The included angle formed by the two legs is 95 degrees. The height at the apex is 9.5 meters. A 9:1 transformer is located at the feed end. A 9:1 transformer is attached at the terminating end, to which is attached a 50 ohm dummy load. a counterpoise wire runs between the two transformers, and runs "along or just a few inches below ground."

The gain and SWR numbers included in the article (using AO) are:

Freq Gain (dBi) SWR

28.0 7.5 1.94

24.9 7.1 1.72

21.0 7.0 1.46

18.1 6.0 1.26

14.0 4.0 1.60

10.1 1.7 1.34

Bill

"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:vub621tfchhkota5cu8j1augv6ukst9jen@4ax.com...
> On Mon, 28 Feb 2005 08:34:30 -0500, "William M. Bickley"
> <bickley@dmv.com> wrote:
>
> >I still have my training wheels on, but I am trying to model the subject
> >antenna, as described in the ARRL's Antenna Classics.
> >
> >The feed end at ground level calls for a 9:1 transformer. The opposite
end
> >(also at ground level)calls for a 9:1 transformer with a 50 ohm dummy
load
> >attached. How would I include these in the model?
>

> I would include a one-segment wire at each end to hold the source and
> load. Use a 450 ohm load and set the alternate SWR Z to 450 if you
> want to see the SWR normalized to that value.
>
> This assumes that the 9:1 transformers don't add any reactive effects,
> something you can't know anyway without some measurement
> characterization.

3122. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-02-28 23:58:58 UTC
From: kensmith@green.rahul.net
Message-ID: <d00b82irq4@blue.rahul.net>
Source record: 81311
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <pan.2005.02.28.02.15.08.933643@att.bizzzz>,
keith <krw@att.bizzzz> wrote:
>On Sun, 27 Feb 2005 17:12:46 +0000, Ken Smith wrote:
>
>> In article <CVcFzUAFBXICFwjZ@jmwa.demon.co.uk>,
>> John Woodgate <noone@yuk.yuk> wrote:
>> [...]
>>>If the FM is what passes for music these days, it's MUCH better IMHO.
>>
>> There is very little that is sent in the form of radio waves that is worth
>> the electrical power to send it.
>
>
>Hmm, many advertisers would disagree. Since they have real money at stake
>and you don't...

They say that 1/2 of all advertising money is just wasted. The problem is
no-one can say which half.

Besides the advertisers don't care about the value of what is sent. They
only care about the wallet of those who are listening.

>
>> The really sad thing is that much of
>> what is send via FM is really "voice grade" material. When FM was new,
>> the material for FM was specially produced to take advantage of the wide
>> bandwidth and large dynamic range.
>
>Bandwidth, perhaps. Wide dynamic range? The FCC rules seem to
>suggest otherwise.

How do you arrive at that? FCC rules don't specify the nature of the
music programming, really. If the "music" always has the modulation index
at least 30% with rap, the dynamic range actually needed is much less than
for something from BareNakedLadys

--
--
kensmith@rahul.net forging knowledge

3123. Re: MFJ 1798 Vertcal

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 00:32:06 UTC
From: Jerseyj <jerseyj69@comcast.net>
Message-ID: <jerseyj69-2FCC34.19314628022005@news.comcast.giganews.com>
Source record: 81312

In article <1124tc95reel834@news.supernews.com>,
"Charlie" <charlie@earthlink.com> wrote:

> You might want to consider the Hustler 4,5 or 6 - BTV. Requires no guying
> and is easy to assemble (30 mins) and tune (15mins). It is sleek in
> appearance and with ample radials it is a very usable DX antenna on all it's
> bands.
>
> 1. http://www.ad5th.com/5-BTV.html
> --
>
> Charlie
> Ham Radio - AD5TH
> www.ad5th.com
> Live Blues Music
> www.492acousticblues.com
>
>
Hi there,
I looked at the 6-BTV as a possibility, doesn't do 12M but otherwise
looks interesting, also requires radials which the MFJ does not...looks
like you do blues music too, I play a little harp *smile*, or used to.

3124. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 01:16:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <44f721927lij9b1bsu0fl1dualbgnf1sa8@4ax.com>
Source record: 81313
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Mon, 28 Feb 2005 22:53:17 GMT, gwhite <gwhite@deadend.com> wrote:

>Obviously people don't have 100 W (or more!) network analyzers looking into the
>output and pretending the device is similar to a linear small signal device.

Hi OM,

Well, it is more accurate to say that you don't, that is for sure.
Defining a solution by negative results can fill up a library without
any positive accomplishment. Obviously people don't have a nuclear
reactor, or lunar lander, or bank account to balance the national
debt. The joke of this, of course, is that no one needs a 100 W (or
more!) network analyzer, or nuclear reactor, or lunar lander, or bank
account to balance the national debt to explain a rather more trivial
problem. Which, by the way, has nothing to do with pretending at all.

The suggestion that
> requires load pull test equipment and that can be expensive
does not negate its existence which commonly proves what you choose to
dismiss as impossible. I have calibrated this gear (called an
artificial or active load), and the gear (called transmitters) it
tests and there are no differences in Physics based upon your
presumption of low-power/high-power demarcations.

To say
>pretending the device is similar to a linear small signal device
is one of those assumptions forced into the argument. There are any
number of ways to do something wrong. Trumping none of these straw
men validates another wrong impression passing as theory. This
returns us to the imposition of impossibilities to answer a rather
mundane concept, eg.
>pretending the device is similar to a small nuclear device
>pretending the device is similar to a mars rover
>pretending the device is similar to the national debt of Lithuania

So to return to a common question that seems to defy 2 out of 3
analysis (and many demurred along the way) - A simple test of a
practical situation with a practical Amateur grade transistor model
100W transmitter commonly available for more than 20-30 years now:
1. Presuming CW mode into a "matched load" (any definition will do);
2. Report the DC power consumed before hitting the key;
3. Report the DC power consumed while holding the key.

Concurrently note:
A. Report Heat Sink Temperature for a previously idle/rcv condition;

B. Report Heat Sink Temperature after 10 minute key-down.

For a hypothetical "100W" model (again, a contemporary, common example for Amateur use) available through standard commercial venues:
2. About 20W - 30W
3. About 200W - 250W
A. About 20 degrees C (or room temperature)
B. Well above 37 degrees C (or skin temperature)

Now, if we are to be any judge of efficiency (Thevenin does not have to be invoked, condemned, or venerated); then it runs close to 50% (ï¿½10%). Others can invoke their favorite deity to explain.

Now, if we are to be any judge of dissipation (no requirement for advanced degree); then heat as a loss by virtue of less than 100% efficiency is quite evident. Others can invoke photons to describe why.

To forestall any armchair engineers, yes, this efficiency is System efficiency. However, I would be surprised if a practical common Amateur grade transistor model transmitter commonly available for more than 20-30 years now has any configuration that does not apply supply voltage directly to the final transistors; and instead adds a significant current path outside of this load (citations to available schematics would be compelling, but any argument without this would be speculation). It takes very little effort to subtract out the power drain of the receive mode (being very representative of the similar power demand of supporting circuitry for transmit up to the driver stage). Barring such amazing evidence of a significant power drain not found in the finals, it follows that a simple computation of efficiency has its merit and has been met.

73's
Richard Clark, KB7QHC

3125. Re: Speaking of ground rods - was: Cold Water...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 01:32:29 UTC
From: Buck <iam@this.site>
Message-ID: <16g721lkb39d3evjri3lpa3tb67dppobou@4ax.com>
Source record: 81314

Thank you, Jack... (see below)

On Mon, 28 Feb 2005 00:38:18 -0500, "Jack Painter" <223bthp@cox.net>
wrote:

>Hi Buck,
>
SNIP

>For HF-only feedlines (where an extra 40-60' of coax would add superficial
>loss) there should be no excuse for not bringing all feedlines into the
>structure only at the service entrance. UHF systems that suffer much higher
>line loss tempt us to bring antenna feedlines directly into the radio shack.
>THAT causes a major bonding headache. This is because we have to achieve
>such low impedance connections to the service ground that lightning will
>never choose a path up from ground, through our equipment, and out via the
>house wiring to get back to the service entrance ground. We are never fully
>protected from such occurrence if the station ground and service ground are
>apart from each other, no matter how well they are bonded. But we can be
>reasonably protected in that respect, when the bonding jumper is of
>significantly lower impedance than the AC wiring in the home.
>
>#8 copper is no where near the "significantly lower impedance" we're talking
>about. Either wide copper strapping or #2 or #4 copper would be a better
>example for the bonding connection between service entrance and station
>ground. The more places along the way that bonding jumper is also bonded to
>the outdoor antenna ground fields, radials, etc, the better. Voltage
>division plays a big part when everything is bonded and many grounding
>electrodes are used.
>
>Hope this helps,
>73,
>Jack Painter
>Virginia Beach, Virginia

While I am still digesting this a bit, I at least understand why I was
so confused about the ground loop in the first place. This also
explains why some contradict each other.

As for trying to reach the service entrance here, it is almost not
practical to do so with the antenna elements. The Service entrance
here is kitty-cornered from both the shack and the direction of the
antennas. The antennas would have an extra 150 + feet to feed to go
directly to the service entrance. (dipoles only, no verticals at this
time).

The more I re-read what you said, the more I think I understand. I am in the process of planning a move so I am not planning to improve conditions here but at least I know how to plan for the new QTH.

My battery charger is double fused (positive and negative leads) so I would assume that if lightning tried to find its way to the ground side, it would blow the fuses first. Of course, if it takes 10,000 volts to jump approximately one inch and lightning is typically hundreds or thousands of feet high.... little good the fuse would be in a direct hit.

One of my plans for my next QTH will be to mount feed-through SO-239s on an metal plate and connect my lightning arresters and ground them before the antennas come into the shack. Based on your message, I am thinking that a good connection from there to the service panel ground would be good too?

Thanks again,

--
73 for now
Buck
N4PGW

3126. Re: Speaking of ground rods - was: Cold Water...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 01:48:26 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <KRPUd.36612$%U2.1405@lakeread01>
Source record: 81315

"Buck" <iam@this.site> wrote
/snip
> One of my plans for my next QTH will be to mount feed-through SO-239s
> on an metal plate and connect my lightning arresters and ground them
> before the antennas come into the shack. Based on your message, I am
> thinking that a good connection from there to the service panel ground
> would be good too?
>
> Thanks again,
> --
> 73 for now
> Buck
> N4PGW

Yes Buck, it would be good. Real good ;-)

Even if you add a 120/240v service branch panel to your new shack (as I did), NEC prohibits a separate neutral/ground bonding at that panel. For our purposes, it could be argued that we would be much safer if we could do that, and then let that ground share with the station single point ground. But if you ever had a fire for any reason the insurance would distance themselves from you fast when they saw that. Better to stay code and suffer the (cost) consequences of making the bond to the main service entrance.

73,
Jack

3127. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 02:18:18 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_4223d884@fidonet.org>
Source record: 81325

"Richard Harrison" bravely wrote to "All" (28 Feb 05 12:09:32)
--- on the heady topic of "Re: Say what you mean."

RH> From: richardharrison@webtv.net (Richard Harrison)
RH> Xref: aeinews rec.radio.amateur.antenna:26155

RH> When there`s no signal input to a Class A amplifier, its power input
RH> is volts x amps and its efficiency is zero. Maximunm undistorted output
RH> requires 1/2 the d-c input to the stage. As this power exits the
RH> stage, it cools as the remaining dissipation is only 1/2 the no-signal
RH> dissipation.

I'm sorry but it is an erroneous conclusion to think it cools. Don't
you recall mentioning that the "average" voltage and current remains
the same? On the contrary, the stage would generate a little more heat
due to the a.c. losses incurred from a small, but non-negligible,
amount of internal resistance. That is because this internal loss
behaves just like a small resistance in series with the source of emf.

RH> An amplifier can be a linear source without operating under Class A
RH> conditions.

I would really find it instructive if you finished up replying to this
message with an example of a "linear" source not operating in Class A?

A*s*i*m*o*v

... As I suspected, you're a rank sentimentalist! --Cpt. Louis Renault

3128. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 02:20:19 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <DjQUd.10260$Pz7.463@newssvr13.news.prodigy.com>
Source record: 81316

Cecil Moore wrote:
> Tom Donaly wrote:
>
>> It's RF Power Amplifier Output Impedance Revisited, by
>> Robert L. Craiglow. Take it with a grain of salt, Cecil.
>> There is more than one conceptual mistake contained in
>> the article.
>
>
> Shirley, you jest. Conceptual mistakes in QEX? :-)
> Unfortunately, I don't have a way to read it. Today
> I got my 2004 ARRL Periodicals on CD-ROM but am not
> a subscriber to QEX since they refused to publish
> my article that would have ended all arguments. :-)

Try to find a copy and read it, anyway, Cecil. It's
worth a pair of bloodshot eyes for its historical value
if nothing else.
73,
Tom Donaly, KA6RUH

3129. Cobra 1000 vs hidden mobile antennae

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 02:23:31 UTC
From: Fuzzball <president@whitehouse.gov>
Message-ID: <38i252F5mq6jbU1@individual.net>
Source record: 81317

Hi All:

I currently have a magnetic mount Cobra 1000 antennae on my Suburban, and am considering a switch to some type of hidden antennae, which I have seen somewhere long ago. Most of my CB use is on trips where I caravan with someone, and so performance is not the most important issue.

Do any of you have a recommendation of where/what/how a hidden antenna works and what it's like?

Thanks!

3130. Re: EZNEC Model of a Tilted Half Rhombic Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 02:31:24 UTC
From: Buck <iam@this.site>
Message-ID: <nuk721154h37v8dg3jfevnjlf14qc7d5ev@4ax.com>
Source record: 81318

On Mon, 28 Feb 2005 18:17:54 -0500, "William M. Bickley"
<bickley@dmv.com> wrote:

>Freq Gain (dBi) SWR
>
>28.0 7.5 1.94
>
>24.9 7.1 1.72
>
>21.0 7.0 1.46
>
>18.1 6.0 1.26
>
>14.0 4.0 1.60
>
>10.1 1.7 1.34
>
>
>
>Bill

how much, if any, loss would there be to that gain due to SWR?

--
73 for now
Buck
N4PGW

3131. How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 02:44:49 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <1127lpaqmlu6v49@news.supernews.com>
Source record: 81319

Using a Hustler 5-BTV ground mounted with 72 radials. I have heard about antenna modeling but is there any way to do a real world take off angle measurement???

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

3132. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 02:58:31 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <56m721pc1h5r35iaq62310gl0marn2c33m@4ax.com>
Source record: 81320
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Fri, 25 Feb 2005 22:56:47 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Ken Smith wrote:
>> If you then
>> put in the output device protection they didn't include, you end up with
>> the matching as I explained elsewhere.
>
>SWR foldback is part of impedance matching?

It is in the sense that it improves the source match by trying to hold
the forward power constant regardless of load. Most SWR foldback
systems overreact but a good ALC system, what we called a "leveling
loop" in waveguide reflectometers back in the mid-20th century
certainly improve the source match.

3133. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 03:23:28 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <ReRUd.36940$%U2.6382@lakeread01>
Source record: 81321

"Charlie" <charlie@earthlink.com> wrote
> Using a Hustler 5-BTV ground mounted with 72 radials. I have heard about
> antenna modeling but is there any way to do a real world take off angle
> measurement???

It will take a lot of thrust, that 5-BTV might require 2 propane tanks ;-)
Be sure to disconnect the radials first!

Sorry, couldn't resist that.

Jack

3134. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 03:27:54 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4223e211$1_2@127.0.0.1>
Source record: 81322

Charlie wrote:
> Using a Hustler 5-BTV ground mounted with 72 radials. I have heard about
> antenna modeling but is there any way to do a real world take off angle
> measurement???

Sure, just rent a helicopter and make field strength
measurements.
--
73, Cecil http://www.qsl.net/w5dxp

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3135. Connecting external antenna to a GMRS radio

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 04:55:25 UTC
From: Bababooey
Message-ID: <cb44f230d856c0e5ca7f677377e3a9e4@localhost.talkaboutradio.com>
Source record: 81323

I'm a "newbie" here, and would like to ask for your help with a project I'm working on for school.
I have a GMRS radio with an built-in antenna, and just for experimentation I wanted to see how my coverage would be with an external antenna (I do have a GMRS licence from the FCC). The integrated antenna which is on this radio simply connects to the PC board of the radio when you screw the outter shell of the radio together. I have a 1/4 wave ground plane antenna tuned to the proper GMRS frequency, and I'd like to connect it to this radio, but my question is this...When connecting an external antenna, I will connect the inner wire from the coax to the circuit board where the radio's original antenna was attached. However, I'm not certain where the outter shield of the coax should be connected..To the - side of the battery connection in this GMRS radio? Should there be some kind of capacitor between the inner wire and outter shield of the coax?
I'm only connecting this external antenna long enough to take some measurements I need for this research project for school, then will return it to normal. This isn't a long term illegal modification I'm asking you to help me with, etc.
Thanks for your help!

3136. Re: Connecting external antenna to a GMRS radio

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 05:51:56 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <11280o3eocagrb7@corp.supernews.com>
Source record: 81324

Bababooey wrote:

> I'm a "newbie" here, and would like to ask for your help with a project I'm
> working on for school.
> I have a GMRS radio with an built-in antenna, and just for
> experimentation I wanted to see how my coverage would be with an external
> antenna (I do have a GMRS licence from the FCC). The integrated antenna
> which is on this radio simply connects to the PC board of the radio when
> you screw the outter shell of the radio together. I have a 1/4 wave
> ground plane antenna tuned to the proper GMRS frequency, and I'd like to
> connect it to this radio, but my question is this...When connecting an
> external antenna, I will connect the inner wire from the coax to the
> circuit board where the radio's original antenna was attached. However,
> I'm not certain where the outter shield of the coax should be
> connected..To the - side of the battery connection in this GMRS radio?
> Should there be some kind of capacitor between the inner wire and outter
> shield of the coax?
> I'm only connecting this external antenna long enough to take some
> measurements I need for this research project for school, then will return
> it to normal. This isn't a long term illegal modification I'm asking you
> to help me with, etc.
> Thanks for your help!
>
>
Being GMRS your radio follows different regulations from FRS radios,
however since the radios you are working with have attached antennas I
would assume that the type acceptance is predicated on only using the
attached antennas. If you remove these antennas and attach an external
antenna you will be in violation of the registration. Momentary
modification or not your base action will be illegal.

If you do do the mod attach the shield to the foil that goes around the
perimeter of the pc board. That is usually a ground. Check the negative
lead (black) from the battery connector. It should connect to this foil
somewhere.

Dave Nagel WD9BDZ

3137. Re: Cobra 1000 vs hidden mobile antennae

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 09:36:21 UTC
From: Bababooey
Message-ID: <6ce75eaac63bc4b36a99a5d0ad2b253c@localhost.talkaboutradio.com>
Source record: 81326

Fuzzball,

I've used this one from JC Whitney with some success (paste this string into your browser)....

http://www.jcwhitney.com/autoparts/Product/showCustom-0/Pr-p_Product.CATENTRY_ID:2001459/c-10101/Nty-1/p-2001459/Ntx-mode+matchallpartial/N-10101/tf-Browse/sct-body/s-10101/th-StoreCatalogDisplay/Ntk-AllTextSearchGroup/ss-10101?Ntt=antenna

This antenna costs under $5, and from what I remember, reception was decent. Basically you unplug your vehicle's AM/FM antenna from the radio and plug it into this small box from JC Whitney. They you use the enclosed cables to connect from the box to your AM/FM radio and to your CB. There are 2 different SWR adjustments on this small box...1 is for your AM/FM radio (if I remember correctly, you tune to a distant station and turn the adjustment until the station is most clear) and then you tune your CB to a certain channel, and this box has a built-in LED that you use to make the proper adjustments to the SWR so your CB reception is good. From what I remember, it worked well, and for under $5, you can't go wrong!

Hope this helps.

3138. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 13:03:44 UTC
From: munterlap@hotmail.com
Message-ID: <d01p81$8oa$1@newsg2.svr.pol.co.uk>
Source record: 81327

wind a small RX i.e.: a field strength coil and LED indicator, or buy one of them cheap 'bug detectors', stick on a gas filled WX balloon, get a hand held radio or mobile phone, and place a RX next to the radio Mic, put your radio on VOX and key from out side, by talking into the hand held, drag the balloon round with long a string observing the bug detector as a led field strength meter by viewing the LED barographs twinkling light, with a binocular. Easier at night.

3139. Re: 6 meter wire antenna for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 13:50:58 UTC
From: KC8QJP KATHY LEE <N8WWM@ARRL.NET>
Message-ID: <lis82110j8bt2m80ip4gul4nd4qpn3j3n0@4ax.com>
Source record: 81328
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

All posts from "Psychiatrist to keyclowns" ARE My
hubby N8WWM. He gave me herpes and anal warts but
I still love him, in spite of his repeater jamming
ways and felonies. I like fucking his brother
Lance more, but I'm gonna really fuck up Doug
soon. hehe

On 28 Feb 2005 05:58:36 -0800, "Psychiatrist to
keyclowns" <keyklonzrnutjobs@yahoo.com> wrote:

>All posts that say they are from Kathy Lee are forges done by a warped
>freak who is mad because he got his previous ISP yanked for making
>violent threats to people.
>Jerry Martes wrote:
>> Kathy
>>
>> Thats a really interesting antenna. And it isnt too expensive
>either.
>> Could 8 of them be connected in parallel to get 21 db gain over a
>dipole?
>>
>> Jerry
>>
>>
>> "KC8QJP KATHY LEE" <N8WWM@ARRL.NET> wrote in message
>> news:svc1219h100jvf50he98s6baes2hpaqhlb@4ax.com...
>> > Nice antenna, designed after the UKSMG design I
>> > "borrowed" (tee hee) from GW0WFH.
>> >
>> > http://www.uksmg.org/longwire.htm
>> >
>> > This is a great working antenna, with 12dB
>> > measured gain over a dipole. It isnt a beam, but
>> > it sure is better than a dipole!
>> >
>> > $140.00 plus $6.50 shipping in lower 48 states.
>> >
>> > Email N8WWM@arrl.net for more information and
>> > photos. I'll take paypal, a check, money order,
>> > whatever.
>> >
>> >
>> > _____________________________________
>> > Usenet Zone Free Binaries Usenet Server

>> > More than 120,000 groups
>> > Unlimited download
>> > http://www.usenetzone.com to open account

Usenet Zone Free Binaries Usenet Server
More than 120,000 groups
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http://www.usenetzone.com to open account

3140. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 13:58:11 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <422475cc$1_1@127.0.0.1>
Source record: 81329

Asimov wrote:
> RH> An amplifier can be a linear source without operating under Class A
> RH> conditions.
>
> I would really find it instructive if you finished up replying to this
> message with an example of a "linear" source not operating in Class A?

Richard may be referring to Class AB push-pull where
the source is more than one device.
--
73, Cecil http://www.qsl.net/w5dxp

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3141. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 14:10:03 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <1128tu7qeo5e6c0@news.supernews.com>
Source record: 81330

Thanks for all those helpful remarks..I have the LED ready along with the balloon. I really liked the helicopter idea....you guys are so helpful!! LOL!!!

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

<munterlap@hotmail.com> wrote in message
news:d01p81$8oa$1@newsg2.svr.pol.co.uk...
> wind a small RX i.e.: a field strength coil and LED indicator, or buy one
> of
> them cheap 'bug detectors', stick on a gas filled WX balloon, get a hand
> held radio or mobile phone, and place a RX next to the radio Mic, put
> your
> radio on VOX and key from out side, by talking into the hand held, drag
> the
> balloon round with long a string observing the bug detector as a led field
> strength meter by viewing the LED barographs twinkling light, with a
> binocular. Easier at night.
>
>

3142. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 14:29:27 UTC
From: richardharrison@webtv.net
Message-ID: <8408-42247C47-112@storefull-3253.bay.webtv.net>
Source record: 81331

Asimov wrote:
"I`m sorry but it is an erroneous conclusion to think it cools (when signal exits)."

The Class A amplifier gets all its power from the d-c supply and it is constant, signal or no signal. With signal power output, some of the power in exits to the load.

I`ll use Cecil, W5DXP`s argument. Energy must be conserved. Energy in equals energy out. If some goes to a load it does not stay within the amplifier to make feat.

Asimov also wrote:
"---linear source not operating Class A?"

I`ll give an example. The Class B amplifier is biased near current cut-off. Current is near zero when the signal is. Yet, output can favorably vie with that from a Class A amplifier for purity. I learned that nearly 60 years ago when I built my first 6N7 phonograph amplifier.

Best regards, Richard Harrison, KB5WZI

3143. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 15:02:41 UTC
From: richardharrison@webtv.net
Message-ID: <8408-42248411-114@storefull-3253.bay.webtv.net>
Source record: 81332

Cecil, W5DXP wrote:
"Richard may be referring to Class AB push-pull where the source is more than one device,"

Push-pull works to eliminate harmonics without filters. In my Kenwood TS-130S, the push-pull devices are 2SC2290*J`s, if my squint is right. Pc=175 (W), VCBo=45 (V), IC=20 (A), etc.

Best regards, Richard Harrison, KB5WZI

3144. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 15:21:18 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42248948$1_2@127.0.0.1>
Source record: 81333

Richard Harrison wrote:
> I`ll use Cecil, W5DXP`s argument. Energy must be conserved. Energy in
> equals energy out. If some goes to a load it does not stay within the
> amplifier to make heat.

From "Electronic Fundamentals and Applications" by
John D. Ryder, regarding Class-A amplifiers:
"As the a-c output increases, the plate loss
decreases and the tube runs cooler."
--
73, Cecil http://www.qsl.net/w5dxp

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3145. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 16:52:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rj6921ht105j869gf6usp2u5h0u1kmj6er@4ax.com>
Source record: 81334

On Monday, 28 Feb 2005 21:18:18 -500, "Asimov"
<Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote:

>I'm sorry but it is an erroneous conclusion to think it cools. Don't
>you recall mentioning that the "average" voltage and current remains
>the same?

Hi OM,

One of those Class A characteristics. It is revealed by the rather
more simple solution to the difficult problem I offered:
What is power in?
What is power out?

This characteristic is part of the lore for those who built their own
equipment as one of several NEVERs
Don't let your amp run without drive;
Don't let your amp run without bias.
Both conditions can lead to melt down.

Unfortunately this kind of Ham memory is fading to the point where
many who witnessed this "internal resistance" are not here to point
out the obvious errors in understanding exhibited by the credit card
generation who build their rigs with plastic.

73's
Richard Clark, KB7QHC

3146. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 17:23:58 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <112999hka7nif05@corp.supernews.com>
Source record: 81335

Cecil Moore wrote:
> Richard Harrison wrote:
>
>> I`ll use Cecil, W5DXP`s argument. Energy must be conserved. Energy in
>> equals energy out. If some goes to a load it does not stay within the
>> amplifier to make heat.
>
>
> From "Electronic Fundamentals and Applications" by
> John D. Ryder, regarding Class-A amplifiers:
> "As the a-c output increases, the plate loss
> decreases and the tube runs cooler."

This is why the load must be matched to the amp. Anyone who has fried a
final will tell you so.
Been there, Done that, Got the bottles to prove it.

Dave WD9BDZ

3147. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 18:06:18 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <4224AF38.770053D4@deadend.com>
Source record: 81337
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Richard Clark wrote:
>
> On Mon, 28 Feb 2005 22:53:17 GMT, gwhite <gwhite@deadend.com> wrote:
>
> >Obviously people don't have 100 W (or more!) network analyzers looking into the
> >output and pretending the device is similar to a linear small signal device.
>
> Hi OM,
>
> Well, it is more accurate to say that you don't, that is for sure.
> Defining a solution by negative results can fill up a library without
> any positive accomplishment. Obviously people don't have a nuclear
> reactor, or lunar lander, or bank account to balance the national
> debt. The joke of this, of course, is that no one needs a 100 W (or
> more!) network analyzer, or nuclear reactor, or lunar lander, or bank
> account to balance the national debt to explain a rather more trivial
> problem. Which, by the way, has nothing to do with pretending at all.

You entirely missed the point. You don't know the output impedance because you don't have a way of determining it by swinging the output full-scale. Even for class A, large signals will/can have rail to rail swing. The device will not be linear for large swings: sinusoidal input swing will not result in a sinusoidal output swing. But "impedance" is a sinusoidal (s-domain) concept. So how can you define an impedance--a sinusoidal concept--when the waveform is not sinusoidal for an inputted sine wave? The point is that the output impedance is time dependent ("causes" the non-sinusoid output for sinusoid drive), which rather makes the concept questionable. As I wrote earlier, one might decide to consider a time averaged impedance, but I'm not clear on what the utility would be.

> The suggestion that
> > requires load pull test equipment and that can be expensive
> does not negate its existence which commonly proves what you choose to
> dismiss as impossible. I have calibrated this gear (called an
> artificial or active load), and the gear (called transmitters) it
> tests and there are no differences in Physics based upon your
> presumption of low-power/high-power demarcations.

There is no "presumption." Linear parameters and theorems totally ignore practical limitations--this is a fact and you can look it up in just about any text on circuit analysis. The simple linear model is perfectly okay for small signal devices. It isn't okay for large signal devices. In any case, load pull equipment does not make the pretense of defining output impedance of an active large signal device. It does say what the load needs to be to acquire maximum

power out of the device.

> To say
> >pretending the device is similar to a linear small signal device
> is one of those assumptions forced into the argument.

No, it isn't. Thevenins and conjugate matching (for maximum power transfer) are explicitly linear small signal device models. Their use in RF PA output design is a misapplication.

> There are any
> number of ways to do something wrong.

We're talking about one of them. Misapplying small signal linear parameters to the output of a large signal device.

> Trumping none of these straw
> men validates another wrong impression passing as theory.
>
> This
> returns us to the imposition of impossibilities to answer a rather
> mundane concept, eg.
> >pretending the device is similar to a small nuclear device
> >pretending the device is similar to a mars rover
> >pretending the device is similar to the national debt of Lithuania

Who are you quoting and why?

> So to return to a common question that seems to defy 2 out of 3
> analysis (and many demurred along the way) - A simple test of a
> practical situation with a practical Amateur grade transistor model
> 100W transmitter commonly available for more than 20-30 years now:
> 1. Presuming CW mode into a "matched load" (any definition will do);

Any definition won't do, and for this discussion the specific "won't do" is using conjugate matching which is a small signal (linear) model.

> 2. Report the DC power consumed before hitting the key;
> 3. Report the DC power consumed while holding the key.

Hey, at least you're recognizing that DC power is important. Where in conjugate matching ideas or Thevenins theorem do you see any concern of DC power? That's right, you don't because they a simple small signal models where DC power and voltage have no bearing because the signals are so small, relatively speaking.

> Concurrently note:
> A. Report Heat Sink Temperature for a previously idle/rcv condition;
> B. Report Heat Sink Temperature after 10 minute key-down.
>
> For a hypothetical "100W" model (again, a contemporary, common example
> for Amateur use) available through standard commercial venues:
> 2. About 20W - 30W
> 3. About 200W - 250W
> A. About 20 degrees C (or room temperature)

> B. Well above 37 degrees C (or skin temperature)
>
> Now, if we are to be any judge of efficiency (Thevenin does not have
> to be invoked, condemned, or venerated); then it runs close to 50%
> (ï¿½10%). Others can invoke their favorite deity to explain.

You brought up Thevenins and armchair philosophy regarding it, not me. I said Thevenins was irrelevent, and now you appear to agree with me. Ken effectively brought up conjugate matching, not me. The original comment I was challenging was:

"...the antenna works as an impedance mathcing network that matches the output stages impedance to the radiation resistance."

I simply wanted to make it clear that the "matching" done was not an issue of "output impedance" per se. It is an issue of how the transistor is to be loaded to extract maximum ouput power.

> Now, if we are to be any judge of dissipation (no requirement for
> advanced degree); then heat as a loss by virtue of less than 100%
> efficiency is quite evident. Others can invoke photons to describe
> why.
>
> To forestall any armchair engineers, yes, this efficiency is System
> efficiency. However, I would be surprised if a practical common
> Amateur grade transistor model transmitter commonly available for more
> than 20-30 years now has any configuration that does not apply supply
> voltage directly to the final transistors; and instead adds a
> significant current path outside of this load (citations to available
> schematics would be compelling, but any argument without this would be
> speculation). It takes very little effort to subtract out the power
> drain of the receive mode (being very representative of the similar
> power demand of supporting circuitry for transmit up to the driver
> stage). Barring such amazing evidence of a significant power drain
> not found in the finals, it follows that a simple computation of
> efficiency has its merit and has been met.

Exactly. It is about DC to RF efficiency, as I've been pointing out since my first post, and which you initially commented was "nonsense" but now seem to agree with. "Impedance matching" meant in the normal sense of conjugate matching for maximum transfer of power is a misapplied small signal concept/model. I think that is all I've really been saying.

3148. Looking for the best 2M/440 mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 18:40:45 UTC
From: "C. J. Clegg" <answer.to.newsgroup@nospam.com>
Message-ID: <sjd921hn9e576malmp8m49im3fnfqgh5vj@4ax.com>
Source record: 81336

Looking for the very best 2M/440 dual-band mobile antenna made.
Looking primarily for the highest gain on both bands. Mounting and
size (length) are not important, i.e. can be anything.

Any suggestions?

Thanks...

3149. Re: Looking for the best 2M/440 mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 19:15:05 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4224c011$1_1@127.0.0.1>
Source record: 81338

C. J. Clegg wrote:
> Looking for the very best 2M/440 dual-band mobile antenna made.
> Looking primarily for the highest gain on both bands. Mounting and
> size (length) are not important, i.e. can be anything. Any suggestions?

My old Comet 2x4max is hard to beat.
--
73, Cecil http://www.qsl.net/w5dxp

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3150. Re: Looking for the best 2M/440 mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 19:20:31 UTC
From: dplatt@radagast.org
Message-ID: <1129g3v2rl53re1@corp.supernews.com>
Source record: 81339

>> Looking for the very best 2M/440 dual-band mobile antenna made.
>> Looking primarily for the highest gain on both bands. Mounting and
>> size (length) are not important, i.e. can be anything. Any suggestions?
>
>My old Comet 2x4max is hard to beat.

Or possibly a Cushcraft A27010S?

<G,D,RLH>

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3151. Re: Looking for the best 2M/440 mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 19:40:53 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <73tef2-36h.ln1@p400bob.lse.com.au>
Source record: 81341

Realising its not what you are after..

- You live in very flat country? Be careful of high gain if you have hills.

- Dont use directive antennas on the mobile (eg a quad/yagi) as most
comms on VHF/UHF happen by reflection once you are beyond LOS and in clutter

- Height above ground clutter is VERY important. Whatever you end up
purchasing see if you can put it on a very high mount. (Even to the
point of mounting a 6ft poll on the vehicle and the antenna on top of
that - you did say length wasnt important!)

Cheers Bob VK2YQA

C. J. Clegg wrote:
> Looking for the very best 2M/440 dual-band mobile antenna made.
> Looking primarily for the highest gain on both bands. Mounting and
> size (length) are not important, i.e. can be anything.
>
> Any suggestions?
>
> Thanks...
>

3152. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 19:41:25 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d02gh5$q0h$1@titan.btinternet.com>
Source record: 81340

The most simple way to describe it is -

With a class-A amplifier the power taken from the DC supply remains constant regardless of signal power output.

The device(s) internal dissipation decreases by the same amount as the signal power output (drive level) increases.

If there's any change in power taken from the DC supply as the power output changes then the device is not operating under class-A distortion-less conditions.

KISS. KISS. KISS. KISS.

To slightly change the subject, anybody who mentions a conjugate match doesn't know what he's waffling about.

And if I remember correctly, a 6N7, a class-B dual-triode, metal tube was specially designed to have a very high Mu and could be operated under very simple zero-bias conditions. Each of the two triodes handled one half of the complete audio sinewave.

With grids in push-pull and the anodes in parallel, you could get 10 watts out of it as an HF frequency doubler.

But it would still take the skin off your fingers.

Ahhh! Happy days!

Punchinello.

3153. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 20:56:46 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_4225583a@fidonet.org>
Source record: 81230

"Cecil Moore" bravely wrote to "All" (01 Mar 05 09:21:18)
--- on the heady topic of "Re: Say what you mean."

CM> From: Cecil Moore <w5dxp@hotmail.com>
CM> Xref: aeinews rec.radio.amateur.antenna:26191

CM> From "Electronic Fundamentals and Applications" by
CM> John D. Ryder, regarding Class-A amplifiers:
CM> "As the a-c output increases, the plate loss
CM> decreases and the tube runs cooler."

Re: harmonic generation...

A*s*i*m*o*v

... Be nice to your kids. They'll choose your nursing home.

3154. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 21:31:42 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4224e016$1_2@127.0.0.1>
Source record: 81342

Reg Edwards wrote:
> With a class-A amplifier the power taken from the DC supply remains constant
> regardless of signal power output.

I wish I had said that, Reg. thanks ...
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
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3155. Re: Looking for the best 2M/440 mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 22:54:37 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <gis921h59eg91i528sr5raa13777nm8hir@4ax.com>
Source record: 81343

On Tue, 01 Mar 2005 13:40:45 -0500, C. J. Clegg
<answer.to.newsgroup@nospam.com> wrote:

>
>Looking for the very best 2M/440 dual-band mobile antenna made.
>Looking primarily for the highest gain on both bands. Mounting and
>size (length) are not important, i.e. can be anything.
>
>Any suggestions?
>
>Thanks...

the best antenna is a dual-bander mounted in a hole drilled in the
middle of your vehicle's roof...

bob
k5qwg

3156. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 23:16:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <52t921hqbmnfidahug2stnibhtm8ilkl7k@4ax.com>
Source record: 81344
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Tue, 01 Mar 2005 18:06:18 GMT, gwhite <gwhite@deadend.com> wrote:

> It is about DC to RF efficiency,

Put a number to it.

>as I've been pointing out since my
>first post, and which you initially commented was "nonsense"

Hi OM,

And so it remains with additional elaborations not quoted here.

>but now seem to agree with.

Seeming is a rather insubstantial thing to hang your theories on.

>"Impedance matching" meant in the normal sense of conjugate
>matching for maximum transfer of power

And this reveals the error of "Seeming" because the so-called meaning
you ascribe is this same nonsense. Pay more attention to reading
instead of writing. It has been pointed out more than once, and by
several, that Matching comes under many headings. The most frequent
violation is the mixing of concepts and specifications (your text is
littered with such clashes).

> is a misapplied small signal
>concept/model. I think that is all I've really been saying.

And I preserved this clash quoted above as an example. If there is
any misapplication, you brought it to the table with this forced
presumption. The misapplication of S parameters to a large signal
amplifier is one thing, to project this error backwards into the
fictive theory that there is some difference between large and small
signal BEHAVIOR (not modeling) is tailoring the argument to suit a
poorly framed thesis.

None of your dissertation reveals any practical substantiation, hence
it falls into the realm of armchair theory. We get plenty of that
embroidered with photonic wave theory that is far more amusing.

73's
Richard Clark, KB7QHC

3157. Lightning and Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-01 23:39:04 UTC
From: wizard12342002@yahoo.com
Message-ID: <1109720344.336570.233730@o13g2000cwo.googlegroups.com>
Source record: 81345

I am trying to gain a better understanding of the issues associated with lightning and grounding, particularly for an amateur radio station. I would greatly appreciate any answers to my questions, given below.

1.) It seems like lightning "finds" a path before actually discharging through it. Is this correct? How fast is the process of finding the path?

2.) Does lightning discharge over one path or many paths? In other words, if lightning strikes a point, and there are two paths from that point to ground, is the energy shared - like a current divider? One would think that this is what happens, with the sharing based upon relative impedances to ground.

3.) This talk about "single point ground" can be confusing, especially when the solution involves multiple ground rods. I believe we are really saying that the station (equipment) should be connected to ground at only one point - but you can have any number of ground connections (i.e., like ground rods) otherwise.

4.) Does the size of an antenna affect the probability of its being struck by lightning, all else being equal? What is the governing relationship?

5.) Finally, consider an amateur antenna on a pole, located some distance from the service entrance of the house. Let's say there is a copper cold water pipe right at the service entrance. Is it wise to place a lightning rod (or rods) right under the antenna, place an arrestor on the coax there and then another arrestor where the coax enters at the service entrance? Is a ground wire needed between the remote ground rod and the cold water pipe?

Thanks in advance,

-JJ

3158. Unlimited Movie/Music/Game Downloads...

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 00:05:11 UTC
From: yumi <ariel4578@yahoo.com>
Message-ID: <1109721911.090882.108750@o13g2000cwo.googlegroups.com>
Source record: 81346

Hi There! Download the Latest Plug-Ins, Games, and More! For more information, please visit www.unlimitedsoftwaredownloads.150m.com
Thank's.

3159. Re: Lightning and Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 00:35:59 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <PT7Vd.37358$%U2.26694@lakeread01>
Source record: 81347

<wizard12342002@yahoo.com> wrote
> I am trying to gain a better understanding of the issues associated
> with lightning and grounding, particularly for an amateur radio
> station. I would greatly appreciate any answers to my questions, given
> below.
>
> 1.) It seems like lightning "finds" a path before actually discharging
> through it. Is this correct? How fast is the process of finding the
> path?

I have 5 minutes before supper to answer this, so it is an off-the-cuff answer which you can look up in greater and possibly more accurate detail later:

For several minutes before a thunderstorm arrives, it pushes a massive wavefront of positive ions over the surface of the earth. This ion "wave" saturates all objects and they begin to emit positive-charged "streamers" skyward toward the thunderstorm cloud. Every object with these positive ions (rocks, buildings, trees, human heads, etc) allows these streamers. Minutes (or seconds) later, a stepped-leader from a cloud will start earthward and the attraction to several of those streamers will grow. Hair could stand up on your neck when this happens. Seconds or parts of a second later, a step-leader will launch from the most favorable of those upward-flowing positive-ion streamers, and the stepped leader will connect to it. A small visible explosion is seen and heard about 150' above ground as this happens (film shows this) and the cloud opens a channel of current to that stepped leader. Milliseconds later a RETURN SROKE from the ground to the cloud opens that stepped leader path wide open, and another pusle or two or three may occur from cloud to ground following that. Lightning has "struck".

>
> 2.) Does lightning discharge over one path or many paths? In other
> words, if lightning strikes a point, and there are two paths from that
> point to ground, is the energy shared - like a current divider? One
> would think that this is what happens, with the sharing based upon
> relative impedances to ground.

Yes multiple paths are likely in most strikes. Current division occurs even through air, we call it voltage division when more than one branch connects with earth, as the current flowing (10-50ka) will be divided according to the varying voltage potentials felt at various points. Voltage division is a good thing when it is where we want it to be. Current then flows on conductors of our choosing!

>
> 3.) This talk about "single point ground" can be confusing, especially

> when the solution involves multiple ground rods. I believe we are
> really saying that the station (equipment) should be connected to
> ground at only one point - but you can have any number of ground
> connections (i.e., like ground rods) otherwise.

That's correct. Ideally there would only be one single point ground for an entire structure. But when radio room and AC service entrance grounds are far apart, we bnd them and connect all forms of grounding systems along the way.

>
> 4.) Does the size of an antenna affect the probability of its being
> struck by lightning, all else being equal? What is the governing
> relationship?

No, but the HEIGHT above ground does. Any object that a rolling ball 300' in diameter would touch as it was "rolled" over your property, is an object that is most likely to be struck if lightning occurs in that general area. Lightning can sideflash horizontally for hundreds of feet, and even change direction more drastically, but the rolling ball defines most likely attachment points for a strike.

>
> 5.) Finally, consider an amateur antenna on a pole, located some
> distance from the service entrance of the house. Let's say there is a
> copper cold water pipe right at the service entrance. Is it wise to
> place a lightning rod (or rods) right under the antenna, place an
> arrestor on the coax there and then another arrestor where the coax
> enters at the service entrance? Is a ground wire needed between the
> remote ground rod and the cold water pipe?

A "Lighttning Rod" is a roof top or other high fastened "collector" of lightning. The modern name for this is an "Air Terminal". From a lightning rod, bonded "Down Conductors" carry the lightning energy to a "Grounding Electrode" (Ground Rod).

A tower is already a lightning "air terminal" and all it needs is a good ground system to divide the vltage and curent in as wide an area as possible. Even the coax shield must be grounded many times along the height of the tower, and an arrestor (or surge protection device) could be attached at the base of the tower also. Yes it would also be used (as is shield grounding) at the entrance to the structure.

Cold water pipes may be bonded as additional voltage division in a lightning protection ground system, but they are only the source of primary single point ground IF the structure's AC service entrance uses them as such.

>
> Thanks in advance,
>
> -JJ
>

More details are explained at:

http://members.cox.net/pc-usa/station/ground0.htm

Cheers,

Jack Painter
Virginia Beach, Virginia

3160. Re: Lightning and Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 00:36:57 UTC
From: w_tom <w_tom1@hotmail.com>
Message-ID: <42250AA9.3E70C18C@hotmail.com>
Source record: 81349

Lets start by first adjusting the perspective. CG lightning seeks charges located 5 kilometers over there. Therefore the shortest electrical path is 3 kilometers directly down to tree, antenna, or utility wire. Then 4 kilometers through earth to those charges. Where will lightning strike earth? Answer is better found in geology. What is the more conductive earth? Has a transcontinental pipeline changed the electrical nature of that region? Obviously the answer is not always obvious. Then many assume lightning is capricious.

Some campers slept near a tree when that tree was struck. Those sleeping tangential to the tree were not affected. Those sleeping pointed at the tree required medical treatment. An electrical path was down tree, through earth, up into human body at the feet, out of human body at the head, then onwards to earth borne charges located elsewhere.

IOW, the camper who required medical treatment were, in essence, earthed at two separate points (at foot and head).

Suppose we had surrounded the camper with a buried electric wire loop. IOW the conductive path was around the sleeping camper. A single point ground (equipotential) was created beneath the camper.

Single point ground can be a single earth ground rod at one of the building, or it can be accomplished by making earth beneath equipotential. But it comes back to a basic concept. No current flows if an incoming and outgoing path does not exist. Goes right back to elementary school science that defined electricity. First a complete circuit must exist meaning that each component must have both an incoming and outgoing path.

The concept of single point ground is make only one connection so that both incoming and outgoing paths do not exist. Some examples of how this is accomplished:
http://www.erico.com/public/library/fep/technotes/tncr002.pdf
http://www.cinergy.com/surge/ttip08.htm

http://lists.contesting.com/archives/html/Towertalk/2002-09/msg00644.html
http://lists.contesting.com/_towertalk/1997-April/004413.html
http://www.leminstruments.com/pdf/LEGP.pdf (see page 14)

How multiple earth grounds can cause damage to a fax:
http://www.epri-peac.com/tutorials/sol01tut.html

Notice even a buried wire can carry destructive transients
as demonstrated by the phone wire in that erico.com figure.
Even a buried wire must connect to the single point earth
before entering a building so that all wires enter at the
single point:
http://www.polyphaser.com/ppc_TD1023.aspx

wizard12342002@yahoo.com wrote:
> I am trying to gain a better understanding of the issues associated
> with lightning and grounding, particularly for an amateur radio
> station. I would greatly appreciate any answers to my questions, given
> below.
>
> 1.) It seems like lightning "finds" a path before actually discharging
> through it. Is this correct? How fast is the process of finding the
> path?
>
> 2.) Does lightning discharge over one path or many paths? In other
> words, if lightning strikes a point, and there are two paths from that
> point to ground, is the energy shared - like a current divider? One
> would think that this is what happens, with the sharing based upon
> relative impedances to ground.
>
> 3.) This talk about "single point ground" can be confusing, especially
> when the solution involves multiple ground rods. I believe we are
> really saying that the station (equipment) should be connected to
> ground at only one point - but you can have any number of ground
> connections (i.e., like ground rods) otherwise.
>
> 4.) Does the size of an antenna affect the probability of its being
> struck by lightning, all else being equal? What is the governing
> relationship?
>
> 5.) Finally, consider an amateur antenna on a pole, located some
> distance from the service entrance of the house. Let's say there is a
> copper cold water pipe right at the service entrance. Is it wise to
> place a lightning rod (or rods) right under the antenna, place an
> arrestor on the coax there and then another arrestor where the coax
> enters at the service entrance? Is a ground wire needed between the
> remote ground rod and the cold water pipe?
>
> Thanks in advance,
>
> -JJ

3161. Re: Lightning and Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 00:40:47 UTC
From: Dave <noone@nowhere.com>
Message-ID: <3oadnY-nCIUPlrjfRVn-sw@crocker.com>
Source record: 81348

<wizard12342002@yahoo.com> wrote in message
news:1109720344.336570.233730@o13g2000cwo.googlegroups.com...
> I am trying to gain a better understanding of the issues associated
> with lightning and grounding, particularly for an amateur radio
> station. I would greatly appreciate any answers to my questions, given
> below.
>
> 1.) It seems like lightning "finds" a path before actually discharging
> through it. Is this correct? How fast is the process of finding the
> path?

no, it takes all the possible 'paths' at once. ones that end in high
impedances reflect most of the current back and then it goes down some other
path... ones that end in low impedances suck more current out of the system.

>
> 2.) Does lightning discharge over one path or many paths? In other
> words, if lightning strikes a point, and there are two paths from that
> point to ground, is the energy shared - like a current divider? One
> would think that this is what happens, with the sharing based upon
> relative impedances to ground.

yes, as above... it goes down all paths and ends up sharing them based on
relative impedance exactly like a current divider but with time delays based
on the lengths of the paths and terminating impedance.

>
> 3.) This talk about "single point ground" can be confusing, especially
> when the solution involves multiple ground rods. I believe we are
> really saying that the station (equipment) should be connected to
> ground at only one point - but you can have any number of ground
> connections (i.e., like ground rods) otherwise.

yeah, thats a reasonable way to look at it. it kind of looks like an
hourglass with everything being connected at one common point and spreading
out in the shack on one side and into the ground on the other side but
possibly with multiple connections on both sides.

>
> 4.) Does the size of an antenna affect the probability of its being
> struck by lightning, all else being equal? What is the governing
> relationship?

the bigger it is the more likely it is to get hit.

>
> 5.) Finally, consider an amateur antenna on a pole, located some

> distance from the service entrance of the house. Let's say there is a
> copper cold water pipe right at the service entrance. Is it wise to
> place a lightning rod (or rods) right under the antenna, place an
> arrestor on the coax there and then another arrestor where the coax
> enters at the service entrance? Is a ground wire needed between the
> remote ground rod and the cold water pipe?

this is actually a couple (relatively) unrelated questions.

the more rods the merrier. the more paths you can give lightning the less of it will get into your shack. just don't put the rods too close together or you are wasting money, put them at least their own length apart from each other and connect by heavy wire, cadwelded, etc, etc.

yes, you can put arresters at each end of a cable, but its probably only worth it if the cable is relatively long... on a swag i would say if its shorter than 100' its probably not worth two arresters, just put one at the service entrance. the function of an 'arrester' is to just equalize the voltage between the shield and center conductor and since the critical point for that difference is at the radio end that one is more important.

i believe code requires water pipes to be connected to the service entrance ground. the service entrance ground should also be connected to the ground at the antenna, so indirectly the water pipe and remote rod would be connected.

>
> Thanks in advance,
>
> -JJ
>

3162. Re: Lightning and Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 00:50:25 UTC
From: Brian O <briano1812@lispwest.com>
Message-ID: <d032cj0pao@enews2.newsguy.com>
Source record: 81353

<wizard12342002@yahoo.com> wrote in message
news:1109720344.336570.233730@o13g2000cwo.googlegroups.com...
> I am trying to gain a better understanding of the issues associated
> with lightning and grounding, particularly for an amateur radio
> station. I would greatly appreciate any answers to my questions, given
> below.
>
> 1.) It seems like lightning "finds" a path before actually discharging
> through it. Is this correct? How fast is the process of finding the
> path?

Logic says no. As a charge starts to build, it also starts to flow. If the discharge path has high enough resistance, it wont flow until the charge reaches a certain potential. That may be what you were trying to ask. Then we are speaking of a dielectric. When the potential becomes large enough to punch through the dielectric, then the discharge occurs.
>
> 2.) Does lightning discharge over one path or many paths? In other
> words, if lightning strikes a point, and there are two paths from that
> point to ground, is the energy shared - like a current divider? One
> would think that this is what happens, with the sharing based upon
> relative impedances to ground.

No need to make lightening too mysterious. It is electricity, and if there are two solid paths of basically equal resistant, it will flow in both. It is important to note that I did say basically EQUAL. Two paths may be equal at low voltages, but at high voltages, in bends of wire, the lightening has been known to burn off one path.
>
> 3.) This talk about "single point ground" can be confusing, especially
> when the solution involves multiple ground rods. I believe we are
> really saying that the station (equipment) should be connected to
> ground at only one point - but you can have any number of ground
> connections (i.e., like ground rods) otherwise.

I cant tell you much about this. Its safer for the equipment to have only one ground connection as the surge caused by lightening can enter from any of the grounds if its not a direct hit to the antenna itself.
>
> 4.) Does the size of an antenna affect the probability of its being
> struck by lightning, all else being equal? What is the governing
> relationship?

Again, logic dictates that a bigger antenna can be closer to a charged area than a small one. That being said, it probably doesnt make much difference

unless youre running some very longwire type of antennas. A yagi or a quad
will probably not change the chance of getting a hit very much.
>
> 5.) Finally, consider an amateur antenna on a pole, located some
> distance from the service entrance of the house. Let's say there is a
> copper cold water pipe right at the service entrance. Is it wise to
> place a lightning rod (or rods) right under the antenna, place an
> arrestor on the coax there and then another arrestor where the coax
> enters at the service entrance? Is a ground wire needed between the
> remote ground rod and the cold water pipe?
>
> Thanks in advance,
>
> -JJ
>
Don't connect it to your water pipe. That's a good way to get a damaged
water pipe if you take a hit. Use grounding at the antenna support. You CAN
use arrestors, but the way our hardline at work is grounded, they just trim
off the outer jacket and connect a clamp for grounding, then cover it with
weatherproof putty. They are grounded at the base of the antenna tower, then
at the point of entry to the cellsite. Then there is a ring ground inside
the cellsite, and that ring ground is connected to a groundrod outside the
site at the opposite corner from where the antenna feedlines enter. Cant
explain how it works all that well, but we seldom have much lightening
damage to our equipment, and its directly connected all the time. We do use
surge protection to protect the power wiring to the equipment as well. There
are probably others on here that can give you more info than I can. There
are also standards that are set up by NEC that need to be followed as well,
if I'm not mistaken.
B

3163. Re: Lightning and Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 00:53:13 UTC
From: Brian O <briano1812@lispwest.com>
Message-ID: <d032hq0pdk@enews2.newsguy.com>
Source record: 81352

<wizard12342002@yahoo.com> wrote in message
news:1109720344.336570.233730@o13g2000cwo.googlegroups.com...
> I am trying to gain a better understanding of the issues associated
> with lightning and grounding, particularly for an amateur radio
> station. I would greatly appreciate any answers to my questions, given
> below.
>
> 1.) It seems like lightning "finds" a path before actually discharging
> through it. Is this correct? How fast is the process of finding the
> path?
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> 2.) Does lightning discharge over one path or many paths? In other
> words, if lightning strikes a point, and there are two paths from that
> point to ground, is the energy shared - like a current divider? One
> would think that this is what happens, with the sharing based upon
> relative impedances to ground.
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> 3.) This talk about "single point ground" can be confusing, especially
> when the solution involves multiple ground rods. I believe we are
> really saying that the station (equipment) should be connected to
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> place a lightning rod (or rods) right under the antenna, place an
> arrestor on the coax there and then another arrestor where the coax
> enters at the service entrance? Is a ground wire needed between the
> remote ground rod and the cold water pipe?
>
> Thanks in advance,
>
> -JJ
>
Oh and as a caveat, this is only my opinion from what I have studied and
seen. It is by no means advice as to what you should do in your case. NEC
are the ones that set the standards and inspectors are probably the best
ones to tell you what has to be done.
B

3164. Re: Looking for the best 2M/440 mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 01:02:31 UTC
From: "C. J. Clegg" <answer.to.newsgroup@nospam.com>
Message-ID: <fv3a21lj3g84h2ubql2ia9g1srn945v1ib@4ax.com>
Source record: 81350

On Tue, 01 Mar 2005 19:20:31 -0000, dplatt@radagast.org (Dave Platt)
wrote:

> Or possibly a Cushcraft A27010S?

Hmmm ... that's a beam, right?

Probably not easy to use mobile (portable, maybe).

CJ

3165. Re: Looking for the best 2M/440 mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 01:06:15 UTC
From: dplatt@radagast.org
Message-ID: <112a4c7t7cni023@corp.supernews.com>
Source record: 81351

In article <fv3a21lj3g84h2ubql2ia9g1srn945v1ib@4ax.com>,
C. J. Clegg <answer.to.newsgroup@nospam.com> wrote:
>
>> Or possibly a Cushcraft A27010S?
>
>Hmmm ... that's a beam, right?

Right. 5 elements on 2 meters, 5 on 440.

>Probably not easy to use mobile (portable, maybe).

True... but the original posting made a point of asking for maximum
gain, and said that type and mounting weren't important. Nothing was
said about "omnidirectional" one way or the other. (##grin##)

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3166. Re: Looking for the best 2M/440 mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 01:10:23 UTC
From: "C. J. Clegg" <answer.to.newsgroup@nospam.com>
Message-ID: <464a21tdj75m0vog2avapnhkcrp3d5s04b@4ax.com>
Source record: 81354

On Wed, 02 Mar 2005 06:40:53 +1100, Bob Bob <bcnntp@optusnet.com.au>
wrote:

>- You live in very flat country?

Not particularly flat ... (MA)

>- Dont use directive antennas on the mobile (eg a quad/yagi) as most
>comms on VHF/UHF happen by reflection once you are beyond LOS and in clutter

Right, I should bave been more clear, I'm looking for an
omnidirectional vertical.

I once had a Hustler 2-meter collinear, something like 5 db gain
omnidirectional, and five feet tall or thereabouts, with a 3/8x24
mount. Never had a better 2 meter mobile antenna before or since.
But, it only comes in a monoband version, and only 2 meters and 220.
If I could find something dual-band for 2 and 440 that's as good as
that one was, I'd be happy.

CJ

3167. Antenna and Grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 01:11:55 UTC
From: Gene <thereb4141@csa.org>
Message-ID: <1109725613.3789b6b9c016ed70c7abbefe9910deda@teranews>
Source record: 81355

Finally Moving back to an area where I can use my rig again. I will be in a two story house and was wondering how running a wire around 2 or 3 sides of the house, under the roof overhang eaves would work. Its actually a "stilt" type or "beach" type house, and the roof eaves are probably 25 feet up. I had a long wire some years ago, and got great results. Would this work well, and should I use 2 or 3 or all 4 sides? Also... Grounding from the 2nd floor.... Is that going to be a problem?? Thanks in advance. Gene K3ASA

3168. Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 01:13:47 UTC
From: jimbo <jimbo62@spamex.com>
Message-ID: <1109726027.230672.256340@g14g2000cwa.googlegroups.com>
Source record: 81356

Anyone familiar with the Carolina Windom? What is it's claim to fame?
Looks like nothing more than a dipole fed off center with an isolator
to limit feed line radiation.

Any insight will be appreciated.

jimbo

3169. Re: Looking for the best 2M/440 mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 01:26:39 UTC
From: Tom Ring <news0001@taring.org>
Message-ID: <422515d3$0$38734$39cecf19@news.twtelecom.net>
Source record: 81357

Dave Platt wrote:

>>>Looking for the very best 2M/440 dual-band mobile antenna made.
>>>Looking primarily for the highest gain on both bands. Mounting and
>>>size (length) are not important, i.e. can be anything. Any suggestions?
>>
>>My old Comet 2x4max is hard to beat.
>
>
> Or possibly a Cushcraft A27010S?
>
> <G,D,RLH>
>

I wouldn't by any Cushcraft antennas produced since Joe left. They
don't have the same reasons behind their designs anymore. Like quality.

tom
K0TAR

3170. Re: Lightning and Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 01:30:23 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <QG8Vd.37364$%U2.18054@lakeread01>
Source record: 81358

"w_tom" <w_tom1@hotmail.com> wrote

> Lets start by first adjusting the perspective.

You were going strong until you drove off the road and into the ditch right here:

> Single point ground can be a single earth ground rod at one
> of the building, or it can be accomplished by making earth
> beneath equipotential. But it comes back to a basic concept.
> No current flows if an incoming and outgoing path does not
> exist. Goes right back to elementary school science that
> defined electricity. First a complete circuit must exist
> meaning that each component must have both an incoming and
> outgoing path.
>
> The concept of single point ground is make only one
> connection so that both incoming and outgoing paths do not
> exist. Some examples of how this is accomplished:

Best remove that whole paragraph from your lightning vocabulary and pretend you never saw it before. It is completely incorrect and misleading to allude that lack of a path or circuit will protect anything from lightning. The opposite is true.

The bonding of all nearby electrically conductive objects is what makes them equipotential, because current does not flow when there is no potential between bonded equipments. Interrupting the "circuit" by failing to properly bond will allow massive potentials and lightning will find several paths you should have known about and others you never knew possible.

Creating "Equipotential" (bonding) and "Grounding" are two distinctly seperate principles. Both are required in a system of lightning protection. If there was one that was immensely more important than the other, it would be the bonding. A well bonded system "could" survive direct lightning strikes to the structure with no damage to the equipment even if there was never a ground connection made (happens to airplannes frequenty). But no ground system conceivable can allow an equipment room that is not properly bonded to survive a strike. Applying the two principles of bonding and grounding together (and surge protection), is what helps control all the entrance and exit paths for lightning, and makes a lightning protection "system".

Jack

3171. Re: Lightning and Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 01:53:25 UTC
From: w_tom <w_tom1@hotmail.com>
Message-ID: <42251C95.79B36FC5@hotmail.com>
Source record: 81359

A well bonded system means all those other potential
'outgoing' paths are connected to the same 'incoming' path.
IOW bonding converts all other possible electrical paths into
the same, common incoming path. If all circuit paths only
connect to the same 'incoming' path, then there is no outgoing
path necessary to conduct electricity.

This is also why equipotential grounding works. But this is
arguing semantics. Bottom line is the perspective of a
protected circuit. If all incoming paths are properly bonded
to a same point, then no outgoing path exists. No outgoing
path means no destructive electricity flow through that
circuit. Therefore no damage.

Jack Painter wrote:
> You were going strong until you drove off the road and into the
> ditch right here:
>
>> Single point ground can be a single earth ground rod at one
>> of the building, or it can be accomplished by making earth
>> beneath equipotential. But it comes back to a basic concept.
>> No current flows if an incoming and outgoing path does not
>> exist. Goes right back to elementary school science that
>> defined electricity. First a complete circuit must exist
>> meaning that each component must have both an incoming and
>> outgoing path.
>>
>> The concept of single point ground is make only one
>> connection so that both incoming and outgoing paths do not
>> exist. Some examples of how this is accomplished:
>
> Best remove that whole paragraph from your lightning vocabulary and
> pretend you never saw it before. It is completely incorrect and
> misleading to allude that lack of a path or circuit will protect
> anything from lightning. The opposite is true.
>
> The bonding of all nearby electrically conductive objects is wha
> makes them equipotential, because current does not flow when there
> is no potential between bonded equipments. Interrupting the
> "circuit" by failing to properly bond will allow massive potentials
> and lightning will find several paths you should have known about
> and others you never knew possible.
>
> Creating "Equipotential" (bonding) and "Grounding" are two
> distinctly seperate principles. Both are required in a system of

> lightning protection. If there was one that was immensely more
> important than the other, it would be the bonding. A well bonded
> system "could" survive direct lightning strikes to the structure
> with no damage to the equipment even if there was never a ground
> connection made (happens to airplannes frequenty). But no ground
> system conceivable can allow an equipment room that is not properly
> bonded to survive a strike. Applying the two principles of bonding
> and grounding together (and surge protection), is what helps
> control all the entrance and exit paths for lightning, and makes a
> lightning protection "system".
>
> Jack

3172. Re: Lightning and Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 01:56:21 UTC
From: Se&#65533;or Sombra <Shadow@escondido.com>
Message-ID: <939Vd.43549$xt.6877@fed1read07>
Source record: 81360

All about lightning and grounding at Polyphaser URL:
http://www.polyphaser.com/ppc_ptd_home.aspx

--
Lamont Cranston

3173. Re: Looking for the best 2M/440 mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 02:19:50 UTC
From: Dan Richardson <dwr@mailinator.net>
Message-ID: <lg8a21lnvon9l9rv2pcu9ugv0di99c3emi@4ax.com>
Source record: 81361

On Tue, 01 Mar 2005 13:40:45 -0500, C. J. Clegg
<answer.to.newsgroup@nospam.com> wrote:

>
>Looking for the very best 2M/440 dual-band mobile antenna made.
>Looking primarily for the highest gain on both bands. Mounting and
>size (length) are not important, i.e. can be anything.
>
>Any suggestions?
>
>Thanks..

If antennas are physically about the same size you are not going to
see a dime's worth of difference between them.

If you happen to look at your S-meter when driving you will note it is
not unusual to see signals varying more that 20 dB as you are diving.
Believe me you will never notice a 1-2 dB difference.

Danny, K6MHE

3174. Re: Lightning and Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 02:40:42 UTC
From: richardharrison@webtv.net
Message-ID: <26194-422527AA-298@storefull-3255.bay.webtv.net>
Source record: 81363

J.J. wrote:
"1.) It seems like lightning "finds" a parh before discharging through it."

Speculation is tempting. I would not swear to a sequence of events but J.J.`s scenario seems plausible.

Lightning breaks down the dielectric of the atmosphere at some point where the potentiaal gradient initiates a huge arc. Charges are accumulating and moving about until an ignition potential is reached at some point.

Influence of accumulations of charges and their movements must be propagated at the speed of light, thought by many to be the final speed limit. Communication of electromagnetic forces among the atmospheric charges may be considered "finding a path" for the lightning bolt.

Best regards, Richard Harrison, KB5WZI

3175. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 02:53:14 UTC
From: kensmith@green.rahul.net
Message-ID: <d039qq$uq5$4@blue.rahul.net>
Source record: 81362
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <4224AF38.770053D4@deadend.com>, gwhite <gwhite@deadend.com> wrote:
[...]
>You entirely missed the point. You don't know the output impedance because you
>don't have a way of determining it by swinging the output full-scale.

You don't have to swing the output full-scale to measure the impedance.
Any change in the load, no matter how small, will cause a change in the
output voltage and the output current. From these you can calculate the
output impedance at the current operating point.

When a transistor is operating under large signal conditions into a tuned
load, there is still an output impedance and this impedance still
discribes what will happen for small changes in the load.

--
--
kensmith@rahul.net forging knowledge

3176. Re: Lightning and Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 03:01:55 UTC
From: richardharrison@webtv.net
Message-ID: <7323-42252CA3-217@storefull-3258.bay.webtv.net>
Source record: 81364

J.J. wrote:
"2.) Does lightning discharge over one path or many paths?"

For me, seeing is believing. There are many reports and photos showing several paths between the clouds and the earth during a lone lightning event. I would not swear perfect synchronization on all routes.

Best regards, Richard Harrison, KB5WZI

3177. WTB Isopole 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 03:20:44 UTC
From: David Thompson <thompson@mindspring.com>
Message-ID: <giaVd.11980$Ba3.7696@newsread2.news.atl.earthlink.net>
Source record: 81365

Looking for an AEA 2 meter Isopole in working condition. Reply to thompson@mindspring.com

Dave K4JRB

3178. WTB 80-40 Mor-Gain

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 03:23:22 UTC
From: David Thompson <thompson@mindspring.com>
Message-ID: <KkaVd.11990$Ba3.10021@newsread2.news.atl.earthlink.net>
Source record: 81366

Looking for another 80-40 or 75-40 Mor-gain dual band dipole. Will consider an Antennas West PM dipole or Antennas and More Kansas Dipole.

Reply to thompson@mindspring.com

Dave K4JRB

3179. Re: Lightning and Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 03:33:06 UTC
From: richardharrison@webtv.net
Message-ID: <9506-422533F2-240@storefull-3257.bay.webtv.net>
Source record: 81367

J.J. wrote:
"This talk about "single point ground" can be confusing, especially when the solution involves multiple ground rods. I believe we are really saying that the station (equipment) should be connected to ground at only one point--."

I agree. It`s to avoid the equipment becoming a link between grounds which can become points of great potential difference. The equipment would likely burn. Great finesse may be needed to avoid such a nexus.

Best regards, Richard Harrison, KB5WZI

3180. Re: Lightning and Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 03:50:18 UTC
From: richardharrison@webtv.net
Message-ID: <9507-422537FA-77@storefull-3257.bay.webtv.net>
Source record: 81370

J.J. wrote:
"4.) Does the size of an antenna affect the probability of it being struck by lightning?"

Probably. It`s a bigger target, more likely to have some part nearer a highly charged area of the atmosphere. A short distance makes a high gradient. If the antenna has sharp points it is more likely to trigger lightning.

Best regards, Richard Harrison, KB5WZI

3181. Re: Lightning and Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 03:56:43 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <8c4a215ebh3jh0cpt4k75hpkft7h05e4ku@4ax.com>
Source record: 81368

On 1 Mar 2005 15:39:04 -0800, wizard12342002@yahoo.com wrote:

>I am trying to gain a better understanding of the issues associated
>with lightning and grounding,

>
>Thanks in advance,
>
>-JJ

Go to http://www.arrl.org and do a search for the keywords, "lightning
and grounding"

Brings up about 150 articles.

bob
k5qwg

3182. Fun, Quick, Homebrew Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 03:58:45 UTC
From: Brian - KB9BVN <kb9bvn@arrl.net>
Message-ID: <VRaVd.1570$L17.1285@newsread3.news.pas.earthlink.net>
Source record: 81369

I built this one last fall, it tunes up great on 15, 20, and 30m with my Elecraft K1 and built in ATU. This will be a good antenna to take to scout camp this year.

I got 599's in Indy from contacts in FL, TX, MA, MD, and LA with 5w. Loads of fun!

http://members.aol.com/realhamradio2/W2IK-ANTENNA.html

73 de KB9BVN

3183. Re: Lightning and Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 04:14:46 UTC
From: richardharrison@webtv.net
Message-ID: <9507-42253DB6-78@storefull-3257.bay.webtv.net>
Source record: 81222

J.J. wrote:
"Is it wise to place a lightning rod (or rods) right under the antenna---?"

Yes. It is a good practice to help nature to neutralize its excess charge in the shortest time and distance. The sooner this gigantic force is diluted, the safer everything and everyone is. But, if your outside plant is impervious to damage, you may choose to put your arc gaps and ground rods back at the station ends of your transmission lines.

Best regards, Richard Harrison, KB5WZI

3184. Re: Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 04:16:35 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42253efc$1_1@127.0.0.1>
Source record: 81371

jimbo wrote:
> Anyone familiar with the Carolina Windom? What is it's claim to fame?
> Looks like nothing more than a dipole fed off center with an isolator
> to limit feed line radiation.

Actually, the isolator is some number of feet from the
feedpoint which ensures feedline radiation. The Carolina
Windom is a compromise between horizontal and vertical
radiation. It's performance falls between a horizontal
dipole and a 1/4WL vertical. Depending upon who you talk
to, it is either the best of both worlds or the worst of
both worlds.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

3185. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 04:35:35 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <robVd.3701$wy3.2702@newsread3.news.atl.earthlink.net>
Source record: 81223

Charlie.....I read the posts with humor as well. Sounds
like you would like to do some serious field measurements. I will say that
one year for field day two friends and myself put up a 4BTV, with 32 radials
out. We got out so well with it we took the 40M dipole down. We worked quite
a bit of DX as well, this was from a mountain top.
I think too many people sell the verticles short.....and I will
bow out at this point.

73,
WB7FFI

"Charlie" <charlie@earthlink.com> wrote in message
news:1127lpaqmlu6v49@news.supernews.com...
> Using a Hustler 5-BTV ground mounted with 72 radials. I have heard about
> antenna modeling but is there any way to do a real world take off angle
> measurement???

3186. Re: Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 04:46:16 UTC
From: RB <rbig@bellsouth.nospam.net>
Message-ID: <lubVd.20815$Q47.16782@bignews5.bellsouth.net>
Source record: 81224

With the Carolina Windom, the most vertical radiation is found on 160m, where the thing acts like a short, top loaded vertical. The ant is fully bandswitching, and will load on some bands without a tuner. The main drawback is the limitation that applies to all horizontal antennas, and that is height above ground. Most horizontal antennas are substantially cloud warmers at less than 1/2 wavelength height.

3187. Re: Looking for the best 2M/440 mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 05:33:10 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <mpvff2-qkn.ln1@p400bob.lse.com.au>
Source record: 81225

Gee I am gong to have to learn those state abbreviations... So many of them start with "M" <grin>

I use to work on UHF radio equipment installs being used on the flat areas in western NSW (Australia). One of the common setups was a 9dB fibreglass whip (476MHz - about 6ft long). It had to be setup just right otherwise the few degrees of tilt you got from air movement would lift the pattern in front of the vehicle above the horizon and make it all but useless.

I also hear that 1/4 wave whips are almost essential if you are driving amongst high rise buildings.

Also did some tests recently on the "gain" of a vehicle mounted 1/4 wave vs a test dipole antenna at 4 metres height. There was about 10dB between them, we assumed because the 1/4 wave was still very much in the ground clutter. This was on 149MHz and LOS.

My view is that any dual band antenna is going to be a huge compromise anyway and high gain on both bands unlikely. I am however prepared to be shot down over this!

Apologies for waffling on!

Bob VK2YQA

C. J. Clegg wrote:
> On Wed, 02 Mar 2005 06:40:53 +1100, Bob Bob <bcnntp@optusnet.com.au>
> wrote:
>
>
>>>- You live in very flat country?
>
>
> Not particularly flat ... (MA)
>

3188. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 06:04:14 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_42255839@fidonet.org>
Source record: 81229

"Richard Harrison" bravely wrote to "All" (01 Mar 05 08:29:27)
--- on the heady topic of "Re: Say what you mean."

RH> From: richardharrison@webtv.net (Richard Harrison)
RH> Xref: aeinews rec.radio.amateur.antenna:26189

RH> The Class A amplifier gets all its power from the d-c supply and it is
RH> constant, signal or no signal. With signal power output, some of the
RH> power in exits to the load.

Let's look at it from the dynamic point of view. When there is no
signal the circumstances are as you describe. When the signal swing
turns the device nearly OFF there is a maximum voltage across the
device but the current is a minimum or close to zero.

Conversely when the signal swings in the opposite polarity the device
turns ON hard but the voltage is at a minimum or near zero too. In
either case the "ideal" device dissipates no extra power because the
two products are always zero. In fact the power difference is
always zero, so there is no reason for the device to cool.

However, no device is ideal, it has losses, and generates harmonics.
If the rectification is such that the average current decreases then
the device will cool. There is a gotcha however, because the harmonics
rob power from the desired output.

RH> I`ll use Cecil, W5DXP`s argument. Energy must be conserved. Energy in
RH> equals energy out. If some goes to a load it does not stay within the
RH> amplifier to make feat.

As you said, if the amplifier dissipates 100W when idle and it can
drive 100W into a load then the power source will still supply 100W
when so doing, of course being an ideal device and neglecting all
other losses. It is easy to test by paralleling a substantial
capacitance and measuring the supply current before the cap. The
current should remain the same or rise only very slightly.

RH> Asimov also wrote:
RH> "---linear source not operating Class A?"

RH> I`ll give an example. The Class B amplifier is biased near current
RH> cut-off. Current is near zero when the signal is. Yet, output can
RH> favorably vie with that from a Class A amplifier for purity. I learned
RH> that nearly 60 years ago when I built my first 6N7 phonograph
RH> amplifier.

Class B is hardly linear if it only amplifies 1/2 of the sinewave.
Time for our periodic 10 year review. <g>

A*s*i*m*o*v

... That's a cute trick.

3189. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 07:30:05 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <nUDcDzA9tWJCFw$b@jmwa.demon.co.uk>
Source record: 81226
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Ken Smith
<kensmith@green.rahul.net> wrote (in <d039qq$uq5$4@blue.rahul.net>)
about '1/4 vs 1/2 wavelength antenna', on Wed, 2 Mar 2005:
>In article <4224AF38.770053D4@deadend.com>, gwhite <gwhite@deadend.com> wrote:
>[...]
>>You entirely missed the point. You don't know the output impedance because you
>>don't have a way of determining it by swinging the output full-scale.
>
>You don't have to swing the output full-scale to measure the impedance.
>Any change in the load, no matter how small, will cause a change in the
>output voltage and the output current. From these you can calculate the
>output impedance at the current operating point.
>
>When a transistor is operating under large signal conditions into a tuned
>load, there is still an output impedance and this impedance still
>discribes what will happen for small changes in the load.
>
>
This incremental impedance is one of several different impedances that
can be defined for a non-linear source. No one is more valid
conceptually than another, but some are of more practical significance
than others.

The point is that if you want to talk/write about one of these
impedances, you need, to prevent misunderstanding, use a precise term,
such as 'incremental output source impedance' and define it.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

3190. Re: Looking for the best 2M/440 mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 08:12:59 UTC
From: "Mike M." <notme@invalid.email.net>
Message-ID: <oisa2158q3gt0i504pu6rb4fn6bd0smb6l@4ax.com>
Source record: 81227

On Tue, 01 Mar 2005 13:40:45 -0500, C. J. Clegg
<answer.to.newsgroup@nospam.com> wrotF:

>
>Looking for the very best 2M/440 dual-band mobile antenna made.
>Looking primarily for the highest gain on both bands. Mounting and
>size (length) are not important, i.e. can be anything.
>
>Any suggestions?
>
>Thanks...
I'm using the Comet CA-2x4SR . It seems to work quite well on 70cm
and about the same as 5/8 wave on 2m. I had originally tried a
Jetstream JT7905L and it actually seemed a little better on 2m and
70cm receive, but the swr was higher than I liked on the high end of
70cm where the local repeater inputs are .

3191. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 08:46:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7fra219ptch0tf0n30h4bi4ek500ecv31p@4ax.com>
Source record: 81228
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Hi OM,

This goes into the intricacies of how forced propositions do not yield
a forceful argument.

On Tue, 01 Mar 2005 18:06:18 GMT, gwhite <gwhite@deadend.com> wrote:

>You don't know the output impedance because you
>don't have a way of determining it by swinging the output full-scale.

This is more properly an admission from you, than a projected
inability upon us. You may not know how, but this does not prevent me
from expressing a value that is suitably accurate.

Now, within the field of measurement, no statement is accurate without
an expression of its range of error. However, in this regard accuracy
is still a remote issue as you offer nothing of practical
consideration and have failed to respond to a simple example to
provide context.

Richard Harrison, , KB5WZI, has in this sense already done the heavy
lifting with:
>>From the specifications page also, the power reguirement is TX: 18A
>>13.8V DC. It`s a linear amplifier. Only 40% efficiency. The designer
>>probably was more interested in low harmonics than efficiency. The final
>>by itself only takes part of the 18A ao its efficiency is more than 40%.

continuing....

>Even for class A, large signals will/can have rail to rail swing.

This marks an artificial imposition not required to respond to the
spirit of the topic. Such swings are not necessary.

>The device will not be
>linear for large swings: sinusoidal input swing will not result in a sinusoidal
>output swing.

This is immaterial to impedance and is a set-up of another artificial
imposition: the Thevenin Model (which was specifically dismissed).
Hence we are into a cascade of impositions.

>But "impedance" is a sinusoidal (s-domain) concept.

This is baloney cut thick. S Domains (?) are at best a modern
contrivance to model well behaved small signal devices. Their utility
follow theory, they do not drive theory.

>So how can
>you define an impedance--a sinusoidal concept--when the waveform is not
>sinusoidal for an inputted sine wave?

There are no sine waves in nature, so by this contortion of logic from
above there are no s-domains (?). Why are there no sine waves in
nature? Because nature is bounded by the Big Bang (a discontinuity)
at one end, and has yet to fulfill its infinite extent.

In other words, tedious appeals to artificial impositions of purity
fail at the gate for their sheer collapse of internal logic. This
kind of stuff appeals to arm-chair theorists who find themselves
impotent to perform.

> The point is that the output impedance is
>time dependent ("causes" the non-sinusoid output for sinusoid drive), which
>rather makes the concept questionable. As I wrote earlier, one might decide to
>consider a time averaged impedance, but I'm not clear on what the utility would
>be.

Classic performance anxiety. Engineers learn to live with limitation
and to express results and sources of error so that others can judge
merit. Priests are better suited with mulling over these issues of
ambiguity.

>There is no "presumption." Linear parameters and theorems totally ignore
>practical limitations--this is a fact and you can look it up in just about any
>text on circuit analysis.

Knowledge limited. There are many suitable texts that offer a wider
spectrum of discussion that are fully capable of answering these
issues. However, it is made worse that most of this stuff is
derivable from first principles and no recourse to vaster libraries is
actually needed.

>The simple linear model is perfectly okay for small
>signal devices. It isn't okay for large signal devices.

And yet there is no substantive illustration to prove this ambiguous
point. What constitutes small, and what demarcates large? Such
nebulous thinking clouds the obvious observation that the full range
of devices themselves operate on only one principle. What is limited
is the human component of their perception, not the physical reality
of their operation. The faulty choice of models (S Parameters) is not
the fault of either Physics or the devices when they diverge from the
crutch of calculation against the wrong mathematical expression.

> In any case, load pull
>equipment does not make the pretense of defining output impedance of an active
>large signal device. It does say what the load needs to be to acquire maximum
>power out of the device.

This is simply the statement from a lack of experience.

>Thevenins and conjugate matching (for maximum power transfer) are
>explicitly linear small signal device models. Their use in RF PA output design
>is a misapplication.

These statements are drawn from thin air.

>> So to return to a common question that seems to defy 2 out of 3
>> analysis (and many demurred along the way) - A simple test of a
>> practical situation with a practical Amateur grade transistor model
>> 100W transmitter commonly available for more than 20-30 years now:
>> 1. Presuming CW mode into a "matched load" (any definition will do);
>
>Any definition won't do, and for this discussion the specific "won't do" is
>using conjugate matching which is a small signal (linear) model.

Given the failure to provide any discussion for either or any form of
matching suggests a lack fluency in any of them.

>*You* brought up Thevenins and armchair philosophy regarding it, not me.

I rejected it as an unnecessary filigree, but I notice in the quotes
above that you readily embraced it as a necessary imposition.

> I said
>Thevenins was irrelevent, and now you appear to agree with me. Ken effectively
>brought up conjugate matching, not me.

This compounded with the denial of Thevenin is quickly closing the
available matching mechanisms. If it is not about Thevenin, and it is
not about Conjugation, then I am willing to wait to hear what it IS
about.

...But not really. I have little faith that the difference is
appreciated nor how many ways a match may be accomplished or for what
ends.

>The original comment I was challenging
>was:
>
>"...the antenna works as an impedance mathcing network that matches the output
>stages impedance to the radiation resistance."

I am always suspicious of how a quoted claim is couched by the
rebutter (cut and paste from the original is always available and
citing the link to the complete contextual post is hardly Herculean).
However, responding to the bald statement, I find nothing
objectionable about it.

>I simply wanted to make it clear that the "matching" done was not an issue of
>"output impedance" per se. It is an issue of how the transistor is to be loaded
>to extract maximum ouput power.

Again, a presumption not brought to the table. It may follow as a
consequence, but it is not a necessary condition.

Our questioner who started this thread is undoubtedly interested in the outcome in terms of maximum radiation for a limited power - it is a chain of causality that is a forced step matching issue from the battery to the ï¿½ther. This is a first principle of successful production engineering.

73's
Richard Clark, KB7QHC

3192. Antenna System Grounding Review Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 13:33:46 UTC
From: "jim@jtmiller.com" <jim@jtmiller.com>
Message-ID: <1109770426.495168.15710@z14g2000cwz.googlegroups.com>
Source record: 81231

Here's what I'm doing and I'd like some feedback.

Antenna will be an 88ft doublet 30-40ft high supported at the center by a ladderlock and fed by 450ohm windowline. The windowline will drop down to within 8ft of the ground (above kiddie reach) where it will be connected to a W2DU style choke balun based on RG213 and Palomar BA-8 ferrites. This will be enclosed in a ~12" length of electical conduit which will be supported to relieve the windowline of further strain.

The coax will connect at the bottom of the choke enclosure via PL259/SO239 to a ~10ft length of RG213 down to earth level driploop and up into a small lockable mushroom enclosure containing a ICE300 supported on a 5/8"x8ft copper ground rod. Also contained in the enclosure will be an LDG RT-11 tuner which will be mounted on the backside of the ground rod from the ICE300. A small RG213 jumper will connect the ICE and RT. The shell of the shielded DB-9 control line will have a small braid to bond it to the ground mounting point as well.

The coax and shielded DB-9 control lines from the RT will drop out of the enclosure via PVC conduit to an undergound PVC junction box which has it's bottom side perforated to drain any condensate. The run to the house from this JB is ~50ft with a >1ft rise which should ensure a flow of any condensate to the JB drain. The RG213 will be direct burial grade but I've not been able to find any shielded DB-9 direct burial cable hence the electrical PVC conduit.

At the house end the PVC will sweep up to another small enclosure atop another 5/8"x8ft ground rod holding a grounding point for the shells of the coax and control lines and also will terminate the line from the station bond from inside the shack. The lines will then enter the house through a driploop and travel ~5ft to the shack.

At the shack a ground bus will be provided where each of the pieces of equipment will be bonded individually. This ground bus will be connected via a 3" copper strap 5ft back out to the ground rod at the entrance to the house.

The station ground outside the house is 40ft away from the service entrance and its ground. I'm thinking of running "something" from the station ground rod to the service entrance. I can easily periodically "terminate" this with some intermediate ground rods if necessary along its length.

What should the "something" running between the station and service ground rods be?

How often should any periodic termination rods be added?

Any help on direct burial shielded DB-9 cable?

tnx
jtm

3193. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 13:42:16 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4225c392_2@127.0.0.1>
Source record: 81232

Asimov wrote:
> In fact the power difference is
> always zero, so there is no reason for the device to cool.

Here's the reason the device cools under load.

Plate loss = Eb*Ib - Ip^2*RL

With no signal, the plate loss is Eb*Ib. When
the signal is increased from zero, any power
delivered to the load is subtracted from Eb*Ib,
thus causing the device to cool.
--
73, Cecil http://www.qsl.net/w5dxp

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3194. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 13:48:32 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4225c50a$1_2@127.0.0.1>
Source record: 81233
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Richard Clark wrote:
> There are no sine waves in nature, so by this contortion of logic from
> above there are no s-domains (?). Why are there no sine waves in
> nature? Because nature is bounded by the Big Bang (a discontinuity)
> at one end, and has yet to fulfill its infinite extent.

One would think that a 12 billion year windowing
would be close enough. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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3195. Re: Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 13:50:47 UTC
From: Larry Moss <larrymoss@citcom.net>
Message-ID: <d04gc2$3342$1@news3.infoave.net>
Source record: 81234

Cecil is correct. I have had a couple of them and they work well, but do have their limitation. I was able to get up about 75/80 feet in the air and it was very good on 20/18 meters the other bands were okay but nothing to write home about.
W4LM
"jimbo" <jimbo62@spamex.com> wrote in message news:1109726027.230672.256340@g14g2000cwa.googlegroups.com...
> Anyone familiar with the Carolina Windom? What is it's claim to fame?
> Looks like nothing more than a dipole fed off center with an isolator
> to limit feed line radiation.
>
> Any insight will be appreciated.
>
> jimbo
>

3196. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 13:55:04 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4225c692$1_1@127.0.0.1>
Source record: 81235

Asimov wrote:
> Re: harmonic generation...

Why do the instructions on my stereo amp warn against
running the amp with no speakers attached?
--
73, Cecil http://www.qsl.net/w5dxp

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3197. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 14:06:03 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <D+O1ZQCLhcJCFwZB@jmwa.demon.co.uk>
Source record: 81236
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Cecil Moore <w5dxp@hotmail.com>
wrote (in <4225c50a$1_2@127.0.0.1>) about '1/4 vs 1/2 wavelength
antenna', on Wed, 2 Mar 2005:
>Richard Clark wrote:
>> There are no sine waves in nature, so by this contortion of logic from
>> above there are no s-domains (?). Why are there no sine waves in
>> nature? Because nature is bounded by the Big Bang (a discontinuity)
>> at one end, and has yet to fulfill its infinite extent.
>
>One would think that a 12 billion year windowing
>would be close enough. :-)

Not only that, but since by definition the Universe started at T=0, any
'sine wave' that starts at a positive zero-crossing is at any later time
indistinguishable from a real one that started at T=0.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

3198. Re: Antenna System Grounding Review Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 14:11:37 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4225ca74$1_2@127.0.0.1>
Source record: 81237

jim@jtmiller.com wrote:

> Here's what I'm doing and I'd like some feedback.
>
> Antenna will be an 88ft doublet 30-40ft high supported at the center by
> a ladderlock and fed by 450ohm windowline. The windowline will drop
> down to within 8ft of the ground (above kiddie reach) where it will be
> connected to a W2DU style choke balun based on RG213 and Palomar BA-8
> ferrites. This will be enclosed in a ~12" length of electical conduit
> which will be supported to relieve the windowline of further strain.
>
> The coax will connect at the bottom of the choke enclosure via
> PL259/SO239 to a ~10ft length of RG213 down to earth level driploop and
> up into a small lockable mushroom enclosure containing a ICE300
> supported on a 5/8"x8ft copper ground rod. Also contained in the
> enclosure will be an LDG RT-11 tuner which will be mounted on the
> backside of the ground rod from the ICE300. A small RG213 jumper will
> connect the ICE and RT. The shell of the shielded DB-9 control line
> will have a small braid to bond it to the ground mounting point as
> well.

Assuming you are going to use this system on 20m, EZNEC says
the 10' piece coax will see 166-j960 ohms for an SWR in excess
of 100:1. Depending upon where the voltage antinodes are located
and how much power you are running, that may be enough to cause
arcing at the coax connectors.

Why not run the ladder-line all the way to the tuner? Hint: SGC
says not to tie transmission line to the outputs of their SG-230.
--
73, Cecil http://www.qsl.net/w5dxp

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3199. Re: Antenna System Grounding Review Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 14:27:19 UTC
From: Jim Miller <jim@jtmiller.com>
Message-ID: <1109773639.516816.18900@z14g2000cwz.googlegroups.com>
Source record: 81238

Hi Cecil

Output power for my use will never exceed 100W, more typically 5W or less. The RT-11 is only rated to 125W. But your caution on impedance is just the sort of feedback I was looking for. I was considering running the windowline all the way to the ground but was concerned about the neighbors' kids getting their hands on it. My alternative was to run a bit of conduit upwards to shelter the windowline until it was out of reach, ~8ft. I was concerned however about how large such a PVC conduit would need to be to avoid problems with the windowline. Would 2" be big enough since its non-conducting?

tnx
jtm

3200. Re: Antenna System Grounding Review Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 15:36:08 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <J3lVd.37552$%U2.5942@lakeread01>
Source record: 81239

<jim@jtmiller.com> wrote
> Here's what I'm doing and I'd like some feedback.
>
> Antenna will be an 88ft doublet 30-40ft high supported at the center by
> a ladderlock and fed by 450ohm windowline. The windowline will drop
> down to within 8ft of the ground (above kiddie reach) where it will be
> connected to a W2DU style choke balun based on RG213 and Palomar BA-8
> ferrites. This will be enclosed in a ~12" length of electical conduit
> which will be supported to relieve the windowline of further strain.
>
> The coax will connect at the bottom of the choke enclosure via
> PL259/SO239 to a ~10ft length of RG213 down to earth level driploop and
> up into a small lockable mushroom enclosure containing a ICE300
> supported on a 5/8"x8ft copper ground rod. Also contained in the
> enclosure will be an LDG RT-11 tuner which will be mounted on the
> backside of the ground rod from the ICE300. A small RG213 jumper will
> connect the ICE and RT. The shell of the shielded DB-9 control line
> will have a small braid to bond it to the ground mounting point as
> well.
>
> The coax and shielded DB-9 control lines from the RT will drop out of
> the enclosure via PVC conduit to an undergound PVC junction box which
> has it's bottom side perforated to drain any condensate. The run to the
> house from this JB is ~50ft with a >1ft rise which should ensure a flow
> of any condensate to the JB drain. The RG213 will be direct burial
> grade but I've not been able to find any shielded DB-9 direct burial
> cable hence the electrical PVC conduit.
>
> At the house end the PVC will sweep up to another small enclosure atop
> another 5/8"x8ft ground rod holding a grounding point for the shells of
> the coax and control lines and also will terminate the line from the
> station bond from inside the shack. The lines will then enter the house
> through a driploop and travel ~5ft to the shack.
>
> At the shack a ground bus will be provided where each of the pieces of
> equipment will be bonded individually. This ground bus will be
> connected via a 3" copper strap 5ft back out to the ground rod at the
> entrance to the house.
>
> The station ground outside the house is 40ft away from the service
> entrance and its ground. I'm thinking of running "something" from the
> station ground rod to the service entrance. I can easily periodically
> "terminate" this with some intermediate ground rods if necessary along
> its length.

>
> What should the "something" running between the station and service
> ground rods be?
>
> How often should any periodic termination rods be added?
>
> Any help on direct burial shielded DB-9 cable?
>
> tnx
> jtm
>

Jim, if you use twin-lead from choke-to-tuner as Cecil suggested, the coax arrestor model at the tuner can be changed to ICE-304U per http://www.arraysolutions.com/Products/ice/impulse1.html#2

40' is at least 2x too long for a bonding jumper, according to a PE's interpretation of NEC-70/NFPA-780. That leaves up to you what to do to mitigate this problem. Practically speaking, you can not provide a low impedance connection that far no matter what conductor was used. But compared to the home's AC ground wiring which is outrageously high impedance, you can provide reasonable equipotential with the service ground. A minimum of one 8' copper clad ground rod, driven 10' into the ground every 2x rod depth feet is the code requirement for grounding electrodes. Applying that electrode-length requirement to a distance too long for a bonding jumper is not defined in the code, hence the professional opinion that was required in my case, which I share with you. In that similar situation, I used 4' copper ground rods every 8' along the bonding-path to the service entrance. The risk involved with such a long jumper is Ground Potential Rise. This could draw current from the station ground up into the bonded equipment cases, overpowering the withstand design of the equipment, and exiting the equipment via the AC connections and coax feedlines. As long as you provide a bond that is significantly lower impedance than the AC wiring to the service ground, you have minimized GPR-risk. Not eliminated it. The better the bonding and voltage-division your ground system provides (radials, improved service entrance ground, ground rings, ufer-grounds, etc) the more protection from GPR you provide. Your bonding must be capable of balancing the GPR across the entire system. Since the withstand of most equipment is approximately 2,000v, you should not have a problem maintaining a much lower potential than that.

The only other thing I would add, is an ICE-300 on the equipment ground bus-bar, after first shield-grounding the coax feedline at the station single point ground.

73,
Jack Painter
Virginia Beach, Virginia

3201. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 16:35:29 UTC
From: richardharrison@webtv.net
Message-ID: <18040-4225EB51-15@storefull-3257.bay.webtv.net>
Source record: 81240

Asimov wrote:
"Let`s look at it from the dynamic point of view (loss in a Class A amplifier)."

The no-signal loss of a Class A amplifier is 100%. It equals volts x amps and appears in the amplifier. Now feed a signal to the ideal amplifier set just below the clipping level. Average d-c power is unchanged from the unloaded and no-signal conditions.

Connect a matched load resistor to the amplifier output. If physically small, the resistor may become warm with heat that were it not for the load would be otherwise dissipated in the amplifier. Input power to the Class A amplifier is unchanging.

Finding the internal resistance theoretically is simple. It is simply the open-circuit output voltage divided by the short-circuit current.

Open-circuit voltage at full output and short-circuit current may be severe. Internal resistance can be found under less stressful conditions. Internal resistance will drop the voltage to any load reasistance. Use the voltage-divider formula to calculate the internal resistance.

With pure resistances, half the open-circuit volts are dropped by the internal resistance when the load is a match.

A power amplifier`s internal impedance can be determined.

Power output from a Class A amplifier cools it.

Best regards, Richard Harrison, KB5WZI

3202. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 16:56:27 UTC
From: richardharrison@webtv.net
Message-ID: <18040-4225F03B-19@storefull-3257.bay.webtv.net>
Source record: 81241

Charlie wrote:
"Using a Hustler 5-BTV ground mounted with 72 radials. I have heard about antenna modeling but is there a way to do a real world take off angle measurement?"

Make a small physical model. Then use a field strength meter without a helicopter.

Best regards, Richard Harrison, KB5WZI

3203. Re: Antenna System Grounding Review Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 17:18:39 UTC
From: Jim Miller <jim@jtmiller.com>
Message-ID: <1109783919.577647.237980@g14g2000cwa.googlegroups.com>
Source record: 81242

Hi Jack

I missed something in the above: you said an 8ft rod driven 10ft into the ground? Does that mean the top of the rod is buried 2ft?

Then driving such a rod every 2x rod depth feet would mean one every 20ft vs every 16ft?

What would be the recommended connecting conductor between all the points? Big honking cable or copper strapping?

I haven't purchased the ICE unit yet until I had gotten some feedback so making that change is no problem.

So you would suggest two ICE units? One at the antenna base and another at the station ground?

BTW, I'm wondering if any installation has ever met the codes you cited other than a dedicated broadcast transmitting facility. Certainly would be the exceptional (<1%) residence in my experience.

thanks for your help!

jtm

3204. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 17:56:24 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_42260c3b@fidonet.org>
Source record: 81254

"Cecil Moore" bravely wrote to "All" (02 Mar 05 07:55:04)
--- on the heady topic of "Re: Say what you mean."

CM> From: Cecil Moore <w5dxp@hotmail.com>
CM> Xref: aeinews rec.radio.amateur.antenna:26244

CM> Asimov wrote:
> Re: harmonic generation...

CM> Why do the instructions on my stereo amp warn against
CM> running the amp with no speakers attached?

Because then the screen tries to carry the plate signal, the reactance
in the output transformer is not damped, and because a tube is
sensitive to voltage, this quickly leads to a molten hole in the side?
Watts to plasma.

A*s*i*m*o*v

3205. Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 18:04:50 UTC
From: clvrmnky <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <6fnVd.92674$vO1.578577@nnrp1.uunet.ca>
Source record: 81243

I've got a little shortwave receiver that has a decent amount of gain in it's antenna input. I've been experimenting with different lengths and placements of the wire, and seen some interesting homebrew antennas I might try once the snow melts.

I know that receivers are less demanding of impedance matching in general, but my readings suggest that I should have a balun (unun) of some sort to match the impedance better, since I'm pretty much stuck with end-fed longwires. This should get more signal to my front-end, and a proper shielded connection to my receiver should help minimize stray RF noise.

I'm a renter, so I'm going to experiment with running a wire along the eaves on the balcony, which is open to two sides of the house (wooden two-story.) That is, I do not have the luxury of using the yard, trees or anything.

So, my idea is to have a long wire (or folded longwire made from a length of twin-lead) go to a balun (or unun, since this is really unbalanced-to-unbalanced) and then run a downwire from there to my receiver through a window.

I'm guessing the real advantage would be realized if I had a good RF ground at the receiver and/or balun. This will be sort of tricky. I don't even think I have copper cold-water pipes anywhere, and running copper braid over the balcony, down the side of the building and into 6-foot rod just ain't going to happen. I've heard of people using houseplants for poor grounds when no other was available, and I have many kilos of wet earth on the balcony.

I've seen a neat artificial ground/antenna tuner from MFJ (I think) which seems to offer a lot of bang for the buck. It even has multiple inputs for high-Z single wires. Would this be useful for SW?

Finally, I'm probably just going to wind my own balun out of a ferrite core. I just can't seem to find the details on how to wind the copper. Do I wind the primary first around the whole core, and then the secondary on top of it? Sorry if this is stupid question, but I've got most of the math figured out (i.e., no. of turns and such) but since I've never seen a balun... my assumption (right or wrong) is that it is just a special transformer.

Thanks for your comments.

-- cm

3206. Re: Antenna System Grounding Review Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 18:23:25 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <AwnVd.24940$7z6.243@lakeread04>
Source record: 81244

"Jim Miller" <jim@jtmiller.com> wrote
> Hi Jack
>
> I missed something in the above: you said an 8ft rod driven 10ft into
> the ground? Does that mean the top of the rod is buried 2ft?
>
> Then driving such a rod every 2x rod depth feet would mean one every
> 20ft vs every 16ft?
>
> What would be the recommended connecting conductor between all the
> points? Big honking cable or copper strapping?
>
> I haven't purchased the ICE unit yet until I had gotten some feedback
> so making that change is no problem.
>
> So you would suggest two ICE units? One at the antenna base and another
> at the station ground?
>
> BTW, I'm wondering if any installation has ever met the codes you cited
> other than a dedicated broadcast transmitting facility. Certainly would
> be the exceptional (<1%) residence in my experience.
>
> thanks for your help!
>
> jtm
>

Hi Jim, I was quoting from the fire and electrical codes regarding grounding electrodes, and yes they mean buried 2' beneath ground surface to reach a total depth of 10'. Use the length of the rod in the ground, not rod depth when determining spacing. That confusing aspect came about when 10' rods were going to be maintained as the minimum length allowed, and contractors screamed they could not obtain them (cheaply). So the 8' rod buried to a depth of 10' was born.

Use 16' as the spacing between buried 8' rods.

Recommend minimum #4 copper or heavier for the service entrance to station bonding connector. It does not have to be continuous if intermittent-spaced ground rods are used. If you figure out some way to efficiently trench for 6" deep >26ga copper strap, please let me know - that would be ideal. Strap is also difficult to bond to ground rods, and generally too thin for exothermal (cadweld) connections.

As for using two coax lightning arrestors, that might rarely if ever be specified. Normally the shield-grounding along the tower and at station entrance is sufficient that one arrestor either on the master ground bus or right outside at the 1st ground rod would suffice. But you are trying to protect your external tuner (let us know how that works out) and might permit some voltages the receiver front-end doesn't like, should they be induced or shorted from shield-to-conductor along the feedline path.

As far as meeting electrical codes and fire standards for grounding systems, there is no way around that in my opinion. If your home is going to be protected from loss by insurance, then you either need to meet all codes and standards, or else somehow demonstrate that you isolate all systems safely before the risk of loss occurs. Personally I don't know how most amateur operators ever collect for lightning damage, since examination by forensic (fire) investigators could show failure to meet code and/or best industry practices in most cases. Yes, you are a "broadcast station" wrt lightning, and in an area subject to it, should take appropriate measures to either always be isolated before the risk occurs, or withstand the risk by plan and design. Proper isolation is not just tossing the feedline out the window as so many unfortunately believe. Considering the risk involved if proper isolation is not followed, protecting the whole property seems like a better plan to me.

73,
Jack

3207. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 18:26:22 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <4226056F.48E4AF54@deadend.com>
Source record: 81245
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Ken Smith wrote:
>

> >The strongest argument for dropping the impedance matching concept is PA
> >efficiency, and therefore maximum signal swing. Obtaining maximum swing is a
> >load line issue.
>
> What do you mean by "maximum signal swing" in this context. I can get a
> bigger swing by leaving the output completely unloaded and hence causing
> the actual efficiency to be zero.

LOL. Sure, the purpose of a power amp is to actually extract power. This is a good start.

Perhaps a simplistic (and of course idealized) class A example would help. And I want to remind that this is a simplification of the first order design cut.

The first assumption/idealization for the class A example would be to demarcate between strong and weak non-linearity. This demarcation is basically the boundary of clipping, both positive and negative. That is, we want our class A amp to swing to the rails but not go beyond. In our class A design we will accept weak non-linearity but not strong non-linearity.

Lets say we have selected a class A device/amplifier for which we can statically dissipate 10W. The drain DC circuit is simply an RF choke (see, it is a simple example!). Let's say the quiescent values are a 10 V supply and 1 A of current (10 W). The question is: how do we load the device to extract maximum power given the "no clipping" (strong non-linearity) constraint?

Say we load it with 20 ohms, what happens? The max positive swing before clipping is Id*rL = 1*20 = 20 V. The max negative swing is, of course, Vd = 10 V. Since the 10 V is the lesser of the two swings, our non-clipping design constraint limits us to 20 Vp-p. So we can deliver (Vp)^2/(2*rL) = (10)^2/(2*20) = 2.5 W.

Say we load it with 5 ohms, what happens? The max positive swing before clipping is Id*rL = 1*5 = 5 V. The max negative swing is, of course, Vd = 10 V. Since the 5 V is the lesser of the two swings, our non-clipping design constraint limits us to 10 Vp-p. So we can deliver (Vp)^2/(2*rL) = (5)^2/(2*5) = 2.5 W.

Say we load it with 10 ohms, what happens? The max positive swing before clipping is Id*rL = 1*10 = 10 V. The max negative swing is, of course, Vd = 10 V. Since they are equal, we get 20 V of p-p swing. So we can deliver (Vp)^2/(2*rL) = (10)^2/(2*10) = 5 W.

Our circuit loaded with 10 ohms delivers twice as much power as with the lesser 5 ohms or greater 20 ohms. That is, extracted output power is peaking at some finite non-zero value. This is also easily seen to be most efficient point for this simplistic example.

In no way was the ouput-Z of the amplifier considered in deciding how to load it for the purpose of extracting maximum power from the circuit. The output-R is completely irrelevent.

This example is intended to be illustrative rather than exact.

> The reactive component issue is still there too. Reactive loads cause
> increased currents in the output stage without delivering any power to the
> load so they still need to be reduced as much as practical.

Yes, I already noted that for that portion of the impedance, it should be tuned out *as best* possible.

"...(to be fair, the time-averaged reactive output component is tuned out as best possible)."

3208. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 19:06:32 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <42260EDB.BB0D03AB@deadend.com>
Source record: 81246
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Richard Clark wrote:
>
> On Tue, 01 Mar 2005 18:06:18 GMT, gwhite <gwhite@deadend.com> wrote:
>
> > It is about DC to RF efficiency,
>
> Put a number to it.
>
> >as I've been pointing out since my
> >first post, and which you initially commented was "nonsense"
>
> Hi OM,
>
> And so it remains with additional elaborations not quoted here.
>
> >but now seem to agree with.
>
> Seeming is a rather insubstantial thing to hang your theories on.

Well they are apparently your's too! Your own example of testing your own PA said absolutely zip about output-Z. The most you could say is how the circuit is loaded and its RF/DC efficiency. You're agreeing with me and can't even seem to recognize it.

> >"Impedance matching" meant in the normal sense of conjugate
> >matching for maximum transfer of power
>
> And this reveals the error of "Seeming" because the so-called meaning
> you ascribe is this same nonsense.

Here's the original quote [Ken]:

"When the correct matching is done, the antenna works as an impedance mathcing network that matches the output stages impedance to the radiation resistance."

He brought up "matching to the output impedance" (of the device), not me. There is no "misinterpretation of meaning" when it comes to making statements about matching output impedance to a load impedance. The meaning is well-understood and precise. It means conjugate matching for maximum power transfer, and this is explicitly sourced from small signal theory. Small signal theory is oblivious to practical factors like supply rails and efficiency. These practical factors are paramount in PA design. Thus to apply a theory that ignores paramount factors is to beg a design which will likely be non-optimal.

> Pay more attention to reading
> instead of writing.

I'm paying attention, you agree with me but don't have the background to understand it.

> It has been pointed out more than once, and by
> several, that Matching comes under many headings. The most frequent
> violation is the mixing of concepts and specifications (your text is
> littered with such clashes).

No, you still don't get it. I don't have a problem with saying it is "matched." For example, I said a PA needs to be "load-line matched." This has a specific meaning, and that meaning explicitly isn't "impedanced matched," which means something else. If you don't bother to know what the words mean, I might as well speak Swahili.

> > is a misapplied small signal
> >concept/model. I think that is all I've really been saying.
>
> And I preserved this clash quoted above as an example. If there is
> any misapplication, you brought it to the table with this forced
> presumption.

There is no forced presumption. The words have explicit definitions. If you don't know the language, you have no way of communicating.

> The misapplication of S parameters to a large signal
> amplifier is one thing, to project this error backwards into the
> fictive theory that there is some difference between large and small
> signal BEHAVIOR (not modeling) is tailoring the argument to suit a
> poorly framed thesis.

The models come from behavior and/or device physics, and were developed for the express purpose of efficient design methodology. Small signal models can (and do) conveniently ignore large signal concerns such as efficiency and supply rails, because such concerns are irrelevent in the small signal milieu. To apply a model to a milieu for which the model is not suited begs a non-optimal design. The output-impedance concept itself is quite dubious for large signal amplifiers.

> None of your dissertation reveals any practical substantiation, hence
> it falls into the realm of armchair theory. We get plenty of that
> embroidered with photonic wave theory that is far more amusing.

You are off track.

3209. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 19:45:35 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <JCr3GBFffhJCFwK3@jmwa.demon.co.uk>
Source record: 81247
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that gwhite <gwhite@deadend.com> wrote
(in <42260EDB.BB0D03AB@deadend.com>) about '1/4 vs 1/2 wavelength
antenna', on Wed, 2 Mar 2005:

> I might as well speak Swahili.

Good idea! Furahini mkaimbe. The wrangling is getting tiresome.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

3210. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 20:02:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6o5c21hpli59hi85a9g15ukrsimp53ufsf@4ax.com>
Source record: 81248
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Wed, 02 Mar 2005 19:06:32 GMT, gwhite <gwhite@deadend.com> wrote:
>>>but now seem to agree with.
>> Seeming is a rather insubstantial thing to hang your theories on.
>Well they are apparently your's too!

Hi OM,

From seeming to appearances - leaps of faith are better suited for
debate at the Vatican.

The remainder, unquoted due to repetition of the same basic errors,
has already been commented upon in another posting. Oh, except the
more entertaining jousts:
>> Pay more attention to reading instead of writing.
>I'm paying attention, you agree with me but don't have the background to
>understand it.

Mmm-hmm :-)

To be so eagerly embraced as a fellow fool! Something of the chess
equivalent of the sacrificial queen gambit.

73's
Richard Clark, KB7QHC

3211. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 20:30:45 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <42262298.EDEF7441@deadend.com>
Source record: 81249
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Richard Clark wrote:
>
> Hi OM,
>
> This goes into the intricacies of how forced propositions do not yield
> a forceful argument.

LOL.

> On Tue, 01 Mar 2005 18:06:18 GMT, gwhite <gwhite@deadend.com> wrote:
>
> >You don't know the output impedance because you
> >don't have a way of determining it by swinging the output full-scale.
>
> This is more properly an admission from you, than a projected
> inability upon us. You may not know how, but this does not prevent me
> from expressing a value that is suitably accurate.
>
> Now, within the field of measurement, no statement is accurate without
> an expression of its range of error. However, in this regard accuracy
> is still a remote issue as you offer nothing of practical
> consideration and have failed to respond to a simple example to
> provide context.

Sheesh!

> Richard Harrison, , KB5WZI, has in this sense already done the heavy
> lifting with:
> >>From the specifications page also, the power reguirement is TX: 18A
> >>13.8V DC. It`s a linear amplifier. Only 40% efficiency. The designer
> >>probably was more interested in low harmonics than efficiency. The final
> >>by itself only takes part of the 18A ao its efficiency is more than 40%.

Efficiency seems to be important enough to mention.

> continuing....
>
> >Even for class A, large signals will/can have rail to rail swing.
>
> This marks an artificial imposition not required to respond to the
> spirit of the topic. Such swings are not necessary.

No one said they "are necessary." But not driving "as hard as possible" simply
means you are wasting power and paying for a bigger device than you need to.

> >The device will not be
> >linear for large swings: sinusoidal input swing will not result in a sinusoidal
> >output swing.
>
> This is immaterial to impedance,...

Oh? The definition of impedance is:

Z = V/I

V and I are sinusoid (phasors), *by definition*. It is as if you don't know the definition of impedance.

> and is a set-up of another artificial
> imposition: the Thevenin Model (which was specifically dismissed).
> Hence we are into a cascade of impositions.
>
> >But "impedance" is a sinusoidal (s-domain) concept.
>
> This is baloney cut thick. S Domains (?) are at best a modern
> contrivance to model well behaved small signal devices.

S-domain *is* linear circuit theory.

> Their utility
> follow theory, they do not drive theory.

It *is* linear circuit theory. The theory was developed for its utility.

http://www.amazon.com/exec/obidos/tg/detail/-/0801869099/

> >So how can
> >you define an impedance--a sinusoidal concept--when the waveform is not
> >sinusoidal for an inputted sine wave?
>
> There are no sine waves in nature, so by this contortion of logic from
> above there are no s-domains (?).

What are you talking about? No circuit is perfectly linear, and no one I knows claims such. That does not invalidate linear theory, nor denigrate its utility properly applied. Many circuits are "sufficiently linear," and "care" little about supply rails and efficiency.

> Why are there no sine waves in
> nature? Because nature is bounded by the Big Bang (a discontinuity)
> at one end, and has yet to fulfill its infinite extent.

I'm not religious, but you beg me.

Ohmigod!

> In other words, tedious appeals to artificial impositions of purity
> fail at the gate for their sheer collapse of internal logic. This
> kind of stuff appeals to arm-chair theorists who find themselves
> impotent to perform.

Suit yourself. Go ahead and apply theory to that for which it was not designed to handle. In fact, you don't do it -- your own example about testing your PA stated absolutely nothing about linear theory, or output impedance of the device. I use (apply) linear theory a good share of the time. That doesn't mean I don't recognize its limitations as a theory (a model).

> > The point is that the output impedance is
> >time dependent ("causes" the non-sinusoid output for sinusoid drive), which
> >rather makes the concept questionable. As I wrote earlier, one might decide to
> >consider a time averaged impedance, but I'm not clear on what the utility would
> >be.
>
> Classic performance anxiety. Engineers learn to live with limitation
> and to express results and sources of error so that others can judge
> merit. Priests are better suited with mulling over these issues of
> ambiguity.

Wow. More importantly, engineers select appropriate models for the design task. They don't bother with ones that have no application to the task at hand.

> >There is no "presumption." Linear parameters and theorems totally ignore
> >practical limitations--this is a fact and you can look it up in just about any
> >text on circuit analysis.
>
> Knowledge limited. There are many suitable texts that offer a wider
> spectrum of discussion that are fully capable of answering these
> issues.

Yeah, like for example:

http://www.amazon.com/exec/obidos/tg/detail/-/0890069891/

> However, it is made worse that most of this stuff is
> derivable from first principles and no recourse to vaster libraries is
> actually needed.

Yes, load line matching is certainly a first principle.

> >The simple linear model is perfectly okay for small
> >signal devices. It isn't okay for large signal devices.
>
> And yet there is no substantive illustration to prove this ambiguous
> point. What constitutes small, and what demarcates large?

Maybe you didn't read those first principles quite closely enough. Nor have you read this thread well. Large signal amplifiers -- i.e. power amplifiers -- "care" about DC to RF efficiency and supply rails. Small signal amplifiers don't "care" about that.

> Such nebulous thinking clouds the
> obvious observation that the full range
> of devices themselves operate on only one principle.

Quite afraid to ask, but being brave, I ask: what "one principle" is it "that the full range of devices themselves operate" upon?

> What is limited
> is the human component of their perception, not the physical reality
> of their operation.

And you critiqued me for nonsense.

> The faulty choice of models (S Parameters) is not
> the fault of either Physics or the devices when they diverge from the
> crutch of calculation against the wrong mathematical expression.

And no one said so.

> > In any case, load pull
> >equipment does not make the pretense of defining output impedance of an active
> >large signal device. It does say what the load needs to be to acquire maximum
> >power out of the device.
>
> This is simply the statement from a lack of experience.

No, it is a fact of the matter. You don't know what the equipment does.

> >Thevenins and conjugate matching (for maximum power transfer) are
> >explicitly linear small signal device models. Their use in RF PA output design
> >is a misapplication.
>
> These statements are drawn from thin air.

No, for PA design, the thevenin impedance of the output source never enters "the equation." Thus pretending that it "is there" is an unfounded assertion. You asserted thevenins to PA design, now prove it. You can't.

> >> So to return to a common question that seems to defy 2 out of 3
> >> analysis (and many demurred along the way) - A simple test of a
> >> practical situation with a practical Amateur grade transistor model
> >> 100W transmitter commonly available for more than 20-30 years now:
> >> 1. Presuming CW mode into a "matched load" (any definition will do);
> >
> >Any definition won't do, and for this discussion the specific "won't do" is
> >using conjugate matching which is a small signal (linear) model.
>
> Given the failure to provide any discussion for either or any form of
> matching suggests a lack fluency in any of them.

What utter ignorance of what has actually been written. In my very first post I described the first order cut of matching technique.

> >*You* brought up Thevenins and armchair philosophy regarding it, not me.
>
> I rejected it as an unnecessary filigree,...

Exactly. It is not necessary. But you brought it up, and Ken implied a simile with "impedance matching." You might wonder why it is not necessary. You might even ask the question wondering if the reason it never shows up is because it would be a misapplication of the concept.

> ... but I notice in the quotes
> above that you readily embraced it as a necessary imposition.
>
> > I said
> >Thevenins was irrelevent, and now you appear to agree with me. Ken effectively
> >brought up conjugate matching, not me.
>
> This compounded with the denial of Thevenin is quickly closing the
> available matching mechanisms. If it is not about Thevenin, and it is
> not about Conjugation, then I am willing to wait to hear what it IS
> about.

Ah, at last a relevent question/statement. See my first post in this thread.

> ...But not really. I have little faith that the difference is
> appreciated,...

You don't appreciate it because you don't understand it. That's not my problem.

> nor how many ways a match may be accomplished or for what
> ends.

If you don't know what the end is for an RF PA, how could you hope to scratch a
meaningful and optimal solution?

> >The original comment I was challenging
> >was:
> >
> >"...the antenna works as an impedance mathcing network that matches the output
> >stages impedance to the radiation resistance."
>
> I am always suspicious of how a quoted claim is couched by the
> rebutter (cut and paste from the original is always available and
> citing the link to the complete contextual post is hardly Herculean).

LOL. I guess you don't appreciate convenience.

> However, responding to the bald statement, I find nothing
> objectionable about it.

That's because you don't understand the difference between impedance matching
and ac load line matching.

> >I simply wanted to make it clear that the "matching" done was not an issue of
> >"output impedance" per se. It is an issue of how the transistor is to be loaded
> >to extract maximum ouput power.
>
> Again, a presumption not brought to the table.

It was brought to the table in my first post to this thread.

> It may follow as a
> consequence, but it is not a necessary condition.
>
> Our questioner who started this thread is undoubtedly interested in

> the outcome in terms of maximum radiation for a limited power - it is
> a chain of causality that is a forced step matching issue from the
> battery to the ï¿½ther. This is a first principle of successful
> production engineering.

How would you know about first principles of production engineering and what does it have to do with this thread?

3212. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 20:50:47 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <4226274C.2701686E@deadend.com>
Source record: 81250
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

John Woodgate wrote:
>
> I read in sci.electronics.design that Cecil Moore <w5dxp@hotmail.com>
> wrote (in <4225c50a$1_2@127.0.0.1>) about '1/4 vs 1/2 wavelength
> antenna', on Wed, 2 Mar 2005:
> >Richard Clark wrote:
> >> There are no sine waves in nature, so by this contortion of logic from
> >> above there are no s-domains (?). Why are there no sine waves in
> >> nature? Because nature is bounded by the Big Bang (a discontinuity)
> >> at one end, and has yet to fulfill its infinite extent.
> > >
> > >One would think that a 12 billion year windowing
> > >would be close enough. :-)
> >
> > Not only that, but since by definition the Universe started at T=0, any
> > 'sine wave' that starts at a positive zero-crossing is at any later time
> > indistinguishable from a real one that started at T=0.

Not if we were there the moment the later wave turned on. I heard that amateur operators hate splatter. RC appears to be an exception, however.

3213. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 21:05:05 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <zhMJ+8FBqiJCFweH@jmwa.demon.co.uk>
Source record: 81251
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that gwhite <gwhite@deadend.com> wrote
(in <4226274C.2701686E@deadend.com>) about '1/4 vs 1/2 wavelength
antenna', on Wed, 2 Mar 2005:
>John Woodgate wrote:
>> Not only that, but since by definition the Universe started at T=0, any
>> 'sine wave' that starts at a positive zero-crossing is at any later time
>> indistinguishable from a real one that started at T=0.
>
>Not if we were there the moment the later wave turned on. I heard that
>amateur operators hate splatter. RC appears to be an exception,
>however.

See 'at any later time' in my text.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

3214. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 21:14:15 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <42262CCA.AC339ADC@deadend.com>
Source record: 81252
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

John Woodgate wrote:
>
> I read in sci.electronics.design that gwhite <gwhite@deadend.com> wrote
> (in <4226274C.2701686E@deadend.com>) about '1/4 vs 1/2 wavelength
> antenna', on Wed, 2 Mar 2005:
> >John Woodgate wrote:
> >> Not only that, but since by definition the Universe started at T=0, any
> >> 'sine wave' that starts at a positive zero-crossing is at any later time
> >> indistinguishable from a real one that started at T=0.
> >>
> >Not if we were there the moment the later wave turned on. I heard that
> >amateur operators hate splatter. RC appears to be an exception,
> >however.
>
> See 'at any later time' in my text.

Oh yeah.

3215. Re: Antenna System Grounding Review Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 21:28:12 UTC
From: Jim Miller <jim@jtmiller.com>
Message-ID: <1109798892.580486.175590@z14g2000cwz.googlegroups.com>
Source record: 81253

Hi Jack

Just got back from HomeDepot where they had 5/8"x8' copper rod and bronze clamps as well as #2 copper wire. I'll use two bronze clamps on each so I can daisy chain the #2. I can put one on the corner of the house and two more along the way to the service ground. That will make four including the station ground around the house and one out at the antenna tuner.

Thanks for your help

jtm (risk averse...)

3216. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 21:39:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <99ac21l3uh76ju0sgd4lipiiek3616fc53@4ax.com>
Source record: 81255
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Wed, 02 Mar 2005 20:30:45 GMT, gwhite <gwhite@deadend.com> wrote:

>> > I said
>> >Thevenins was irrelevent, and now you appear to agree with me. Ken effectively
>> >brought up conjugate matching, not me.
>>
>> This compounded with the denial of Thevenin is quickly closing the
>> available matching mechanisms. If it is not about Thevenin, and it is
>> not about Conjugation, then I am willing to wait to hear what it IS
>> about.
>
>Ah, at last a relevent question/statement. See my first post in this thread.
>

Mmm-Hmm

On Wed, 23 Feb 2005 19:08:20 GMT, gwhite <gwhite@deadend.com> wrote:

>RF transmitters are not impedance matched to antennae in the sense of maximum
>transfer of power.

Hi OM,

As I've noted in the past, you can fill a library with negative
assertions without ever offering an answer, eg.:
>RF transmitters are not Nuclear resonated to antennae in the sense of maximum
>transfer of power.

>RF transmitters are not impedance matched to antennae in the sense of maximum
>balance of payments.

>RF transmitters are not cosmically matched to antennae in the sense of maximum
>psychrotropic power.

The list could go on, be completely accurate, and yet never actually
mean anything in the end much as the nonsense you offered from the
start.

You sighed with content at being offered a "relevent
question/statement" Your re-iterative response contains the same (how
could it be otherwise?) slack of precision that started this. Want to
try again?

You could have as easily expressed what sense they ARE matched, but
instead this time offer what Basis of Matching you are attempting to
describe. This is the more rigorous approach that eliminates vague
descriptions and uses standard terms. If you have to query about what

"Basis" means (used by professionals - namely metrologists who can
quantify Output Z of all sources) - then we can skip it as a topic out
of the reach of amateur discussion.

Note:
>Again, RF PA's should be load-line matched.
Does not qualify as a Basis. It is suggestive of one, but because you
indiscriminately mix several Basis within your discussions, it is your
responsibility to be precise. If you can accomplish this, then we can
proceed to review how little it all matters.

Barring resolving any of these issues of precise language, I notice
that you rather enjoy fruitless jousting with them than challenging my
support of Ken's (supposed) statement that you say is your focus:
>> However, responding to the bald statement, I find nothing
>> objectionable about it.
>
>That's because you don't understand the difference between impedance matching
>and ac load line matching.
We will leave that as another dead-end.

73's
Richard Clark, KB7QHC

3217. 450ohm Ladder Line Dimension and PVC

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 22:16:41 UTC
From: Jim Miller <jim@jtmiller.com>
Message-ID: <1109801801.317042.174310@z14g2000cwz.googlegroups.com>
Source record: 81256

I'd like to run 450ohm windowline inside 1/2" vertical PVC conduit for about 8 feet to minimize the chance of kids messing with it and getting hurt.

The line would come in vertically upwards through two 90° pulls which have a removable plate on the corner, the first of which would have a box adapter bushing to keep the 1/2" dimension. The second adapter would fit to the top of the PVC. This should keep water intrusion out.

Another 90° pull junction would be at the bottom where the line would enter a PVC junction box housing the lightning arrestor and remote tuner. A 5/8"x8' ground rod would be the support for the box to which the arrestor and tuner would be bonded.

What's the edge to edge dimension on 450ohm line?

Anyone done this and experienced big losses?

Should I expect big losses?

This would make for a nice clean installation and relatively stealthy.

tnx
jtm

3218. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 22:22:09 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <42263CB3.FF19AAF1@deadend.com>
Source record: 81258
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Ken Smith wrote:
>
> In article <4224AF38.770053D4@deadend.com>, gwhite <gwhite@deadend.com> wrote:
> [...]
> >You entirely missed the point. You don't know the output impedance because you
> >don't have a way of determining it by swinging the output full-scale.
>
> You don't have to swing the output full-scale to measure the impedance.

Playing along with the idea that there is some meaningful fixed Z of the device for large swings, yes you would have to do so to prove the concept. You would need to prove that output Z was the same for driving 1 W into the output as for driving 100 W into the output. I also predict that even the small signal output Z of the power amp will not be that conjugate impedance you think it is for a properly designed PA. (I am not making a claim that it would *never* be so for any PA.)

> Any change in the load, no matter how small, will cause a change in the
> output voltage and the output current.

Likewise, a change in the output Z would do the same thing. Since you're presuming linearity, we can include gain linearity. I.e., the gain with "-10 dB" of drive is the same as the gain with "0 dB" drive. I'll define the 0 dB gain as associated with the 1 db compression point. Since the gain is defined as linear (really fixed regardless of drive), and the load is fixed, something must have "caused" the compression. A way to *model* the compression is a changed output Z as a function of drive. While I realize this is an unconventional view of output compression modeling, I believe it is fair, since you are making the linear presumption. I think this is fair also because the impedance concept is a linear/sinusoid one. Under that presumption, you've given me license to disregard distortion.

> From these you can calculate the
> output impedance at the current operating point.
>
> When a transistor is operating under large signal conditions into a tuned
> load, there is still an output impedance and this impedance still
> discribes what will happen for small changes in the load.

Let's do another example.

Say the device we've selected has an Imax rating of 1 amp and a generator resistance of 100 ohms. Per standard linear theory, we do our norton model of Igen in parallel with the 100 ohms. Under standard conjugate matching theory, we should load it with 100 ohms.

Now with the 100 ohm load, we get a 50 V peak for Imax = 1 amp. But what if both our DC supply and device breakdown won't allow this? We have a practical limiting Vmax not at all included in linear theory. Due to breakdown or supply rail concerns, we'll see our Imax quite short of the 1 amp we expect when the device is loaded with 100 ohms. We won't be getting all the power out of it we "expect" because of practical limitations not built into linear conjugate matching theory.

How do we select the best load, since conjugate loading clearly does not use the device to its full potential? We seek Ropt, or what is commonly referred to as the load line match.

Ropt = Vmax/Imax

where Ropt << Rgen, if not

(Rgen + Ropt)/(Rgen*Ropt) = Vmax/Imax

So even looking into the PA output in the small signal sense (or tweaking the impedance as you suggest), we won't likely see Ropt = Rgen, because we are dealing with some practical design limitations not accounted for in linear theory.

Perhaps a couple of quotes from Cripps would be nice:

http://www.amazon.com/exec/obidos/tg/detail/-/0890069891/

"The load-line match is a real-world compromise that is necessary to extract the maximum power from RF transistors and at the same time keep the RF voltage swing within specified limits and/or the available DC supply." p13

"A final note here concerns the nebulous and highly questionable concept of large signal impedance. The reason for the load-line match is to accommodate the maximum allowable current and voltage swings at the transistor output. That says nothing about the impedance of the device, which remains the same throughout the linear range. Once a device starts to operate in a significantly nonlinear fashion, the apparent value of the impedances will change, but the whole concept of impedance starts to break down as well, because the wave forms no longer are sinusoidal." p14

3219. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 22:22:37 UTC
From: kensmith@green.rahul.net
Message-ID: <d05ebdqbk1@blue.rahul.net>
Source record: 81257
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <4226056F.48E4AF54@deadend.com>, gwhite <gwhite@deadend.com> wrote:
>Ken Smith wrote:
>>
>
>> >The strongest argument for dropping the impedance matching concept is PA
>> >efficiency, and therefore maximum signal swing. Obtaining maximum swing is a
>> >load line issue.
>>
>> What do you mean by "maximum signal swing" in this context. I can get a
>> bigger swing by leaving the output completely unloaded and hence causing
>> the actual efficiency to be zero.
>
>LOL. Sure, the purpose of a power amp is to actually extract power. This is a
>good start.

No, the purpose of the power amp is to deliver power, not extract it.

>Perhaps a simplistic (and of course idealized) class A example would help. And
>I want to remind that this is a simplification of the first order design cut.

Don't bother with the over simplified Class A case. RF power
amplification is rarely done class and and it is a digression from the
actual topic.

[...]

>Our circuit loaded with 10 ohms delivers twice as much power as with the lesser
>5 ohms or greater 20 ohms. That is, extracted output power is peaking at some
>finite non-zero value. This is also easily seen to be most efficient point for
>this simplistic example.

At some point as you decrease the resistance, the output will drop to zero
as the amplifier fails or it will start to decrease in some more
controlled manner as the protection circuits take control. If we assume
the latter case, it is easy to see that the power reaches a maximum value
and then decreases as the resistance is lowered. The point at which the
power is at the maximum is the point at which the load is matched. If you
make a small change in the load and observe the voltage and current when
that small change is made, you will see that that is indeed the output
impedance of the amplifier. I think this is the part you are not
grasping.

--
--
kensmith@rahul.net forging knowledge

3220. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 22:27:44 UTC
From: kensmith@green.rahul.net
Message-ID: <d05el0qbk2@blue.rahul.net>
Source record: 81259
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <42260EDB.BB0D03AB@deadend.com>, gwhite <gwhite@deadend.com> wrote:
[...]
>Here's the original quote [Ken]:
>
>"When the correct matching is done, the antenna works as an impedance mathcing
>network that matches the output stages impedance to the radiation resistance."

Yes, I stand by and have just in another part of the thread once again explained that indeed the impedance is matched. ie: If you make a small change in the impedance in any direction the power decreases. Increasing the resistance is the obvious one. The other three are because the protection circuits act. The OP had a completed transmitter he was connecting to a length of wire.

--
--
kensmith@rahul.net forging knowledge

3221. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 22:30:38 UTC
From: kensmith@green.rahul.net
Message-ID: <d05eqeqbk3@blue.rahul.net>
Source record: 81260
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

In article <nUDcDzA9tWJCFw$b@jmwa.demon.co.uk>,
John Woodgate <noone@yuk.yuk> wrote:
[...]
>The point is that if you want to talk/write about one of these
>impedances, you need, to prevent misunderstanding, use a precise term,
>such as 'incremental output source impedance' and define it.

You are right. I really needed to be more clear in the first posting I
did. That bridge has now been crossed and this is getting tiresome. If
the OP doesn't come in with more questions, I'm out of here.

--
--
kensmith@rahul.net forging knowledge

3222. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 22:34:28 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <42263F97.A84CCB7@deadend.com>
Source record: 81261
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Ken Smith wrote:
>
> In article <4226056F.48E4AF54@deadend.com>, gwhite <gwhite@deadend.com> wrote:
> >Ken Smith wrote:
> >>
> >
> >> >The strongest argument for dropping the impedance matching concept is PA
> >> >efficiency, and therefore maximum signal swing. Obtaining maximum swing is a
> >> >load line issue.
> >>
> >> What do you mean by "maximum signal swing" in this context. I can get a
> >> bigger swing by leaving the output completely unloaded and hence causing
> >> the actual efficiency to be zero.
> >
> >LOL. Sure, the purpose of a power amp is to actually extract power. This is a
> >good start.
>
> No, the purpose of the power amp is to deliver power, not extract it.

Well really, once the device and supply have been determined, we can indeed view
it as extraction. We'll load it to extract the most. If you want to mince
words and call it "deliver," that is fine.

> >Perhaps a simplistic (and of course idealized) class A example would help. And
> >I want to remind that this is a simplification of the first order design cut.
>
> Don't bother with the over simplified Class A case. RF power
> amplification is rarely done class and and it is a digression from the
> actual topic.

Well, class A is certainly done. Two cases are where the extra little bit of
linearity is desired and at high frequencies, were PAE starts to take a bite as
the gain drops below 10 dB.

> >Our circuit loaded with 10 ohms delivers twice as much power as with the lesser
> >5 ohms or greater 20 ohms. That is, extracted output power is peaking at some
> >finite non-zero value. This is also easily seen to be most efficient point for
> >this simplistic example.
>
> At some point as you decrease the resistance, the output will drop to zero
> as the amplifier fails or it will start to decrease in some more
> controlled manner as the protection circuits take control. If we assume
> the latter case, it is easy to see that the power reaches a maximum value
> and then decreases as the resistance is lowered. The point at which the

> power is at the maximum is the point at which the load is matched. If you
> make a small change in the load and observe the voltage and current when
> that small change is made, you will see that that is indeed the output
> impedance of the amplifier. I think this is the part you are not
> grasping.

No, this is exactly where I'm saying you are incorrect. You are not getting the practical limitations and are mistakenly applying linear concepts. It doesn't work if you want to extract maximum power from the DC supply through a real device, converting the DC power into RF power.

3223. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 22:44:27 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <422641ED.253BB78E@deadend.com>
Source record: 81262
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Ken Smith wrote:
>
> In article <42260EDB.BB0D03AB@deadend.com>, gwhite <gwhite@deadend.com> wrote:
> [...]
> >Here's the original quote [Ken]:
> >
> >"When the correct matching is done, the antenna works as an impedance mathcing
> >network that matches the output stages impedance to the radiation resistance."
>
> Yes, I stand by and have just in another part of the thread once again
> explained that indeed the impedance is matched. ie: If you make a small
> change in the impedance in any direction the power decreases.

Driven to max swing, this is true. But it is because of asymmetrical clipping, not because of conjugate mismatch. For lower drives, what you say won't necessarily be true *unless* you've mis-designed according to conjugate match ideals. Your argument is circular.

If you design for conjugate match, you're right. I'm saying: don't do that. If I design for load line match and you design for conjugate max (both pf us using the same device and supply), I will get a higher peak power than you will. However, you'll get to be right about how your amp acts regarding diverging from conjugate load. But it is irrelevent: you made a fundamental mistake.

> Increasing
> the resistance is the obvious one. The other three are because the
> protection circuits act. The OP had a completed transmitter he was
> connecting to a length of wire.

3224. Re: 450ohm Ladder Line Dimension and PVC

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 22:50:34 UTC
From: jimbo <jimbo62@spamex.com>
Message-ID: <1109803834.423946.64280@l41g2000cwc.googlegroups.com>
Source record: 81263

The 450 ohm ladder line that I have is about 1 inch wide. Maybe you mean TV lead line?

Good luck, jimbo

Jim Miller wrote:
> I'd like to run 450ohm windowline inside 1/2" vertical PVC conduit for
> about 8 feet to minimize the chance of kids messing with it and getting
> hurt.
>
> The line would come in vertically upwards through two 90° pulls which
> have a removable plate on the corner, the first of which would have a
> box adapter bushing to keep the 1/2" dimension. The second adapter
> would fit to the top of the PVC. This should keep water intrusion out.
>
> Another 90° pull junction would be at the bottom where the line would
> enter a PVC junction box housing the lightning arrestor and remote
> tuner. A 5/8"x8' ground rod would be the support for the box to which
> the arrestor and tuner would be bonded.
>
> What's the edge to edge dimension on 450ohm line?
>
> Anyone done this and experienced big losses?
>
> Should I expect big losses?
>
> This would make for a nice clean installation and relatively stealthy.
>
> tnx
> jtm

3225. Re: 450ohm Ladder Line Dimension and PVC

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 23:12:57 UTC
From: jgboyles@aol.com
Message-ID: <1109805177.576635.131610@o13g2000cwo.googlegroups.com>
Source record: 81264

Jim Miller wrote:
> I'd like to run 450ohm windowline inside 1/2" vertical PVC conduit
for
> about 8 feet to minimize the chance of kids messing with it and
getting
> hurt.
> What's the edge to edge dimension on 450ohm line?
> tnx
> jtm

Hi Jim, The ladder line I have is .931 inches edge to edge. As such
I would not recommend trying to stuff it thru 8' of 1/2" PVC. I would
at least use 1", and even then you will have some compression of the
ladder line. Changing the spacing of ladder line will change its
characteristic impedance.
Thinking about it, if you force ladder line into 1/2" PVC you will
have to distort it into a "U" shape, and have a bad time trying to fish
it thru the PVC.
Gary N4AST

3226. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 23:25:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <28ic219b26augatj24k57n0v4s9g0pc0hf@4ax.com>
Source record: 81265

On Wed, 02 Mar 2005 13:04:50 -0500, clvrmnky
<clvrmnky-uunet@coldmail.com.invalid> wrote:

>I know that receivers are less demanding of impedance matching in
>general, but my readings suggest that I should have a balun (unun) of
>some sort to match the impedance better, since I'm pretty much stuck
>with end-fed longwires.

Hi OM,

This match, as you speak of, is probably remote from any probability
you are likely to encounter with the antenna options you describe in
your posting. However, there are other merits:

>a proper shielded connection to my receiver should help minimize
>stray RF noise.

Presuming you mean to terminate the far end shield connection to
ground.

>I'm guessing the real advantage would be realized if I had a good RF
>ground at the receiver and/or balun. This will be sort of tricky. I
>don't even think I have copper cold-water pipes anywhere, and running
>copper braid over the balcony, down the side of the building and into
>6-foot rod just ain't going to happen.

OK, so we strike out those as options not available to you.

>I've heard of people using
>houseplants for poor grounds when no other was available, and I have
>many kilos of wet earth on the balcony.

Don't even think of it. Ground does not mean wet mud.

>I've seen a neat artificial ground/antenna tuner from MFJ (I think)
>which seems to offer a lot of bang for the buck. It even has multiple
>inputs for high-Z single wires. Would this be useful for SW?

Certainly, but you would achieve just as much with a simple tuner
(cheap one without the transmitter meters). In fact, this tuner is
generally very necessary to keep local AM stations from desensitizing
your receiver. This is a common plight suffered by many who would
otherwise think they were doing pretty well, but just need more
antenna to get those signals others are reporting.

>Finally, I'm probably just going to wind my own balun out of a ferrite
>core. I just can't seem to find the details on how to wind the copper.
> Do I wind the primary first around the whole core, and then the

>secondary on top of it?

What you are describing is a conventional power transformer - NOT the same thing as a Transmission Line Transformer. What you should really concentrate on is what is called a Transmission Line Choke (perfectly accomplished using a 1:1 Current BalUn/UnUn).

73's
Richard Clark, KB7QHC

3227. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-02 23:52:03 UTC
From: richardharrison@webtv.net
Message-ID: <13637-422651A3-40@storefull-3252.bay.webtv.net>
Source record: 81267

G. White wrote:
"This example is intended to be illustrative rather than exact."

Nobody contradicts that maximum power from an amplifier requires an impedance match, so far.

Nobody contradicts that efficiency in an ideal Class A amplifier can never exceed 50%, so far.

Some texts show waveform distortion typical of a single-ended Class A amplifier and note that "maximum undistorted power" requires a load impedance 2 to 3 times that of the amplifying device.

G. White gives a peak to peak voltage of 20 and a power out of 5 watts. RMS volts are 7.07 in this case. The load then is the square of the volts divided by the power. This is 50/5 or 10 ohms for the load. If this matches his amplifier, 5 watts is the maximum output.

G. White said that he did not consider the output-Z of the amplifier in its loading. Ignoring an amplifier`s impedance does not make it go away. Ignoring an amplifier`s impedance does not revoke the maximum power transfer theorem, either.

Best regards, Richard Harrison, KB5WZI

3228. Re: 450ohm Ladder Line Dimension and PVC

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 00:07:27 UTC
From: Jim Miller <jim@jtmiller.com>
Message-ID: <1109808447.452422.41770@o13g2000cwo.googlegroups.com>
Source record: 81266

Thanks for all the info. I'll switch to 1".

The reason I don't have the dimensions is that I'm new to AR and don't have 450ohm in hand. I'm trying to figure out what to build for an antenna including all the "make it pretty" details rather than trying to do it over several times.

thanks again!

jtm

3229. Re: Lightning and Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 00:13:22 UTC
From: wizard12342002@yahoo.com
Message-ID: <1109808802.207468.161330@l41g2000cwc.googlegroups.com>
Source record: 81268

All,

Thanks for the replies. One clarification; I meant "ground rod" in 5.) above, NOT "lightning rod". It should read:

5.) Finally, consider an amateur antenna on a pole, located some distance from the service entrance of the house. Let's say there is a copper cold water pipe right at the service entrance. Is it wise to place a ground rod (or rods) right under the antenna, place an arrestor on the coax there and then another arrestor where the coax enters at the service entrance? Is a ground wire needed between the remote ground rod and the cold water pipe?

Thanks,

-JJ

3230. Why a Short Lightning Ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 00:27:50 UTC
From: wizard12342002@yahoo.com
Message-ID: <1109809670.151362.237410@l41g2000cwc.googlegroups.com>
Source record: 81269

I can understand why we want a short connection between the station ground (the bonded chassis) and earth ground in the case of an RF ground, especially for unbalanced antennas. But for a lightning ground, I am not sure I understand why we want a short connection between station ground and earth.

Let's take the example of an operator with whose only choice is a second story ham shack and an antenna mounted on a pole some distance from the house. If a balanced antenna system is used (so we don't need a good RF ground) and the coax has an arrestor placed at the service entrance ground where the shield is connected (cold water pipe in basement), why do we need a ground wire at all? (The coax would run from the antenna to the basement level [where grounded] and then up to the second floor.) The chassis' can be bonded together and the bond point can be connected to earth ground through the coax shield. The lightning is not going to travel up to the second floor to get the radio when it has a low impedance path right at ground, is it?

-JJ

3231. What is Zint of an amplifier ?.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 00:28:18 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d05ln2$51a$1@hercules.btinternet.com>
Source record: 81270

Richard, your method of measuring internal impedance of an amplifier sounds interesting. (o/c volts divided by s/c current)

At present I have no facilities to make such measurements.

Perhaps a few curious readers, who do have facilities, might make crude measurements on their HF rigs and report approximate impedance values on one or two bands on this newsgroup. Some sort of average could be obtained.

Reg, G4FGQ
==========

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:18040-4225EB51-15@storefull-3257.bay.webtv.net...
> Asimov wrote:
> "Let`s look at it from the dynamic point of view (loss in a Class A
> amplifier)."
>
> The no-signal loss of a Class A amplifier is 100%. It equals volts x
> amps and appears in the amplifier. Now feed a signal to the ideal
> amplifier set just below the clipping level. Average d-c power is
> unchanged from the unloaded and no-signal conditions.
>
> Connect a matched load resistor to the amplifier output. If physically
> small, the resistor may become warm with heat that were it not for the
> load would be otherwise dissipated in the amplifier. Input power to the
> Class A amplifier is unchanging.
>
> Finding the internal resistance theoretically is simple. It is simply
> the open-circuit output voltage divided by the short-circuit current.
>
> Open-circuit voltage at full output and short-circuit current may be
> severe. Internal resistance can be found under less stressful
> conditions. Internal resistance will drop the voltage to any load
> reasistance. Use the voltage-divider formula to calculate the internal
> resistance.
>
> With pure resistances, half the open-circuit volts are dropped by the
> internal resistance when the load is a match.
>
> A power amplifier`s internal impedance can be determined.
>
> Power output from a Class A amplifier cools it.
>
> Best regards, Richard Harrison, KB5WZI

>

3232. Re: Antenna System Grounding Review Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 00:54:06 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <cmnc21perh1hol13gvvimahv0atcv51kcc@4ax.com>
Source record: 81271

On Wed, 2 Mar 2005 13:23:25 -0500, "Jack Painter" <223bthp@cox.net>
wrote:

>
>
>>
>
>Hi Jim, I was quoting from the fire and electrical codes regarding grounding
>electrodes, and yes they mean buried 2' beneath ground surface to reach a
>total depth of 10'. Use the length of the rod in the ground, not rod depth
>when determining spacing. That confusing aspect came about when 10' rods
>were going to be maintained as the minimum length allowed, and contractors
>screamed they could not obtain them (cheaply). So the 8' rod buried to a
>depth of 10' was born.

Jack, isn't this getting a little over-the-top? I have to dig a 2
foot hole, get an 8 foot rod totally buried in that hole -- and then
what, to bond different rods together, dig a 2 foot trench from rod to
rod to bond them together with strapping?

And what about all the corrosion on the buried rods and strapping?

Who does this sort of stuff !! ??

I understand you're quoting from codes, but does anyone "residential"
really do this stuff?

bob
kj5qwg

3233. Antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 01:06:32 UTC
From: "Joe S." <nobody@nowhere.net>
Message-ID: <d05nul097i@news3.newsguy.com>
Source record: 81176

In 1996, I disassembled my antenna farm that graced the 3-acre plot where we lived in Manassas, VA:
-- 40- and 50-foot Rohn towers
-- two 135-foot dipoles each center-fed with ladder line
-- TH7
-- assorted VHF and UHF beams
-- 40-mtr inverted Vee

Bundled it all up and moved from Virginia to Tennessee where I moved into a restricted subdivision. The antenna farm stayed bundled up in the crawl space.

In 2003, sold the house and moved into an apartment at which point I sold the antenna farm for a fraction of what I paid for it.

Now, in 2005, living in an apartment on the Mississippi Gulf Coast and trying to scrape together the money to build a house on a 100 x 100-foot lot where maybe I can put up a short dipole but will not be able to have a tower.

So -- what's the point? As I sit here and read the debates about this wire, that vertical, some other yagi, yes/no on the Carolina Windom, advice on an antenna for a 10-acre plot -- I can't help but think: If you have an antenna, thank the gods because any antenna radiates better than no antenna.

--

Joe S.

3234. Re: Why a Short Lightning Ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 01:08:08 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <YrtVd.25092$7z6.22731@lakeread04>
Source record: 81172

<wizard12342002@yahoo.com> wrote
> I can understand why we want a short connection between the station
> ground (the bonded chassis) and earth ground in the case of an RF
> ground, especially for unbalanced antennas. But for a lightning
> ground, I am not sure I understand why we want a short connection
> between station ground and earth.

Because a large portion of the frequency spectrum of lightning is at RF. Therefore the inductance of a conductor, not just it's dc-resistance, is critical to maintain as low as possible. This is done by the shortest, lowest impedance connection possible to the earth. The potential from all bonded equipment in a shack and the potential at the grounding electrode of the station ground should bever be more than 4' apart in elevation, and even that is a stretch. 1' would be ideal!

>
> Let's take the example of an operator with whose only choice is a
> second story ham shack and an antenna mounted on a pole some distance
> from the house. If a balanced antenna system is used (so we don't need
> a good RF ground) and the coax has an arrestor placed at the service
> entrance ground where the shield is connected (cold water pipe in
> basement), why do we need a ground wire at all? (The coax would run
> from the antenna to the basement level [where grounded] and then up to
> the second floor.) The chassis' can be bonded together and the bond
> point can be connected to earth ground through the coax shield. The
> lightning is not going to travel up to the second floor to get the
> radio when it has a low impedance path right at ground, is it?
>
> -JJ

Good that you brought that up. A second story ham shack is the most difficult, and almost an impossible location to safely provide a low impedance ground for. Feedlines supplying a second-floor station should never be allowed to enter from an above ground elevation. Think of inches of elevation being equal to hundreds of volts each. A few feet above ground can easily be 10,000v potential above ground. As long as the conditions you described are followed, the feedlines have a safe path up to a second story, wrt ground potential rise or attachment of lightning to a nearby antenna.

There are other issues that make the second floor difficult to protect, but education can solve most of those problems. Lightning striking the nearby antenna tower, telephone pole, tree in the yard, rooftoop, etc, can also induce massive energy by electro-magnetic induction on house AC wiring, phonelines and feedlines inside a structure. It won't matter if they were grounded on the first floor if the energy in also induced at the second

floor level. Bonding, and a ground system, and adequate surge protection control EMI from lightning. The problem that relying on a copper strap connection to ground from 13' above ground is, it still allows a LOT of potential when confronted with thousands of volts of potential from EMI. "Wire" to ground from the second floor is useless at RF frequencies, and even wide copper strap allows a dangerous level of potential to develop. But it is better than nothing, because the electrical wiring on a second floor is at a frightening potential wrt ground. If bonding and a lower impedance path to ground is not provided, the prospect of at least minor damage is possible from any nearby strike. Disconnecting the feedlines outside (only) do not help prevent EMI damage at all. The wiring still carries it, and feedlines still connected to the radios carry it as well. A Drake R8B I own was originally crisped in a friend's second story shack, and it's feedlines were disconnected outside. The entrance point of the damage? The RG-8X feedline! Where did the lightning strike? 200' away on the tower. The connection to AC ground (a horrible potential between earth and AC ground exist on a second floor, remember?) was established via an AC powered sound board that the Drake was connected to via speaker wire connection. My friend thought disconnecting from main AC power and breaking the feedline connection outside was enough to protect equipment. That's not always the case.

73,
Jack Painter
Virginia Beach, Virginia

3235. Re: Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 01:13:58 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <mooc21hs3mj31qo9k5791ekfko7dfv8o7p@4ax.com>
Source record: 81173

I vote best of best. I use one for 40 and 80 meters at 40 feet and have no problems tunning. I also get good reports, and get into Europe on 40 if the band is right. It is a good general purpose antenna. It is probably in the same class with the G5RV, but is a cleaner installation.

Win, W0LZ

3236. lighting replusion?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 01:16:21 UTC
From: ml <m@di.net>
Message-ID: <m-5FD012.20161602032005@news.verizon.net>
Source record: 81174

I was wondering all this neet posting about lightning

i understand that lightning wants to find path of least resistance

if my antenna is grounded, so over other objects on the roof,
including the brick building itself nearby trees etc wouldn't my
antenna then become the 'best' ground ie path of least ristance and
thusly ""attract"" the lightning

i get confused since, my antenna being a good conductor and grounded
(both pairs when not using it) will thereby dissapate ''static'' or
ionic buildup and so i think wouldn't that sorta make lighting not
become super attracted to seek it out??

dunno which takes the lead here??

thanks

m

3237. Re: Antenna System Grounding Review Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 01:16:39 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <XztVd.25177$7z6.15857@lakeread04>
Source record: 81175

"Bob Miller" <NOSPAM@neosoft.com> wrote
> On Wed, 2 Mar 2005 13:23:25 -0500, "Jack Painter" <223bthp@cox.net>
> wrote:
>
> >
> >Hi Jim, I was quoting from the fire and electrical codes regarding
grounding
> >electrodes, and yes they mean buried 2' beneath ground surface to reach a
> >total depth of 10'. Use the length of the rod in the ground, not rod
depth
> >when determining spacing. That confusing aspect came about when 10' rods
> >were going to be maintained as the minimum length allowed, and
contractors
> >screamed they could not obtain them (cheaply). So the 8' rod buried to a
> >depth of 10' was born.
>
> Jack, isn't this getting a little over-the-top? I have to dig a 2
> foot hole, get an 8 foot rod totally buried in that hole -- and then
> what, to bond different rods together, dig a 2 foot trench from rod to
> rod to bond them together with strapping?
>
> And what about all the corrosion on the buried rods and strapping?
>
> Who does this sort of stuff !! ??
>
> I understand you're quoting from codes, but does anyone "residential"
> really do this stuff?
>
> bob
> kj5qwg

Hi Bob, you're right few people follow NEC code to any degree unless an inspector is going to follow. And I hope I pointed out a couple examples where code was changed or written because of convenience, not science (the 2' below grade level and non-continuous requirement). So in some cases following code is not the best practice (it needs to be exceeded) and in other cases is just not practical or possible. You be your own judge there. Anyone who follows the topic knows why the rules are there, and that in the case of a casualty, an investigation may assign blame whether code was followed or not, but certainly if it was not.

The knowledge gained and effort made to protect property is certainly more important than splitting hairs about code that is a moot point for most.

73,

Jack Painter
Virginia Beach, Virginia

3238. Re: Antenna and Grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 01:54:56 UTC
From: bg998@FreeNet.Carleton.CA
Message-ID: <d05qpgnsa1@theodyn.ncf.ca>
Source record: 81177

Gene (thereb4141@csa.org) writes:
> Finally Moving back to an area where I can use my rig again. I will be
> in a two story house and was wondering how running a wire around 2 or
> 3 sides of the house, under the roof overhang eaves would work. Its
> actually a "stilt" type or "beach" type house, and the roof eaves are
> probably 25 feet up. I had a long wire some years ago, and got great
> results. Would this work well, and should I use 2 or 3 or all 4 sides?
> Also... Grounding from the 2nd floor.... Is that going to be a
> problem?? Thanks in advance. Gene K3ASA

If you ran the wire around all 4 sides of the house, you could build a horizontal loop. They work great, but be aware that you are living "inside" the antenna and RF exposure could be a problem.

I would run the wire around just 2 sides, the two sides least used for living and sleeping.

... Martin VE3OAT

3239. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 01:57:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <112cro1nahrpv98@corp.supernews.com>
Source record: 81178

Try this simple test.

Tune your receiver to a part of the dial where there's no station. Disconnect the antenna from your receiver. If the noise level drops, impedance matching won't help your signal/noise ratio, it'll just make everything louder. You can accomplish the same thing by turning up the volume control.

Roy Lewallen, W7EL

clvrmnky wrote:
> I've got a little shortwave receiver that has a decent amount of gain in
> it's antenna input. I've been experimenting with different lengths and
> placements of the wire, and seen some interesting homebrew antennas I
> might try once the snow melts.
>
> I know that receivers are less demanding of impedance matching in
> general, but my readings suggest that I should have a balun (unun) of
> some sort to match the impedance better, since I'm pretty much stuck
> with end-fed longwires. This should get more signal to my front-end,
> and a proper shielded connection to my receiver should help minimize
> stray RF noise.
>
> I'm a renter, so I'm going to experiment with running a wire along the
> eaves on the balcony, which is open to two sides of the house (wooden
> two-story.) That is, I do not have the luxury of using the yard, trees
> or anything.
>
> So, my idea is to have a long wire (or folded longwire made from a
> length of twin-lead) go to a balun (or unun, since this is really
> unbalanced-to-unbalanced) and then run a downwire from there to my
> receiver through a window.
>
> I'm guessing the real advantage would be realized if I had a good RF
> ground at the receiver and/or balun. This will be sort of tricky. I
> don't even think I have copper cold-water pipes anywhere, and running
> copper braid over the balcony, down the side of the building and into
> 6-foot rod just ain't going to happen. I've heard of people using
> houseplants for poor grounds when no other was available, and I have
> many kilos of wet earth on the balcony.
>
> I've seen a neat artificial ground/antenna tuner from MFJ (I think)
> which seems to offer a lot of bang for the buck. It even has multiple
> inputs for high-Z single wires. Would this be useful for SW?
>

> Finally, I'm probably just going to wind my own balun out of a ferrite
> core. I just can't seem to find the details on how to wind the copper.
> Do I wind the primary first around the whole core, and then the
> secondary on top of it? Sorry if this is stupid question, but I've got
> most of the math figured out (i.e., no. of turns and such) but since
> I've never seen a balun... my assumption (right or wrong) is that it is
> just a special transformer.
>
> Thanks for your comments.
>
> -- cm

3240. Re: Antenna System Grounding Review Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 02:01:13 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <422670c4$2_2@127.0.0.1>
Source record: 81179

Jim Miller wrote:
> Hi Cecil
>
> Output power for my use will never exceed 100W, more typically 5W or
> less. The RT-11 is only rated to 125W. But your caution on impedance is
> just the sort of feedback I was looking for. I was considering running
> the windowline all the way to the ground but was concerned about the
> neighbors' kids getting their hands on it.

Look at the bright side - you could teach them something about
the physics of RF. :-)

> My alternative was to run a
> bit of conduit upwards to shelter the windowline until it was out of
> reach, ~8ft. I was concerned however about how large such a PVC conduit
> would need to be to avoid problems with the windowline. Would 2" be big
> enough since its non-conducting?

If the PVC is kept away from conductors, 2" should be just fine.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
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3241. Re: Why a Short Lightning Ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 02:01:32 UTC
From: richardharrison@webtv.net
Message-ID: <12941-42266FFC-147@storefull-3258.bay.webtv.net>
Source record: 81183

J.J. wrote:
"---why do we need a ground wire at all?"

Three reasons:
1) 50/60 Hz safety
2) R-F circuitry or suppression
3) Lightning abatement

Powerline frequencies have such wavelength that phase and voltage are the same everywhere along a line in any particular vicinity. Wire inductance is of little consequence.

Balanced R-F circuits don`t rely on ground wires to convey signal between points. Transmission lines do this. Ground wires may be used to supress some undesired R-F appearances.

Ground wires are essential to lightning abatement as the earth is nearly always part of the circuit.

Best regards, Richard Harrison, KB5WZI

3242. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 02:05:49 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <422671d8$1_2@127.0.0.1>
Source record: 81180

Asimov wrote:

> "Cecil Moore" bravely wrote:
> CM> Why do the instructions on my stereo amp warn against
> CM> running the amp with no speakers attached?
>
> Because then the screen tries to carry the plate signal, the reactance
> in the output transformer is not damped, and because a tube is
> sensitive to voltage, this quickly leads to a molten hole in the side?
> Watts to plasma.

Sorry, it's solid state - no screen. Let's face it - unloaded
amplifiers tend to burn up no matter what class they are running.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
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3243. Re: Antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 02:07:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <112csbe98c44la9@corp.supernews.com>
Source record: 81181

Joe S. wrote:
> . . .
> So -- what's the point? As I sit here and read the debates about this wire,
> that vertical, some other yagi, yes/no on the Carolina Windom, advice on an
> antenna for a 10-acre plot -- I can't help but think: If you have an
> antenna, thank the gods because any antenna radiates better than no antenna.
>

The point is, that some people are satisfied with any antenna that radiates. That's fine, nothing wrong with that, and it looks like that describes you.

Some other folks are interested in making an antenna that radiates as well as it can given whatever constraints that are applied (size of yard, size of budget, directions of interest, etc.). Others are simply interested in learning more about how antennas work. Those two groups are the folks who usually hang out here.

You'll find the same thing on other newsgroups -- people in the photography newsgroups aren't primarily snapshot-takers, the ones in the (amateur) homebrew groups aren't the appliance operators, and the ones in the (beer) homebrew groups aren't the Bud Lite swillers.

You might find topics which are more interesting to you on other newsgroups or venues.

Roy Lewallen, W7EL

3244. Re: What is Zint of an amplifier ?.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 02:19:29 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4226750c$1_1@127.0.0.1>
Source record: 81182

Reg Edwards wrote:
> Richard, your method of measuring internal impedance of an amplifier sounds
> interesting. (o/c volts divided by s/c current)

Reg, I tried that one time in college. I got as far as torching
two ARC-5 1625's driving an open circuit so I don't know what
would have happened with a short circuit.
--
73, Cecil http://www.qsl.net/w5dxp

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3245. Re: Antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 02:34:26 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <nHuVd.42334$Rl5.17960@bignews4.bellsouth.net>
Source record: 81184

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:112csbe98c44la9@corp.supernews.com...
> Joe S. wrote:
> > . . .
> > So -- what's the point? As I sit here and read the debates about this
wire,
> > that vertical, some other yagi, yes/no on the Carolina Windom, advice on
an
> > antenna for a 10-acre plot -- I can't help but think: If you have an
> > antenna, thank the gods because any antenna radiates better than no
antenna.
> >
>
> The point is, that some people are satisfied with any antenna that
> radiates. That's fine, nothing wrong with that, and it looks like that
> describes you.
>
> Some other folks are interested in making an antenna that radiates as
> well as it can given whatever constraints that are applied (size of
> yard, size of budget, directions of interest, etc.). Others are simply
> interested in learning more about how antennas work. Those two groups
> are the folks who usually hang out here.
>
> You'll find the same thing on other newsgroups -- people in the
> photography newsgroups aren't primarily snapshot-takers, the ones in the
> (amateur) homebrew groups aren't the appliance operators, and the ones
> in the (beer) homebrew groups aren't the Bud Lite swillers.
>
> You might find topics which are more interesting to you on other
> newsgroups or venues.
>
> Roy Lewallen, W7EL

Joe came across like the man with no feet, looking into the window of a shoe
store, and wondering why anyone with shoes would complain at all. He's only
expressing his feelings that he wished he had an antenna to discuss.

3246. Re: What is Zint of an amplifier ?.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 02:52:41 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <ZZuVd.10864$Pz7.1669@newssvr13.news.prodigy.com>
Source record: 81185

Cecil Moore wrote:
> Reg Edwards wrote:
>
>> Richard, your method of measuring internal impedance of an amplifier
>> sounds
>> interesting. (o/c volts divided by s/c current)
>
>
> Reg, I tried that one time in college. I got as far as torching
> two ARC-5 1625's driving an open circuit so I don't know what
> would have happened with a short circuit.

Some of Motorola's devices might actually be able to stand
Reg's little test. The MRF150, for instance is advertised as
being able to withstand a 30:1 VSWR at all phase angles. I
think Reg should offer to pay for any damage sustained as the
result of this test.
73,
Tom Donaly, KA6RUH

3247. rf channel

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 03:00:49 UTC
From: Jason <cheanglong@gmail.com>
Message-ID: <1109818849.429079.173290@o13g2000cwo.googlegroups.com>
Source record: 81186

Hello All

I need to know more about walkie talkie and how the frequency range
work.
Let'say a walkie talkie with frequency range work from 2400 to 2500 Mhz
wHile the IF is 5 Mhz
So how will the channels be allocated for trasmitting and receiving if
it is a single duplex type?

Can anyone enlighthen please
Any helpful link or ducment is appreciated
Thanks a lot in advance

rgds and thanks
jason

3248. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 04:12:32 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_422694e5@fidonet.org>
Source record: 81190

"Richard Harrison" bravely wrote to "All" (02 Mar 05 10:35:29)
--- on the heady topic of "Re: Say what you mean."

RH> From: richardharrison@webtv.net (Richard Harrison)
RH> Xref: aeinews rec.radio.amateur.antenna:26249

RH> Asimov wrote:
RH> "Let`s look at it from the dynamic point of view (loss in a Class A
RH> amplifier)."

RH> The no-signal loss of a Class A amplifier is 100%. It equals volts x
RH> amps and appears in the amplifier. Now feed a signal to the ideal
RH> amplifier set just below the clipping level. Average d-c power is
RH> unchanged from the unloaded and no-signal conditions.

RH> Connect a matched load resistor to the amplifier output. If physically
RH> small, the resistor may become warm with heat that were it not for the
RH> load would be otherwise dissipated in the amplifier. Input power to
RH> the Class A amplifier is unchanging.
[,,,]
RH> Power output from a Class A amplifier cools it.

Okay, it cools. Enough said. I was confusing it with Class B which
does warm up the heatsink. ;-)

A*s*i*m*o*v

... May you find the light and walk the mountain tops.

3249. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 04:49:48 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <112d5rj26ima164@news.supernews.com>
Source record: 81187

Hi John and thx for the reply. I too used to sell verticals short and I was mystified why anyone would admit to having a "ground mounted" vertical of all kinds. But with a well built vertical and plenty of radials one can bust pileups in DX...I am so pleased with my 5-BTV.

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"John Franklin" <jpfrank@peoplepc.com> wrote in message
news:robVd.3701$wy3.2702@newsread3.news.atl.earthlink.net...
> Charlie.....I read the posts with humor as well. Sounds
> like you would like to do some serious field measurements. I will say that
> one year for field day two friends and myself put up a 4BTV, with 32
> radials out. We got out so well with it we took the 40M dipole down. We
> worked quite a bit of DX as well, this was from a mountain top.
> I think too many people sell the verticles short.....and I will
> bow out at this point.
>
> 73,
> WB7FFI
>
> "Charlie" <charlie@earthlink.com> wrote in message
> news:1127lpaqmlu6v49@news.supernews.com...
>> Using a Hustler 5-BTV ground mounted with 72 radials. I have heard about
>> antenna modeling but is there any way to do a real world take off angle
>> measurement???
>
>

3250. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 04:51:03 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <112d5tskrcp8690@news.supernews.com>
Source record: 81188

Hi Richard thx for the reply but in thinking it over it would seem an unlikely possibility that I could accurately model the 5-BTV with it's traps. Did I miss something there?

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:18040-4225F03B-19@storefull-3257.bay.webtv.net...
> Charlie wrote:
> "Using a Hustler 5-BTV ground mounted with 72 radials. I have heard
> about antenna modeling but is there a way to do a real world take off
> angle measurement?"
>
> Make a small physical model. Then use a field strength meter without a
> helicopter.
>
> Best regards, Richard Harrison, KB5WZI
>

3251. Re: Antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 05:23:18 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <abxVd.311$KD6.76@newsread2.news.atl.earthlink.net>
Source record: 81189

Joe, I live in an apartment and I use an MP-1 clamped to my patio railing.....I get out from middle Tennessee. I even have the occasional contact on the west coast on 40M phone. I try to keep the power down to about 60 watts or so.....don't want the "Worked all Stereos" award. There is hope. I may consider the ATAS-120 to work with my FT-897.....Don't give up.

John

"Joe S." <nobody@nowhere.net> wrote in message news:d05nul097i@news3.newsguy.com...
> So -- what's the point? As I sit here and read the debates about this
> wire,
> that vertical, some other yagi, yes/no on the Carolina Windom, advice on
> an
> antenna for a 10-acre plot -- I can't help but think: If you have an
> antenna, thank the gods because any antenna radiates better than no
> antenna.

3252. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 06:16:50 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_42286a33@fidonet.org>
Source record: 81171

"Rich Grise" bravely wrote to "All" (03 Mar 05 23:00:40)
--- on the heady topic of "Re: 1/4 vs 1/2 wavelength antenna"

RG> From: Rich Grise <richgrise@example.net>
RG> Xref: aeinews rec.radio.amateur.antenna:26329
RG> sci.electronics.design:1386
RG> On Thu, 03 Mar 2005 20:53:48 +0000, John Woodgate wrote:
> I read in sci.electronics.design that gwhite <gwhite@deadend.com> wrote
...
> Doesn't everyone know that an audio amplifier that id designed to feed
> an 8 ohm load MUST have an output source impedance of 0.0000001 ohms or
> less. An output source impedance of 8 ohms would dramatically decrease
> the electromagnetic damping on the loudspeaker voice-coil - by the huge
> factor of .... two!(;-)

RG> Yeah - isn't that why the TOOB amps had those taps? So you could get
RG> that rich, full-bodied TOOB sound? ;-)

No, the taps are there to maximize the power output. If one uses the
8 ohm tap with a 4 ohm speaker the power is reduced and the same if
one uses a 16 ohm speaker. Audio output matching has little to do with
plate resistance in a beam tube or pentode. It has everything to do
with plate voltage swing and maximum plate current. The less plate
resistance the more power can get to the load. Beam tube curves look a
lot like a transistor's collector saturation curves.

However, some tube amplifiers had a current feedback control which
would increase the output impedance to equal the speaker's. Needless
to say it severely reduced the speaker damping resulting in exagerated
frequency response artifacts.

A*s*i*m*o*v

... Without ignorance, knowledge is powerless.

3253. Re: Antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 08:02:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <112dh4gkmg4nh97@corp.supernews.com>
Source record: 81191

Hal Rosser wrote:
>
> Joe came across like the man with no feet, looking into the window of a shoe
> store, and wondering why anyone with shoes would complain at all. He's only
> expressing his feelings that he wished he had an antenna to discuss.

I apologize if I misinterpreted his lament. If the problem is that the current discussions involve antennas which would be impossible for him to construct, I suggest going to groups.google.com and search past postings on this newsgroup for "limited space", "apartment", "stealth", "invisible", "attic" and the like. Although not on the plate at the moment, there's been a great deal of discussion about limited-space antennas on this group in the past, and a lot of good ideas and suggestions have been offered. And I'm sure a lot of folks would be glad to offer more if asked.

Roy Lewallen, W7EL

3254. Re: What is Zint of an amplifier ?.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 13:11:54 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d072eq$k53$1@hercules.btinternet.com>
Source record: 81192

> Reg Edwards wrote:
> > Richard, your method of measuring internal impedance of an amplifier
sounds
> > interesting. (o/c volts divided by s/c current)
>
> Reg, I tried that one time in college. I got as far as torching
> two ARC-5 1625's driving an open circuit so I don't know what
> would have happened with a short circuit.
> --
> 73, Cecil

==========
Cecil,
Presumably you hadn't heard of Ohms Law.

The internal resistance of a generator is independent of its internal voltage. Just reduce the drive level to some small, no particular value, and stop making excuses.

(Somebody will say it IS dependent. But we are interested only in ball-park accuracy. And in any case the operating point will be within the normal range of operation between no-drive and full drive, or between no modulation and full modulation.)

Reg, G4FGQ

3255. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 13:39:14 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d07422spl1@sparta.btinternet.com>
Source record: 81193

"Cecil Moore"
> Charlie wrote:
> > Using a Hustler 5-BTV ground mounted with 72 radials. I have heard
about > > antenna modeling but is there any way to do a real world take off
angle
> > measurement???
>
> Sure, just rent a helicopter and make field strength
> measurements.
>
==========

What use would he make of take-off angle if he ever gets to know it.

3256. Re: What is Zint of an amplifier ?.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 13:41:31 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <422714ec_2@127.0.0.1>
Source record: 81194

Reg Edwards wrote:
> The internal resistance of a generator is independent of its internal
> voltage. Just reduce the drive level to some small, no particular value,
> and stop making excuses.
>
> (Somebody will say it IS dependent. But we are interested only in
> ball-park accuracy. And in any case the operating point will be within the
> normal range of operation between no-drive and full drive, or between no
> modulation and full modulation.)

That might work better for Class-AB than Class-C. If one
reduces drive level on a Class-C, one is reducing the 'on'
time of the device, thus changing the internal impedance
probably somewhat inversely proportional to the 'on' time.

If I remember correctly, my IC-706 would not fold back
under any load condition when run at minimum power.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
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3257. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 13:47:06 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42271636$1_2@127.0.0.1>
Source record: 81195

Reg Edwards wrote:

> "Cecil Moore"
>>Sure, just rent a helicopter and make field strength
>>measurements.
>
> What use would he make of take-off angle if he ever gets to know it.

Maybe it would make him feel good?
Sorta like your Cabernet? :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

3258. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 13:56:38 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_42271bd1@fidonet.org>
Source record: 81206

"Cecil Moore" bravely wrote to "All" (02 Mar 05 20:05:49)
--- on the heady topic of "Re: Say what you mean."

CM> From: Cecil Moore <w5dxp@hotmail.com>
CM> Xref: aeinews rec.radio.amateur.antenna:26289

CM> Asimov wrote:
> Watts to plasma.

CM> Sorry, it's solid state - no screen. Let's face it - unloaded
CM> amplifiers tend to burn up no matter what class they are running.

Why don't you repeat that to the folk who think their amp cools when
it outputs watts?

A*s*i*m*o*v

... New computer? But I like my vacuum tubes... They keep me warm.

3259. Re: Say what you mean.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 13:59:49 UTC
From: richardharrison@webtv.net
Message-ID: <16001-42271855-19@storefull-3253.bay.webtv.net>
Source record: 81196

Asimov wrote:
"I was confusing it with Class B which does warm up the heatsink>"

True. Class B amplifiers can be single-ended for R-F if used with the right tank circuit to supply the missing 1/2-cycle. More often they are push-pull to reduce harmonics.

SSB final amplifiers are biased to near current cut-off. During modulation gaps, current falls to nearly zero. When current is zero, so is the dissipation.

Reg mentioned the blistering heat of the 6N7. Thai`s my recollection too when getting nearly 10 watts of audio from the small twin-triode octal-based metal tube. Reduce the audio volume and the heat is reduced simultaneously.

Best regards, Richard Harrison, KB5WZI

3260. Typical Doublet Tension?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 14:54:30 UTC
From: Jim Miller <jim@jtmiller.com>
Message-ID: <1109861670.268758.50540@o13g2000cwo.googlegroups.com>
Source record: 81197

What's the "typical" tension necessary to keep a 88ft doublet aloft?
I'll also be supporting the midpoint where the feedline attaches.
Insulated 18awg will be used as the antenna wire.

tnx
jtm

3261. Re: lighting replusion?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 15:01:22 UTC
From: richardharrison@webtv.net
Message-ID: <13638-422726C2-31@storefull-3252.bay.webtv.net>
Source record: 81199

ml wrote:
"wouldn`t my antenna then become the "best" ground or path of least resistance and thusly ""attract"" the lightning."

That seems right and conductivity does not have to be high. Ben Franklin found the conductivity of twine sufficient. He drained charge from the atmosphere by placing fis kite high.

Height is shown to attract lightning bolts to grounded towers used for various purposes. Many are hit by nearly every passing thunderstorm. Towers take lightning bolts. They don`t always if ever discharge the earth and atmosphere in their area to eliminate hits. They do seem to divert strikes in their vicinity and offer some protection to their surroundings.

I`ve spent years in broadcast plants and seen many lightning strikes. If you build it they will come.

Best regards, Richard Harrison, KB5WZI

3262. Length of ladder wire for G4RV "Junior: antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 15:08:46 UTC
From: jim <Jim@no.com>
Message-ID: <mu9e21l3esg5t5i8j5163mmd3q0j1m6l3i@4ax.com>
Source record: 81198

Can some one please tell me the optimum length for the lead in ladder wire for the so called "Junior" G4RV which is about 65 feet long with two traps ??

TIA

3263. Re: Lightning and Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 15:49:51 UTC
From: Dave VanHorn <dvanhorn@dvanhorn.org>
Message-ID: <TbCdndwsE8avrrrfRVn-pA@comcast.com>
Source record: 81200

Look up Martin Uman's books on lightning. Very informative.

3264. Re: lighting replusion?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 16:04:31 UTC
From: Harold Burton <hwburton@cableone.net>
Message-ID: <112edcini799144@corp.supernews.com>
Source record: 81201

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:13638-422726C2-31@storefull-3252.bay.webtv.net...
> Height is shown to attract lightning bolts to grounded towers used for
> various purposes. Many are hit by nearly every passing thunderstorm.
> Towers take lightning bolts. They don`t always if ever discharge the
> earth and atmosphere in their area to eliminate hits. They do seem to
> divert strikes in their vicinity and offer some protection to their
> surroundings.
>
> I`ve spent years in broadcast plants and seen many lightning strikes. If
> you build it they will come.
>
> Best regards, Richard Harrison, KB5WZI
>
Saw a program on lightning a year or so back that described the mechanism
involved in setting up a lightning strike. Every raised object in a fairly
large area below an accumulating cloud charge
sends up a stepped "leader"of opposing charge, all these "leaders"
advance in steps that also zig and zag randomly upward. If I remember
correctly the charge in the cloud is also sending out
multiple feelers in a zig zag process. When one of the clouds
feelers completes a circuit by meeting a leader from the ground
the circuit completes and all hell breaks loose. It's all relatively random
and the leader from a golfers head may just connect before the leader from a
much taller tree or tower connects. if he's a lucky golfer the taller stuff
will make the connection. I've seen weather service warnings lately
indicating that anything within a 25 mile radius of a stormclouds center has
a chance of winning the electrical
lottery. When I see lightning as I'm mowing my 7 acres here in southern
Oklahoma, I now shut down and make for the house.If I have an inkling we're
gonna see weather I bag the terminal end of my various coax connections
before the weather starts and coil them outside away from the house

Harold
KD5SAK

3265. Re: Antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 16:50:16 UTC
From: nm5k@wt.net
Message-ID: <1109868616.113707.153380@l41g2000cwc.googlegroups.com>
Source record: 81202

Joe S. wrote:
> In 1996, I disassembled my antenna farm that graced the 3-acre plot
where we
> lived in Manassas, VA:
> -- 40- and 50-foot Rohn towers
> -- two 135-foot dipoles each center-fed with ladder line
> -- TH7
> -- assorted VHF and UHF beams
> -- 40-mtr inverted Vee
>
> Bundled it all up and moved from Virginia to Tennessee where I moved
into a
> restricted subdivision. The antenna farm stayed bundled up in the
crawl
> space.
>
> In 2003, sold the house and moved into an apartment at which point I
sold
> the antenna farm for a fraction of what I paid for it.
>
> Now, in 2005, living in an apartment on the Mississippi Gulf Coast
and
> trying to scrape together the money to build a house on a 100 x
100-foot lot
> where maybe I can put up a short dipole but will not be able to have
a
> tower.
>
> So -- what's the point? As I sit here and read the debates about
this wire,
> that vertical, some other yagi, yes/no on the Carolina Windom, advice
on an
> antenna for a 10-acre plot -- I can't help but think: If you have an
> antenna, thank the gods because any antenna radiates better than no
antenna.
>
> --
>
> -----
> Joe S.

You can always operate from the car...Seriously...If I had no shack,
antennas, etc, I would still have a decent mobile rig. You can sit
in it, or just park it in the driveway, and run a coax to it, from

house, garage, etc...I've done the "remote mobile antenna" thing many times when camping...I'll sit the rig on a picnic table, and run coax to the car antenna. Works better than you might think. The higher bands, very good. MK

3266. Re: Typical Doublet Tension?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 17:11:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <t4he21dl8pfhgo80hmkggd6qfspq6m3qjk@4ax.com>
Source record: 81203

On 3 Mar 2005 06:54:30 -0800, "Jim Miller" <jim@jtmiller.com> wrote:
>What's the "typical" tension necessary to keep a 88ft doublet aloft?

Hi Jim,

It is the weight of the wire times the arctan of the angle the sag of the wire depresses from the horizontal if I recall correctly.

73's
Richard Clark, KB7QHC

3267. Re: Typical Doublet Tension?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 17:40:09 UTC
From: richardharrison@webtv.net
Message-ID: <11745-42274BF9-220@storefull-3251.bay.webtv.net>
Source record: 81205

Jim Miller wrote:
"What`s the "typical" tension necessary to keep a 88ft doublet aloft?"

Table 2 on page 20-3 of the 19th edition of the "ARRL Antenna Book"
recommends 8 pounds tension for #18AWG hard-drawn copper wire.

Many issues are involved in tensioning. For calculations see Ed Laport`s
"Radio Antenna Engineering" page 346.

Best regards, Richard Harrison, KB5WZI

3268. want: Maxcom Antenna Matcher Unit

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 17:59:00 UTC
From: Skipp says dont spam me <usethebelowaddress@yahoo.com>
Message-ID: <d07j94$1br$1@skeeter.ucdavis.edu>
Source record: 81204
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap,rec.radio.amateur.swap

Hello there,

I'm looking for a Maxcom Antenna Matcher... yes I know what they are and the story behind them.

If you have one in pretty much any condition that you'd like to sell or trade away, please contact me using the yahoo email address below. Please, no other spam.

thanks much

skipp025 at yahoo.com

3269. Re: Typical Doublet Tension?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 19:33:16 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ijpe215vtdg2pv008hfcbcn686kmnq8ad4@4ax.com>
Source record: 81207

On Thu, 3 Mar 2005 11:40:09 -0600, richardharrison@webtv.net (Richard Harrison) wrote:
>Table 2 on page 20-3 of the 19th edition of the "ARRL Antenna Book"
>recommends 8 pounds tension for #18AWG hard-drawn copper wire.
Hi Richard,

From "Reference Data for Radio Engineers," the breaking load for #18 Hard-Drawn Copper is 85 pounds. The weight for 88 feet of this wire (at 4.9 pounds per 1000') would be 0.43 pounds.
>
>Many issues are involved in tensioning. For calculations see Ed Laport`s
>"Radio Antenna Engineering" page 346.

Simple Trig would reveal that with an 88 foot catenary with a 5 foot sag would develop roughly an angle of 6.5 degrees below the horizontal. My earlier post employing arctan was in error. It is the sine of the depressed angle used as a divider into half the weight (we are presuming this is a symmetrical dipole) that describes the tension. The sine of 6.5 degrees is 0.113. The tension in the wire then becomes 0.215/0.113 pounds (1.9#).

Trying to flatten the catenary is where tension becomes increasingly stressful. If you attempted to hold the catenary to within 1 foot of flat, then this would be a depression of 1.3 degrees, resulting in a divisor of 0.022. The tension in the wire then becomes 0.215/0.022 pounds (9.5#).

If we were to add in the weight of the transmission line drop, RG-58 comes in at roughly 0.029 pounds per foot or RG-11 as much as 0.096 pounds per foot.

Let's ballpark the last dipole with 1 foot sag to hold up 40 feet of RG-11 (whatever the practicality, and irrespective of the center being held up, we are considering only a two point suspension). The added weight of the cable comes to 3.84 pounds. The tension in the wire then becomes 2.135/0.022 pounds (97#).

The wire snaps.

73's
Richard Clark, KB7QHC

3270. New URL for W2DU Web Page plus Quadrifilar Helix in Reflections 2

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 19:43:58 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <fhpe21pthtvh9eibgapv00u16m0crl2imc@4ax.com>
Source record: 81208

The new URL for my web page is w2du.com. My new email address is walt@w2du.com.

Please use my new web page URL when accessing it. My page will soon have new material added, but for now it has only selected chapters from Reflections 2, which include the R&D report of my RCA research on the quadrifilar helix antenna flying on all TIROS-N NOAA polar-orbiting weather spacecraft. The research included antenna pattern and impedance measurements I made on more than a thousand different electrical and physical configurations of the antenna in the late 1970's that produced the one used on the TIROS-N spacecraft. A picture of the test model used in the measurements appears in my R&D report.

Walt Maxwell, W2DU

3271. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 20:25:16 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <422772C9.A4A9508E@deadend.com>
Source record: 81209
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Richard Clark wrote:
>

> As I've noted in the past, you can fill a library with negative
> assertions...

The troublesome assertion is not the negative one. It is that RF PA's are conjugate matched. Neither you nor Ken has provided a single example of such a design that also extracts the maximum amount of "linear" power from a device and essentially its power supply (after all, that is what it is: a _power_ amp). Your example said nothing about output-Z, which suggests you have no clue, since you didn't even remotely address the issue.

For Ken's part, he recently obfuscated by dismissing an example that was primarily intended to be illustrative, but yet holding the salient points. He completely ignored (or didn't understand) the clipping issue. Further obfuscation was provided by talking about "protection circuitry," which may or may not exist in a circuit, but adds zero to a discussion regarding how the PA is to be loaded. "Protection" is a non-stater because the PA is either off or impaired.

Ken's argument is circular. He say's that if a design is done for conjugate match,
then it will behave as if it is conjugately matched. Well of course (or at least sort of under specific test conditions and circuits)! It is self-fullfilling prophecy but it unfortunately makes no statement regarding obtaining the maximum power out of the circuit in the sense of turning DC power into RF power (yes, *extracting* power from the DC supply and transformed to RF). This is paramount to PA design. To use the device to maximum efficacy, as Cripps puts it, a load-line match is needed. Ken's "conjugate match" design won't do that, and that's why PA's aren't designed that way.

The bottom line is that if I design an amp via load line techniques using the same device and power supply as Ken (him using conj-match), my amp will deliver higher unclipped PEP than his. That is the factual result you resist. Now if you want to pay for extra power and big devices, that's your business--go ahead and attempt to conj-match your amp--but engineers who design PA's don't do that.

Another idealized and hypothetical example to elucidate the load-line principle is offered.

Let's say we have a 10 W FET we'll build into a class A circuit. An RF choke is used to supply drain current. We DC bias it to Vd = 10 V and Id = 1 A. Just for argument sake, let's say it has a constant internal resistance of 110 ohms and the device will break down at 25 V. According to the most idealized and

standard load-line theory, we should load it to rL = Vd/Id = 10 Ohms. This idealization includes the definition of positive and negative clipping -- whichever comes "first" -- of being the operational limit for output voltage swing. Clipping is associated with severe distortion.

Since we need rL to be 10 ohms, and Ri = 110 ohms, we need to make the actual load resistor equal to: RL = 11 Ohms. Let's check that result and see if it meets the clipping constraint for maximum available power.

positive swing = Id*rL = 1*10 = 10 V
negative swing = Vd = 10 V
Power delivered to RL: Pload = 10^2/(2*11) = 4.55 W
The efficiency is a little under 50% because of the internal resistance. Note the Load resistance is decidely not the conjugate of the internal resistance.

Let's spot check the load to see if it at least appears to be the peak available power, by testing two loads "immediately" on either side of our optimum 11 ohms.

Let RL = 10 ohms
positive swing = Id*rL = 1*9.17 = 9.17 V
negative swing = Vd = 10 V
Since we positive clip at 9.17 V, we are limited by our design clipping constraint to only driving the PA such that 2*9.17 V is the maximum available voltage swing.
Power delivered to RL: Pload = 9.17^2/(2*10) = 4.20 W

Let RL = 12 ohms
positive swing = Id*rL = 1*10.82 = 10.82 V
negative swing = Vd = 10 V
Since we negative clip at 10 V, we are limited by our design clipping constraint to driving the PA such that 2*10 V is the maximum available voltage swing.
Power delivered to RL: Pload = 10^2/(2*12) = 4.17 W

Sure enough, the power peaked at a load of 11 ohms, just like load-line theory says it will. Now let's see what the available power hit of conjugate matching is.

By definition, conj-match insists RL = Ri = 110 ohms. Again we are limited in our clipping constraint by static drain current, and supply voltage, specifically 10 V.

Our negative swing limit is, as ever, 10 V (the drain voltage).

positive swing = Id*rL = 1*55 = 55 V

This would breakdown the device, but the lower negative swing will force us to back down the drive to meet the design defined clipping constraint.

Pload = 10^2/(2*110) = 0.455 W

Conjugate matching resulted in a 10*log(0.455/4.55) = 10 dB available power hit. Power amplifiers are not designed with conjugate matching in mind. You don't need to re-invent the wheel. Just follow well established principles when doing cookie cutter PA design.

> The list could go on,...

LOL. Given your pattern, I am sure it will.

> You sighed with content at being offered a "relevent
> question/statement" Your re-iterative response contains the same (how
> could it be otherwise?) slack of precision that started this. Want to
> try again?

Not really. The problem isn't precision, it is you can't, or refuse, to comprehend what is being said, which I presume is why you instead write with the most bizarre terms and phrasology that has nothing of import to the topic at hand.

> You could have as easily expressed what sense they ARE matched,

For what seems like the billionth time now: they are load-line matched.

> ...but instead this time offer what Basis
> of Matching you are attempting to
> describe.

I've given a didactic example (actually a couple), you just don't--or more likely won't--get it. If you don't like my example, you can refer to Cripps, who is considered one of the preeminant RF PA experts in the world.

Even more simplistic is Malvino's discussion on pp177-185 of the first edition ((c) 1968) of "Transistor Circuit Approximations." It is basically a technician level description, so perhaps it is well-suited to you. In academics, load-line theory is presented down to tech level courses and up across to engineering. That some engineers and techs aren't clear on the load-line concept for PA's (or *any* circuit needing a wide symmetrical swing) is notwithstanding.

> This is the more rigorous approach that eliminates vague
> descriptions and uses standard terms. If you have to query about what
> "Basis" means (used by professionals - namely metrologists who can
> quantify Output Z of all sources) - then we can skip it as a topic out
> of the reach of amateur discussion.

I see you still don't know what impedance is. In any case, it doesn't mean that looking into a properly designed PA output with a network analyzer confirms the conj-match precept, it doesn't.

Impedance is a *linear* conception, a portion of linear theory, and again by definition:

Z = V/I

V and I are sinusoids (phasors). But with power amps, substantial non-linearity exists (destroying the linearity assumption of impedance), thus applying a linearly defined concept to a non-linear milieu is a misapplication. You are attempting, as is Ken, to stuff a square peg down a round hole. Why?

The concept is even questionable for the most linear of the power amps: class A. In any case, given real devices with real supplies, the conj-match ideal is next to worthless. While I could agree that the borderline may be fuzzy

regarding where and when to drop the impedance notion, it still stands that the concept is not useful in determining how to optimally load an RF PA.

At this point you own the conj-match assertion as much as Ken. Prove it! You can't because it is fundamentally incorrect.

> Note:
> >Again, RF PA's should be load-line matched.
> Does not qualify as a Basis.

Load-line matching is such a basic electronic concept it is unbelievable how oblivious you are to the concept. Read a basic book. Don't rely on me: look it up and do your own design!

> It is suggestive of one, but because you indiscriminately
> mix several Basis within your discussions, it is your
> responsibility to be precise.

You just like to hear yourself talk. I've been explicit and precise. You just don't know anything about the elementary electronics principle of load line matching. I presume this is why your comments have zero substantive responsiveness.

> If you can accomplish this, then we can
> proceed to review how little it all matters.

If you keep ignoring what I've written, and that which is written in elementary electronics texts, you can remain happily ignorant of understanding the simple-basic-fundamental concept presented. Your choice.

> Barring resolving any of these issues of precise language,...]

The guy ignorant of the definition of impedance and that s-domain theory *is* linear circuit theory (and more goodies) is talking about "precise language." Amusing.

> I notice
> that you rather enjoy...

No, I don't enjoy it at all. Your lack of electronic understanding is dismal, especially given your tone. It would have been a lot easier for me if Ken hadn't made the erroneous
statement in the first place and made a correct one instead. That would have been my preferance.

> ..fruitless jousting with them than challenging my
> support of Ken's (supposed) statement that you say is your focus:
> >> However, responding to the bald statement, I find nothing
> >> objectionable about it.
> >
> >That's because you don't understand the difference between impedance matching
> >and ac load line matching.
> We will leave that as another dead-end.

I suspect you will. I already understand it -- you're the one who doesn't.

"One of the principal differences between linear RF amplifier design and PA design is that, for optimum power, the output of the device is not presented with the impedance required for a linear conjugate match. That causes much consternation and has been the subject of extensive controversy about the meaning and nature of conjugate matching. It is necessary, therefore, to swallow that apparently unpalatable result as early as possible (Section 1.5), before going on to give it more extended interpretation and analysis (Chapter 2)." -- Cripps, p1

The quote is on Page 1. Swallow it now. Learn something for a change.

3272. Re: Typical Doublet Tension?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 20:30:25 UTC
From: richardharrison@webtv.net
Message-ID: <29600-422773E1-229@storefull-3256.bay.webtv.net>
Source record: 81210

Richard Clark, KB7QHC wrote:
"Simple trig would reveal that with an 88 foot caternary with a 5 foot
sag would develop roughly an angle of 6;5 degrees below the horizontal."

I think we are about on the same page. Ed Laport says:
"If W is the equivalent total weight at the center, then the tension of
the triatic is:
T=W/2sinA

Where T and W are in identical units."

A is the deflection angle below an imaginary horizontal line.

Best regards, Richard Harrison, KB5WZI

3273. Re: Length of ladder wire for G4RV "Junior: antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 20:46:38 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4227797e_2@127.0.0.1>
Source record: 81211

jim wrote:
> Can some one please tell me the optimum length for the lead in ladder
> wire for the so called "Junior" G4RV which is about 65 feet long with
> two traps ??

A G5RV junior is a 1.5WL dipole on 10m with a
1/2WL matching section. No G5RV that I ever
heard of has traps. I'm assuming you did mean
G5RV instead of G4RV?
--
73, Cecil, W5DXP

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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3274. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 20:53:48 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <ylbJPFBcl3JCFwuc@jmwa.demon.co.uk>
Source record: 81212
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that gwhite <gwhite@deadend.com> wrote
(in <422772C9.A4A9508E@deadend.com>) about '1/4 vs 1/2 wavelength
antenna', on Thu, 3 Mar 2005:
>By definition, conj-match insists RL = Ri = 110 ohms. Again we are
>limited in our clipping constraint by static drain current, and supply
>voltage, specifically 10 V.
>
>Our negative swing limit is, as ever, 10 V (the drain voltage).
>
>positive swing = Id*rL = 1*55 = 55 V
>
>This would breakdown the device, but the lower negative swing will force
>us to back down the drive to meet the design defined clipping
>constraint.
>
>Pload = 10^2/(2*110) = 0.455 W

And the power dissipated in the device is also 0.445 W. Matching
according to the 'maximum power theorem' or conjugate matching, results
in equal power in the PA and load. That's why it isn't useful for power
amplifiers.

Doesn't everyone know that an audio amplifier that id designed to feed
an 8 ohm load MUST have an output source impedance of 0.0000001 ohms or
less. An output source impedance of 8 ohms would dramatically decrease
the electromagnetic damping on the loudspeaker voice-coil - by the huge
factor of .... two!(;-)
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

3275. Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 21:24:36 UTC
From: WA2SI <wa2si@arrl.net>
Message-ID: <1109885075.976970.77950@l41g2000cwc.googlegroups.com>
Source record: 81213

Hi folks,

I just bought a batch of Amphenol PL-259 83-1SPs to assemble some jumpers. When did Amphenol shift from 'Made In USA' to 'Assembled In Mexico'? The whole reason for buying Amphenol was to:

A) Enjoy that Amphenol quality. (BTW, they don't even look the same. The dielectric has a cheap milky recycled look and the name and model nr. are no longer stamped into the sleeve ring.)

B) Support products 'Made In USA'.

Ok, this was my two minute rant. Tnx fer listening.

73 de Bert
WA2SI
FISTS #9384
QRP ARCI #11782

3276. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 21:29:10 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <GkLVd.128279$qB6.125396@tornado.tampabay.rr.com>
Source record: 81214

hey burt
i havent bought any in many years but
reason 1 is cause americans DEMAND to much wages thanks to the unions
and are you sure you didnt order knock offs? AKA conterfit items?
thats all the rage now adays

WA2SI wrote:
> Hi folks,
>
> I just bought a batch of Amphenol PL-259 83-1SPs to assemble some
> jumpers. When did Amphenol shift from 'Made In USA' to 'Assembled In
> Mexico'? The whole reason for buying Amphenol was to:
>
> A) Enjoy that Amphenol quality. (BTW, they don't even look the same.
> The dielectric has a cheap milky recycled look and the name and model
> nr. are no longer stamped into the sleeve ring.)
>
> B) Support products 'Made In USA'.
>
> Ok, this was my two minute rant. Tnx fer listening.
>
> 73 de Bert
> WA2SI
> FISTS #9384
> QRP ARCI #11782
>

3277. Re: Typical Doublet Tension?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 21:32:06 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <950f21h779agc9kg2fpgll7i7e0lfaseib@4ax.com>
Source record: 81215

On 3 Mar 2005 06:54:30 -0800, "Jim Miller" <jim@jtmiller.com> wrote:

>What's the "typical" tension necessary to keep a 88ft doublet aloft?
>I'll also be supporting the midpoint where the feedline attaches.
>Insulated 18awg will be used as the antenna wire.
>
>tnx
>jtm

This isn't very scientific, but I just pull the wire tight until most of the sag is gone. Never had one break. Also, if using trees for support, a screen door spring at each end, between the tree and the insulator, will keep the swaying tree from snapping the doublet.

Bob
k5qwg

3278. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 21:42:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <sq0f21lgea9tsh1df9vagmcethcs3skvva@4ax.com>
Source record: 81216
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Thu, 03 Mar 2005 20:25:16 GMT, gwhite <gwhite@deadend.com> wrote:

>> You sighed with content at being offered a "relevent
>> question/statement" Your re-iterative response contains the same (how
>> could it be otherwise?) slack of precision that started this. Want to
>> try again?
>
>Not really.
...
>> I notice that you rather enjoy fruitless jousting with them than challenging my
>> support of Ken's (supposed) statement that you say is your focus:
>> >> However, responding to the bald statement, I find nothing
>> >> objectionable about it.
>> >
>> >That's because you don't understand the difference between impedance matching
>> >and ac load line matching.
>> We will leave that as another dead-end.
>
>I suspect you will.

Hi OM,

224 line postings to produce this little qualitative information? :-)

73's
Richard Clark, KB7QHC

3279. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 21:44:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <o71f21p2ckvbbd7b6cjmdpta9af74far3p@4ax.com>
Source record: 81217
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Thu, 3 Mar 2005 20:53:48 +0000, John Woodgate
<jmw@jmwa.demon.contraspam.yuk> wrote:

>Doesn't everyone know that an audio amplifier that id designed to feed
>an 8 ohm load MUST have an output source impedance of 0.0000001 ohms or
>less.

Hi John,

I hope that was a joke.

73's
Richard Clark, KB7QHC

3280. Re: Looking for the best 2M/440 mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 22:39:36 UTC
From: Mark <makolber@yahoo.com>
Message-ID: <1109889576.400248.72380@z14g2000cwz.googlegroups.com>
Source record: 81218

I've had two dual band mobile Comets that seem to get water logged in the loading coil. It seems to loose gain especiually on 2 meters after about 1 year on the car. The coil is well sealed so I think it is a condensation problem. I have drilled a small hole in this last one to let the water vapor OUT and it seems to have solved the problem.

Mark

3281. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 22:47:00 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <42279402.2D14149@deadend.com>
Source record: 81219
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Richard Clark wrote:
>

> 224 line postings to produce this little qualitative information? :-)

I see one line here with no content. You don't have any argument because you have zero understanding. No one can cure that but you. But can you?

"Stupid is as stupid does." -- Forrest Gump

3282. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 23:00:29 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <4227972A.863A1FE7@deadend.com>
Source record: 81221
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

John Woodgate wrote:
>
> I read in sci.electronics.design that gwhite <gwhite@deadend.com> wrote
> (in <422772C9.A4A9508E@deadend.com>) about '1/4 vs 1/2 wavelength
> antenna', on Thu, 3 Mar 2005:
> >By definition, conj-match insists RL = Ri = 110 ohms. Again we are
> >limited in our clipping constraint by static drain current, and supply
> >voltage, specifically 10 V.
> >
> >Our negative swing limit is, as ever, 10 V (the drain voltage).
> >
> >positive swing = Id*rL = 1*55 = 55 V
> >
> >This would breakdown the device, but the lower negative swing will force
> >us to back down the drive to meet the design defined clipping
> >constraint.
> >
> >Pload = 10^2/(2*110) = 0.455 W
>
> And the power dissipated in the device is also 0.445 W.

I think it is 1A*10V - 0.455 W = 9.545 W
^^^^^^ ^^^^^^^
DC input Power
Power delivered
to RL

The resistance dissipated in the "internal AC resistance" is equal to RL in the conj-match condition. Of course, we're ignoring input power here, which is "small" when the gain is > +20 dB.

> Matching
> according to the 'maximum power theorem' or conjugate matching, results
> in equal power in the PA and load. That's why it isn't useful for power
> amplifiers.

Amusingly for my hypothetical class A conj-match example, the "equal power dissipation" isn't such a big deal, since it is class A and the fractional power dissipated in either the internal AC resistance or the external load resistance is rather small compared to DC dissipation (less than 10%).

> Doesn't everyone know that an audio amplifier that id designed to feed
> an 8 ohm load MUST have an output source impedance of 0.0000001 ohms or
> less. An output source impedance of 8 ohms would dramatically decrease
> the electromagnetic damping on the loudspeaker voice-coil - by the huge

> factor of .... two!(;-)

Nice one.

3283. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 23:00:40 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.03.03.23.00.57.1230@example.net>
Source record: 81220
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

```
On Thu, 03 Mar 2005 20:53:48 +0000, John Woodgate wrote:
> I read in sci.electronics.design that gwhite <gwhite@deadend.com> wrote
...
> Doesn't everyone know that an audio amplifier that id designed to feed
> an 8 ohm load MUST have an output source impedance of 0.0000001 ohms or
> less. An output source impedance of 8 ohms would dramatically decrease
> the electromagnetic damping on the loudspeaker voice-coil - by the huge
> factor of .... two!(;-)

Yeah - isn't that why the TOOB amps had those taps? So you could get that
rich, full-bodied TOOB sound? ;-)

Cheers!
Rich
```

3284. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 23:07:14 UTC
From: Rich Grise <richgrise@example.net>
Message-ID: <pan.2005.03.03.23.07.30.272776@example.net>
Source record: 81122
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Thu, 03 Mar 2005 13:44:06 -0800, Richard Clark wrote:

> On Thu, 3 Mar 2005 20:53:48 +0000, John Woodgate
> <jmw@jmwa.demon.contraspam.yuk> wrote:
>
>>Doesn't everyone know that an audio amplifier that id designed to feed
>>an 8 ohm load MUST have an output source impedance of 0.0000001 ohms or
>>less.
>
> Hi John,
>
> I hope that was a joke.

Please! You know Mr. Woodgate _hates_ explaining his jokes:

"Doesn't everyone know that an audio amplifier that [is] designed to feed
an 8 ohm load MUST have an output source impedance of 0.0000001 ohms or
less[?] An output source impedance of 8 ohms would dramatically decrease
the electromagnetic damping on the loudspeaker voice-coil - by the huge
factor of .... two! (;-)
[^^^^]

Please notice the last sentence in that paragraph. ;-)

> 73's

Best regardses? ;-)

Cheers!
Rich

3285. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 23:15:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vf6f21h6kuge40v22ssi28571ibi2ogf23@4ax.com>
Source record: 81123
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Thu, 03 Mar 2005 22:47:00 GMT, gwhite <gwhite@deadend.com> wrote:
>I see one line here with no content.

Hi Forrest,

Great! Now try with the other eye. :-)

73's
Richard Clark, KB7QHC

3286. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 23:15:52 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <42279AC6.75D74719@deadend.com>
Source record: 81124
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Rich Grise wrote:
>
> On Thu, 03 Mar 2005 13:44:06 -0800, Richard Clark wrote:
>
> > On Thu, 3 Mar 2005 20:53:48 +0000, John Woodgate
> > <jmw@jmwa.demon.contraspam.yuk> wrote:
> >
> >>Doesn't everyone know that an audio amplifier that id designed to feed
> >>an 8 ohm load MUST have an output source impedance of 0.0000001 ohms or
> >>less.
> >
> > Hi John,
> >
> > I hope that was a joke.
>
> Please! You know Mr. Woodgate _hates_ explaining his jokes:

Mr. Clark _hates_ reading and comprehending. I forsee a clash royal.

3287. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 23:16:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jk6f215gs0ljmc9pdaf8ufh91knm6dj753@4ax.com>
Source record: 81126
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Thu, 03 Mar 2005 23:07:14 GMT, Rich Grise <richgrise@example.net>
wrote:

>Please! You know Mr. Woodgate _hates_ explaining his jokes:

Hi Rich,

Some love explaining their jokes. I've gotten quite a bit of
correspondence to that matter already.

73's
Richard Clark, KB7QHC

3288. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 23:17:07 UTC
From: jgboyles@aol.com
Message-ID: <1109891827.899504.132340@f14g2000cwb.googlegroups.com>
Source record: 81125

Charlie wrote:
> Hi Richard thx for the reply but in thinking it over it would seem an

> unlikely possibility that I could accurately model the 5-BTV with
it's
> traps. Did I miss something there?

Hi Charlie, A 5-BTV with 72 radials will have about the same take off angle as a full size vertical with 72 radials on a given band. This is assuming the 5-BTV is operated as a 1/4 wave, current fed vertical on all bands. If it is used as something else, say a 1/2 wave voltage fed vertical on a given band, then the TOA should be about the same as a full size 1/2 wave vertical.
As you can tell by other posts, actually measuring the TOA will be difficult. If you could model full size versions of the 5-BTV on the bands of interest on a program such as Eznec, you could find out your TOA. As Reg asked, when you do find it out, what are you gonna do then?
Gary N4AST

3289. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 23:22:07 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <42279C3C.58F210FB@deadend.com>
Source record: 81127
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Richard Clark wrote:
>
> On Thu, 03 Mar 2005 22:47:00 GMT, gwhite <gwhite@deadend.com> wrote:
> >I see one line here with no content.
>
> Hi Forrest,
>
> Great! Now try with the other eye. :-)

At least your not even pretending to have an argument anymore. Ah, sweet
progress.

3290. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 23:29:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jc7f21pk4iotuhplep4vieug6oe70iq39k@4ax.com>
Source record: 81129
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Thu, 03 Mar 2005 23:22:07 GMT, gwhite <gwhite@deadend.com> wrote:

>At least your not even pretending to have an argument anymore. Ah, sweet
>progress.

Hi OM,

I suppose this means you failed the eye exam with the other eye.

73's
Richard Clark, KB7QHC

3291. Re: lighting replusion?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 23:29:31 UTC
From: Dave <noone@nowhere.com>
Message-ID: <6q-dne3L-aR_ALrfRVn-1A@crocker.com>
Source record: 81128

"Harold Burton" <hwburton@cableone.net> wrote in message
news:112edcini799144@corp.supernews.com...
>
> "Richard Harrison" <richardharrison@webtv.net> wrote in message
> news:13638-422726C2-31@storefull-3252.bay.webtv.net...
> > Height is shown to attract lightning bolts to grounded towers used for
> > various purposes. Many are hit by nearly every passing thunderstorm.
> > Towers take lightning bolts. They don`t always if ever discharge the
> > earth and atmosphere in their area to eliminate hits. They do seem to
> > divert strikes in their vicinity and offer some protection to their
> > surroundings.
> >
> > I`ve spent years in broadcast plants and seen many lightning strikes. If
> > you build it they will come.
> >
> > Best regards, Richard Harrison, KB5WZI
> >
> Saw a program on lightning a year or so back that described the mechanism
> involved in setting up a lightning strike. Every raised object in a fairly
> large area below an accumulating cloud charge
> sends up a stepped "leader"of opposing charge, all these "leaders"
> advance in steps that also zig and zag randomly upward.

>If I remember correctly

you don't.

there are exceptions, but in most of the cloud-ground lightning the 'stepped leader' starts down from the cloud. it progresses downward in 50-100m steps bringing charge down from the cloud with it as it progresses (most often negative charge). as it gets closer to the ground it attracts the opposite (usually positive) charge under it, when the field strength is high enough streamers start up from the ground and connect with the stepped leader and the bolt that you see is triggered. streamers from the ground are normally not stepped, they are a single breakdown between the ground (or some other object) and the downward leader usually no more than about 100m long. the final attachment point for the stroke depends on which streamer coming up connects to the leader coming down first.

3292. Re: Why a Short Lightning Ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 23:33:27 UTC
From: Dave <noone@nowhere.com>
Message-ID: <3NCdnRQzwptTA7rfRVn-1Q@crocker.com>
Source record: 81130

<wizard12342002@yahoo.com> wrote in message
news:1109809670.151362.237410@l41g2000cwc.googlegroups.com...
> I can understand why we want a short connection between the station
> ground (the bonded chassis) and earth ground in the case of an RF
> ground, especially for unbalanced antennas. But for a lightning
> ground, I am not sure I understand why we want a short connection
> between station ground and earth.
>
> Let's take the example of an operator with whose only choice is a
> second story ham shack and an antenna mounted on a pole some distance
> from the house. If a balanced antenna system is used (so we don't need
> a good RF ground) and the coax has an arrestor placed at the service
> entrance ground where the shield is connected (cold water pipe in
> basement), why do we need a ground wire at all? (The coax would run
> from the antenna to the basement level [where grounded] and then up to
> the second floor.) The chassis' can be bonded together and the bond
> point can be connected to earth ground through the coax shield. The
> lightning is not going to travel up to the second floor to get the
> radio when it has a low impedance path right at ground, is it?

don't ever say that lightning won't do something. the voltages and currents
and frequency range combination in lightning can do things that are often
hard to understand. it will go up, down, and sideways, often at the same
time. and just because it hits the ground doesn't mean it won't come up
again somewhere else and still be deadly or destroy equipment.

3293. Re: Antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 23:36:38 UTC
From: Dave <noone@nowhere.com>
Message-ID: <s_-dnTS_M74RArrfRVn-iQ@crocker.com>
Source record: 81131

"Joe S." <nobody@nowhere.net> wrote in message
news:d05nul097i@news3.newsguy.com...
> In 1996, I disassembled my antenna farm that graced the 3-acre plot where
we
> lived in Manassas, VA:
> -- 40- and 50-foot Rohn towers
> -- two 135-foot dipoles each center-fed with ladder line
> -- TH7
> -- assorted VHF and UHF beams
> -- 40-mtr inverted Vee
>
> Bundled it all up and moved from Virginia to Tennessee where I moved into
a
> restricted subdivision. The antenna farm stayed bundled up in the crawl
> space.
>
> In 2003, sold the house and moved into an apartment at which point I sold
> the antenna farm for a fraction of what I paid for it.
>
> Now, in 2005, living in an apartment on the Mississippi Gulf Coast and
> trying to scrape together the money to build a house on a 100 x 100-foot
lot
> where maybe I can put up a short dipole but will not be able to have a
> tower.
>
> So -- what's the point? As I sit here and read the debates about this
wire,
> that vertical, some other yagi, yes/no on the Carolina Windom, advice on
an
> antenna for a 10-acre plot -- I can't help but think: If you have an
> antenna, thank the gods because any antenna radiates better than no
antenna.

AMEN on that! I have been on both sides of it, right now i have a big
aluminum farm, but i have been in apartments and still found a way to
operate. if nothing else load up the bedsprings and chat around town.

3294. Re: Why a Short Lightning Ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-03 23:40:27 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4227a14a$1_2@127.0.0.1>
Source record: 81132

Dave wrote:
> don't ever say that lightning won't do something. the voltages and currents
> and frequency range combination in lightning can do things that are often
> hard to understand. it will go up, down, and sideways, often at the same
> time. and just because it hits the ground doesn't mean it won't come up
> again somewhere else and still be deadly or destroy equipment.

The scariest thing I ever heard of lightning doing is
killing someone out of a clear blue sky, coming from
clouds that were hidden by mountains.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

3295. Re: Why a Short Lightning Ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 00:32:42 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <K0OVd.35744$7z6.16364@lakeread04>
Source record: 81133

"Cecil Moore" <w5dxp@hotmail.com> wrote

> Dave wrote:
> > don't ever say that lightning won't do something. the voltages and
currents
> > and frequency range combination in lightning can do things that are
often
> > hard to understand. it will go up, down, and sideways, often at the
same
> > time. and just because it hits the ground doesn't mean it won't come up
> > again somewhere else and still be deadly or destroy equipment.
>
> The scariest thing I ever heard of lightning doing is
> killing someone out of a clear blue sky, coming from
> clouds that were hidden by mountains.
> --
> 73, Cecil http://www.qsl.net/w5dxp

Cecil, the "bolt from the blue" is a fairly common way for Americans to be struck and injured or killed from lightning. In a few cases each year, witnesses offer that there was either no warning that the storm was arriving when the victim was struck, or they had only heard thunder but not seen the storm. Last year I believe there were three such document cases, two of which resulted in fatalities. The National Lightning Safety Center and National Weather Bureau have both recently revised upwards the number of miles from a storm that lightning can be expected to strike. That number varies according to agency but is generally accepted to be at least 10 miles ahead of the storm and an unknown (smaller) number of miles behind it. Agreed is the now universal warning that if outdoors you should find cover immediately when you hear thunder, and not leave cover until 30 minutes have passed without hearing thunder.

A good friend who I have known for years and who provided many professional documents for my lightning systems review over the years was just struck (and injured) last summer. He waited a couple minutes in his driveway in Virginia for the rain to let up a bit, and then made his forty foot "dash for the door". Lightning struck a pine tree next to the driveway just then, and it struck sideways into his shoulder and out his feet onto the wet driveway. His wife found him unconscious a few minutes later, and he was fortunate to survive and make good recovery so far. More than half of all survivors of lightning strikes experience mental and/or physical disabilities or complications following the incident. Another good friend was in his Virginia workshop three summer ago when lightning struck the tower, and he was the lucky survivor but unfortunate witness to massive damage, some of it explosive, both to the room he was in, and other

buildings on his property. after a lifetime of close calls myself, it was my close friend's experience three years ago that finally helped me get the message and change the way I operated.

Jack Painter
Virginia Beach, Virginia

3296. Re: Antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 00:38:09 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <15bf21th8gsq61n09rbn7kett97cv2iikj@4ax.com>
Source record: 81134

On 3 Mar 2005 08:50:16 -0800, nm5k@wt.net wrote:

>
>Joe S. wrote:
>> In 1996, I disassembled my antenna farm that graced the 3-acre plot
>where we
>> lived in Manassas, VA:
>> -- 40- and 50-foot Rohn towers
>> -- two 135-foot dipoles each center-fed with ladder line
>> -- TH7
>> -- assorted VHF and UHF beams
>> -- 40-mtr inverted Vee
>>
>> Bundled it all up and moved from Virginia to Tennessee where I moved
>into a
>> restricted subdivision. The antenna farm stayed bundled up in the
>crawl
>> space.
>>
>> In 2003, sold the house and moved into an apartment at which point I
>sold
>> the antenna farm for a fraction of what I paid for it.
>>
>> Now, in 2005, living in an apartment on the Mississippi Gulf Coast
>and
>> trying to scrape together the money to build a house on a 100 x
>100-foot lot
>> where maybe I can put up a short dipole but will not be able to have
>a
>> tower.
>>
>> So -- what's the point? As I sit here and read the debates about
>this wire,
>> that vertical, some other yagi, yes/no on the Carolina Windom, advice
>on an
>> antenna for a 10-acre plot -- I can't help but think: If you have an
>> antenna, thank the gods because any antenna radiates better than no
>antenna.
>>
>> --
>>
>> -----
>> Joe S.
>

>You can always operate from the car...Seriously...If I had no shack,
>antennas, etc, I would still have a decent mobile rig. You can sit
>in it, or just park it in the driveway, and run a coax to it, from
>house, garage, etc...I've done the "remote mobile antenna" thing
>many times when camping...I'll sit the rig on a picnic table, and
>run coax to the car antenna. Works better than you might think.
>The higher bands, very good. MK

Sure. My Elmer and neighbor had an acre and lots of bux but he still
liked his "mobile" rig.

http://www.qsl.net/n7ws/w7uvr.jpg

This was "state-of-the-art" in 1958.

Full tilt with a high level modulated 4-1000A. Thirty foot "tower"
and 2 el. beam for high bands and remotely tuned verticals for lower
bands.

3297. Re: Typical Doublet Tension?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 00:49:13 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <dgOVd.610$603.389@newsread2.news.atl.earthlink.net>
Source record: 81135

"Bob Miller" <NOSPAM@neosoft.com> wrote in message
news:950f21h779agc9kg2fpgll7i7e0lfaseib@4ax.com...
> On 3 Mar 2005 06:54:30 -0800, "Jim Miller" <jim@jtmiller.com> wrote:
>
>>What's the "typical" tension necessary to keep a 88ft doublet aloft?
>>I'll also be supporting the midpoint where the feedline attaches.
>>Insulated 18awg will be used as the antenna wire.
>>
>>tnx
>>jtm
>
> This isn't very scientific, but I just pull the wire tight until most
> of the sag is gone. Never had one break. Also, if using trees for
> support, a screen door spring at each end, between the tree and the
> insulator, will keep the swaying tree from snapping the doublet.
>
> Bob
> k5qwg
>
>

I tried all that scientific formula stuff, and the KISS stuff. But neither made the tree rats happy.

So my answer is; put it up until the squirels find the line and chew it in half, then put it back up.

Dan/W4NTI

3298. Is PVC pipe UV resistant?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 01:05:53 UTC
From: "JimK2TL@gmail.com" <JimK2TL@gmail.com>
Message-ID: <1109898353.797664.69430@g14g2000cwa.googlegroups.com>
Source record: 81136

Greetings
Does anyone know if typical schedule 40 PVC pipe is UV resistant? I
have some antenna projects in mind that will be built from this stuff.
I suppose I can paint it for some extra protection, but I was wondering
if it is necessary?

Thanks
Jim/K2TL

3299. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 01:13:39 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <7DOVd.567827$8l.179127@pd7tw1no>
Source record: 81137
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Wow this is a long thread. Don't really know where I should put my two bits in, but here it goes.

I have designed several RF PA sections in the past. 500MHz at about 50W. Pretty easy stuff if you have the right tools and know how to use them. The tools I like using for matching the power output FET is two triple stub tuners. One on the input of the FET and one on the output. So it goes...pre-amp (50 ohm output) -> stub tuner -> FET -> stub tuner -> 50 ohm dummy pad -> spectrum analyzer. Then just tune the stubs for the performance you desire, these include: efficiency (thermal issues), harmonic content, spurious emissions, load VSWR considerations, cold start, ect. Then remove the FET and look into the triple stub tuners with the network analyzer. Model and duplicate the network out of discrete components that can handle the voltage/power, send the design off to the enviro test lab, and head home early for the day.

Cheers,
Thomas

"gwhite" <gwhite@deadend.com> wrote in message
news:422772C9.A4A9508E@deadend.com...
> Richard Clark wrote:
> >
>
> > As I've noted in the past, you can fill a library with negative
> > assertions...
>
> The troublesome assertion is not the negative one. It is that RF PA's are
> conjugate matched. Neither you nor Ken has provided a single example of
such a
> design that also extracts the maximum amount of "linear" power from a
device and
> essentially its power supply (after all, that is what it is: a _power_
amp).
> Your example said nothing about output-Z, which suggests you have no clue,
since
> you didn't even remotely address the issue.
>
> For Ken's part, he recently obfuscated by dismissing an example that was
> primarily intended to be illustrative, but yet holding the salient points.
He
> completely ignored (or didn't understand) the clipping issue. Further
> obfuscation was provided by talking about "protection circuitry," which
may or

> may not exist in a circuit, but adds zero to a discussion regarding how
the PA
> is to be loaded. "Protection" is a non-stater because the PA is either
off or
> impaired.
>
> Ken's argument is circular. He say's that if a design is done for
conjugate
> match,
> then it will behave as if it is conjugately matched. Well of course (or
at
> least sort of under specific test conditions and circuits)! It is
> self-fullfilling prophecy but it unfortunately makes no statement
regarding
> obtaining the maximum power out of the circuit in the sense of turning DC
power
> into RF power (yes, *extracting* power from the DC supply and transformed
to
> RF). This is paramount to PA design. To use the device to maximum
efficacy, as
> Cripps puts it, a load-line match is needed. Ken's "conjugate match"
design
> won't do that, and that's why PA's aren't designed that way.
>
> The bottom line is that if I design an amp via load line techniques using
the
> same device and power supply as Ken (him using conj-match), my amp will
deliver
> higher unclipped PEP than his. That is the factual result you resist.
Now if
> you want to pay for extra power and big devices, that's your business--go
ahead
> and attempt to conj-match your amp--but engineers who design PA's don't do
that.
>
> Another idealized and hypothetical example to elucidate the load-line
principle
> is offered.
>
> Let's say we have a 10 W FET we'll build into a class A circuit. An RF
choke is
> used to supply drain current. We DC bias it to Vd = 10 V and Id = 1 A.
Just
> for argument sake, let's say it has a constant internal resistance of 110
ohms
> and the device will break down at 25 V. According to the most idealized
and
> standard load-line theory, we should load it to rL = Vd/Id = 10 Ohms.
This
> idealization includes the definition of positive and negative clipping --

> whichever comes "first" -- of being the operational limit for output
voltage
> swing. Clipping is associated with severe distortion.
>
> Since we need rL to be 10 ohms, and Ri = 110 ohms, we need to make the
actual
> load resistor equal to: RL = 11 Ohms. Let's check that result and see if
it
> meets the clipping constraint for maximum available power.
>
> positive swing = Id*rL = 1*10 = 10 V
> negative swing = Vd = 10 V
> Power delivered to RL: Pload = 10^2/(2*11) = 4.55 W
> The efficiency is a little under 50% because of the internal resistance.
Note
> the Load resistance is decidely not the conjugate of the internal
resistance.
>
> Let's spot check the load to see if it at least appears to be the peak
available
> power, by testing two loads "immediately" on either side of our optimum 11
ohms.
>
> Let RL = 10 ohms
> positive swing = Id*rL = 1*9.17 = 9.17 V
> negative swing = Vd = 10 V
> Since we positive clip at 9.17 V, we are limited by our design clipping
> constraint to only driving the PA such that 2*9.17 V is the maximum
available
> voltage swing.
> Power delivered to RL: Pload = 9.17^2/(2*10) = 4.20 W
>
> Let RL = 12 ohms
> positive swing = Id*rL = 1*10.82 = 10.82 V
> negative swing = Vd = 10 V
> Since we negative clip at 10 V, we are limited by our design clipping
constraint
> to driving the PA such that 2*10 V is the maximum available voltage swing.
> Power delivered to RL: Pload = 10^2/(2*12) = 4.17 W
>
> Sure enough, the power peaked at a load of 11 ohms, just like load-line
theory
> says it will. Now let's see what the available power hit of conjugate
matching
> is.
>
> By definition, conj-match insists RL = Ri = 110 ohms. Again we are
limited in
> our clipping constraint by static drain current, and supply voltage,
> specifically 10 V.

>
> Our negative swing limit is, as ever, 10 V (the drain voltage).
>
> positive swing = Id*rL = 1*55 = 55 V
>
> This would breakdown the device, but the lower negative swing will force
us to
> back down the drive to meet the design defined clipping constraint.
>
> Pload = 10^2/(2*110) = 0.455 W
>
> Conjugate matching resulted in a 10*log(0.455/4.55) = 10 dB available
power
> hit. Power amplifiers are not designed with conjugate matching in mind.
You
> don't need to re-invent the wheel. Just follow well established
principles when
> doing cookie cutter PA design.
>
> > The list could go on,...
>
> LOL. Given your pattern, I am sure it will.
>
> > You sighed with content at being offered a "relevent
> > question/statement" Your re-iterative response contains the same (how
> > could it be otherwise?) slack of precision that started this. Want to
> > try again?
>
> Not really. The problem isn't precision, it is you can't, or refuse, to
> comprehend what is being said, which I presume is why you instead write
with the
> most bizarre terms and phrasology that has nothing of import to the topic
at
> hand.
>
> > You could have as easily expressed what sense they ARE matched,
>
> For what seems like the billionth time now: they are load-line matched.
>
> > ...but instead this time offer what Basis
> > of Matching you are attempting to
> > describe.
>
> I've given a didactic example (actually a couple), you just don't--or more
> likely won't--get it. If you don't like my example, you can refer to
Cripps,
> who is considered one of the preeminant RF PA experts in the world.
>
> Even more simplistic is Malvino's discussion on pp177-185 of the first
edition

> ((c) 1968) of "Transistor Circuit Approximations." It is basically a
technician
> level description, so perhaps it is well-suited to you. In academics,
load-line
> theory is presented down to tech level courses and up across to
engineering.
> That some engineers and techs aren't clear on the load-line concept for
PA's (or
> *any* circuit needing a wide symmetrical swing) is notwithstanding.
>
> > This is the more rigorous approach that eliminates vague
> > descriptions and uses standard terms. If you have to query about what
> > "Basis" means (used by professionals - namely metrologists who can
> > quantify Output Z of all sources) - then we can skip it as a topic out
> > of the reach of amateur discussion.
>
> I see you still don't know what impedance is. In any case, it doesn't
mean that
> looking into a properly designed PA output with a network analyzer
confirms the
> conj-match precept, it doesn't.
>
> Impedance is a *linear* conception, a portion of linear theory, and again
by
> definition:
>
> Z = V/I
>
> V and I are sinusoids (phasors). But with power amps, substantial
non-linearity
> exists (destroying the linearity assumption of impedance), thus applying a
> linearly defined concept to a non-linear milieu is a misapplication. You
are
> attempting, as is Ken, to stuff a square peg down a round hole. Why?
>
> The concept is even questionable for the most linear of the power amps:
class
> A. In any case, given real devices with real supplies, the conj-match
ideal is
> next to worthless. While I could agree that the borderline may be fuzzy
> regarding where and when to drop the impedance notion, it still stands
that the
> concept is not useful in determining how to optimally load an RF PA.
>
> At this point you own the conj-match assertion as much as Ken. Prove it!
You
> can't because it is fundamentally incorrect.
>
> > Note:
> > >Again, RF PA's should be load-line matched.

> > Does not qualify as a Basis.
>
> Load-line matching is such a basic electronic concept it is unbelievable
how
> oblivious you are to the concept. Read a basic book. Don't rely on me:
look it
> up and do your own design!
>
> > It is suggestive of one, but because you indiscriminately
> > mix several Basis within your discussions, it is your
> > responsibility to be precise.
>
> You just like to hear yourself talk. I've been explicit and precise. You
just
> don't know anything about the elementary electronics principle of load
line
> matching. I presume this is why your comments have zero substantive
> responsiveness.
>
> > If you can accomplish this, then we can
> > proceed to review how little it all matters.
>
> If you keep ignoring what I've written, and that which is written in
elementary
> electronics texts, you can remain happily ignorant of understanding the
> simple-basic-fundamental concept presented. Your choice.
>
> > Barring resolving any of these issues of precise language,...]
>
> The guy ignorant of the definition of impedance and that s-domain theory
is
> linear circuit theory (and more goodies) is talking about "precise
language."
> Amusing.
>
> > I notice
> > that you rather enjoy...
>
> No, I don't enjoy it at all. Your lack of electronic understanding is
dismal,
> especially given your tone. It would have been a lot easier for me if Ken
> hadn't made the erroneous
> statement in the first place and made a correct one instead. That would
have
> been my preferance.
>
> > ..fruitless jousting with them than challenging my
> > support of Ken's (supposed) statement that you say is your focus:
> > >> However, responding to the bald statement, I find nothing
> > >> objectionable about it.

> > >
> > >That's because you don't understand the difference between impedance
matching
> > >and ac load line matching.
> > We will leave that as another dead-end.
>
> I suspect you will. I already understand it -- you're the one who
doesn't.
>
>
> "One of the principal differences between linear RF amplifier design and
PA
> design is that, for optimum power, the output of the device is not
presented
> with the impedance required for a linear conjugate match. That causes much
> consternation and has been the subject of extensive controversy about the
> meaning and nature of conjugate matching. It is necessary, therefore, to
swallow
> that apparently unpalatable result as early as possible (Section 1.5),
before
> going on to give it more extended interpretation and analysis (Chapter
2)." --
> Cripps, p1
>
>
> The quote is on Page 1. Swallow it now. Learn something for a change.

3300. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 01:22:27 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <BLmdnZ3AVOPJJbrfRVn-tw@adelphia.com>
Source record: 81138

Cecil Moore wrote:

> Reg Edwards wrote:
>
>> "Cecil Moore"
>>
>>> Sure, just rent a helicopter and make field strength
>>> measurements.
>>
>>
>> What use would he make of take-off angle if he ever gets to know it.
>
>
> Maybe it would make him feel good?
> Sorta like your Cabernet? :-)

I want to measure the Cabernet of my antenna!!!

- Mike KB3EIA -

3301. Re: Antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 01:37:58 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <112fevrdhhb9uf6@corp.supernews.com>
Source record: 81139

Wes Stewart wrote:

> On 3 Mar 2005 08:50:16 -0800, nm5k@wt.net wrote:
>
>
>>Joe S. wrote:
>>
>>>In 1996, I disassembled my antenna farm that graced the 3-acre plot
>>
>>where we
>>
>>>lived in Manassas, VA:
>>>-- 40- and 50-foot Rohn towers
>>>-- two 135-foot dipoles each center-fed with ladder line
>>>-- TH7
>>>-- assorted VHF and UHF beams
>>>-- 40-mtr inverted Vee
>>>
>>>Bundled it all up and moved from Virginia to Tennessee where I moved
>>
>>into a
>>
>>>restricted subdivision. The antenna farm stayed bundled up in the
>>
>>crawl
>>
>>>space.
>>>
>>>In 2003, sold the house and moved into an apartment at which point I
>>
>>sold
>>
>>>the antenna farm for a fraction of what I paid for it.
>>>
>>>Now, in 2005, living in an apartment on the Mississippi Gulf Coast
>>
>>and
>>
>>>trying to scrape together the money to build a house on a 100 x
>>
>>100-foot lot
>>
>>>where maybe I can put up a short dipole but will not be able to have
>>

>>a
>>
>>>tower.
>>>
>>>So -- what's the point? As I sit here and read the debates about
>>
>>this wire,
>>
>>>that vertical, some other yagi, yes/no on the Carolina Windom, advice
>>
>>on an
>>
>>>antenna for a 10-acre plot -- I can't help but think: If you have an
>>>antenna, thank the gods because any antenna radiates better than no
>>
>>antenna.
>>
>>>--
>>>
>>>-----
>>>Joe S.
>>
>>You can always operate from the car...Seriously...If I had no shack,
>>antennas, etc, I would still have a decent mobile rig. You can sit
>>in it, or just park it in the driveway, and run a coax to it, from
>>house, garage, etc...I've done the "remote mobile antenna" thing
>>many times when camping...I'll sit the rig on a picnic table, and
>>run coax to the car antenna. Works better than you might think.
>>The higher bands, very good. MK
>
>
> Sure. My Elmer and neighbor had an acre and lots of bux but he still
> liked his "mobile" rig.
>
> http://www.qsl.net/n7ws/w7uvr.jpg
>
> This was "state-of-the-art" in 1958.
>
> Full tilt with a high level modulated 4-1000A. Thirty foot "tower"
> and 2 el. beam for high bands and remotely tuned verticals for lower
> bands.
>

I seem to recall seeing your mobile (!) rig before. Has it been
published before?

Dave WD9BDZ

3302. Re: lighting replusion?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 01:41:01 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <8fudnUlhJfcwIbrfRVn-vQ@adelphia.com>
Source record: 81140

Richard Harrison wrote:

> ml wrote:
> "wouldn`t my antenna then become the "best" ground or path of least
> resistance and thusly ""attract"" the lightning."
>
> That seems right and conductivity does not have to be high. Ben Franklin
> found the conductivity of twine sufficient. He drained charge from the
> atmosphere by placing fis kite high.
>
> Height is shown to attract lightning bolts to grounded towers used for
> various purposes. Many are hit by nearly every passing thunderstorm.
> Towers take lightning bolts. They don`t always if ever discharge the
> earth and atmosphere in their area to eliminate hits. They do seem to
> divert strikes in their vicinity and offer some protection to their
> surroundings.
>
> I`ve spent years in broadcast plants and seen many lightning strikes. If
> you build it they will come.

I went on a tour of a TV station tower site last year, and they had a lightning suppression system that had a number of rods with a lot of fine metal (wires?) hanging off the ends - they looked a bit like a cheerleaders pom-pom. The individual rods hung from the sides of that tower at various heights on the tower. Height was either 1000 or 1200 foot IIRC.

The station engineer noted that although it was still a noisy place when a storm was approaching, it was no where as exciting as it used to be!

And yes, it did protect the area around the tower.

I was very impressed with the mechanics of a large tower, such as the huge suspended weight/pulley system on the guy wires, The strange elevator that takes people up to do maintenance on the tower and guy wires, the icefall protection structures (the engineer lost a car once), and of course the foot thick solid copper jacket coax!

- Mike KB3EIA -

3303. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 01:57:06 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <4227C08D.B80063D1@deadend.com>
Source record: 81141
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Richard Clark wrote:
>

> I suppose this means you failed the eye exam with the other eye.

There's no need for supposition. You don't know anything about PA design. You demonstrated that clearly enough for a blind person to see.

3304. Endfed zepp questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 02:17:52 UTC
From: gil <gi1pi@yahoo.com>
Message-ID: <1109902672.696699.310580@o13g2000cwo.googlegroups.com>
Source record: 81142

Not having a lot of space for wire antennas (50 feet at best) would it be better for me to use an endfed zepp (50 feet) or a double zepp (25 feet each leg) ?

On the endfed zepp there is one side of the latter line that its not connected to the aerial, on the other end (in the shack) where does that end connect to...ground or should it be connected just like any other latter line on the tuner ?

Just trying to get the best results out of a small space.

Thanks

Gil

3305. Re: Antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 02:19:12 UTC
From: OICU812 <oicu8122@emailaccount.comnospam>
Message-ID: <bradnVcfg-MxWLrfRVn-tQ@adelphia.com>
Source record: 81143

<nm5k@wt.net> wrote in message
news:1109868616.113707.153380@l41g2000cwc.googlegroups.com...
:
: Joe S. wrote:
: > In 1996, I disassembled my antenna farm that graced the 3-acre plot
: where we
: > lived in Manassas, VA:
: > -- 40- and 50-foot Rohn towers
: > -- two 135-foot dipoles each center-fed with ladder line
: > -- TH7
: > -- assorted VHF and UHF beams
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: >
: > Bundled it all up and moved from Virginia to Tennessee where I moved
: into a
: > restricted subdivision. The antenna farm stayed bundled up in the
: crawl
: > space.
: >
: > In 2003, sold the house and moved into an apartment at which point I
: sold
: > the antenna farm for a fraction of what I paid for it.
: >
: > Now, in 2005, living in an apartment on the Mississippi Gulf Coast
: and
: > trying to scrape together the money to build a house on a 100 x
: 100-foot lot
: > where maybe I can put up a short dipole but will not be able to have
: a
: > tower.
: >
: > So -- what's the point? As I sit here and read the debates about
: this wire,
: > that vertical, some other yagi, yes/no on the Carolina Windom, advice
: on an
: > antenna for a 10-acre plot -- I can't help but think: If you have an
: > antenna, thank the gods because any antenna radiates better than no
: antenna.
: >
: > --
: >
: > -----
: > Joe S.
:

: You can always operate from the car...Seriously...If I had no shack,
: antennas, etc, I would still have a decent mobile rig. You can sit
: in it, or just park it in the driveway, and run a coax to it, from
: house, garage, etc...I've done the "remote mobile antenna" thing
: many times when camping...I'll sit the rig on a picnic table, and
: run coax to the car antenna. Works better than you might think.
: The higher bands, very good. MK
:

I thought about hooking my Kenwood TS 520
up to my car and doing the mobile thing also.Only problem is I have a Honda
Civic and it does not offera lot of room for the rig and was wondering about
current draw on my alternator ie would I need a bigger alternator for that
etc.
I'm definetly a newbie when it comes to mobile hamming HF.Hate to break into
a thread like this but you guys intigued me into the subject .....
Thanks .

3306. Re: Is PVC pipe UV resistant?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 02:30:38 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <Oqudnc9ZlrHPVbrfRVn-ow@comcast.com>
Source record: 81144

<JimK2TL@gmail.com> wrote in message
news:1109898353.797664.69430@g14g2000cwa.googlegroups.com...
> Greetings
> Does anyone know if typical schedule 40 PVC pipe is UV resistant? I
> have some antenna projects in mind that will be built from this stuff.
> I suppose I can paint it for some extra protection, but I was wondering
> if it is necessary?
>
> Thanks
> Jim/K2TL
>
It's not bad, some of the early stuff (1970's/1980s) for an installation --
it is a lighter shade of gray today.
The last batch that I purchased a couple of years ago was silk-screened
(yellow) on outside as being UV resistant.
http://www.jmpipe.com/electrical.html

Schedule 80 is thicker (and heavier) and rated for outdoor use (and
punishment).

This is from Carlon (a major electrical PVC conduit mfg.)

UV is an issue for all plastic products. Fortunately, there are additives
that are added to plastics to make the material UV resistance. Listed
Schedule 40 and 80 PVC conduit utilizes these additives and are UV
resistant. The sunlight resistance test is found in UL Standard UL651.
Listed product will have an indefinite life period.

Listed Schedule 40 and 80 Conduit have been used in Florida for years
including on rooftops. It is preferred along the coast because it is
corrosion resistant. When used in an exposed environment where there are
changes in temperatures please are sure to use enough expansion fittings.

Greg
w9gb

3307. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 02:34:35 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <pJOdnUjMtaKjVLrfRVn-oQ@comcast.com>
Source record: 81145

"WA2SI" <wa2si@arrl.net> wrote in message
news:1109885075.976970.77950@l41g2000cwc.googlegroups.com...
> Hi folks,
>
> I just bought a batch of Amphenol PL-259 83-1SPs to assemble some
> jumpers. When did Amphenol shift from 'Made In USA' to 'Assembled In
> Mexico'? The whole reason for buying Amphenol was to:
>
> A) Enjoy that Amphenol quality. (BTW, they don't even look the same.
> The dielectric has a cheap milky recycled look and the name and model
> nr. are no longer stamped into the sleeve ring.)
>
> B) Support products 'Made In USA'.
>

NAFTA.

gb

3308. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 02:56:21 UTC
From: Tom Ring <news0001@taring.org>
Message-ID: <4227cdce$0$92311$39cecf19@news.twtelecom.net>
Source record: 81146
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Richard Clark wrote:

> On Thu, 3 Mar 2005 20:53:48 +0000, John Woodgate
> <jmw@jmwa.demon.contraspam.yuk> wrote:
>
>
>>Doesn't everyone know that an audio amplifier that id designed to feed
>>an 8 ohm load MUST have an output source impedance of 0.0000001 ohms or
>>less.
>
>
> Hi John,
>
> I hope that was a joke.
>
> 73's
> Richard Clark, KB7QHC

I think he just meant that damping factor is important in an audio amp.

At least I hope that's what he meant.

He forgot to mention that for that output impedance to be relevant, you
need superconducting wire to the speakers as well as superconducting
voice coils.

tom
K0TAR

3309. Re: Typical Doublet Tension?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 03:04:55 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <1109905495.227821.43560@g14g2000cwa.googlegroups.com>
Source record: 81147

Richard Clark wrote:
> On Thu, 3 Mar 2005 11:40:09 -0600, richardharrison@webtv.net (Richard
> Harrison) wrote:
> >Table 2 on page 20-3 of the 19th edition of the "ARRL Antenna Book"
> >recommends 8 pounds tension for #18AWG hard-drawn copper wire.
> Hi Richard,
>
> From "Reference Data for Radio Engineers," the breaking load for #18
> Hard-Drawn Copper is 85 pounds. The weight for 88 feet of this wire
> (at 4.9 pounds per 1000') would be 0.43 pounds.
> >
> >Many issues are involved in tensioning. For calculations see Ed
Laport`s
> >"Radio Antenna Engineering" page 346.
>
> Simple Trig would reveal that with an 88 foot catenary with a 5 foot
> sag would develop roughly an angle of 6.5 degrees below the
> horizontal. My earlier post employing arctan was in error. It is
the
> sine of the depressed angle used as a divider into half the weight
(we
> are presuming this is a symmetrical dipole) that describes the
> tension. The sine of 6.5 degrees is 0.113. The tension in the wire
> then becomes 0.215/0.113 pounds (1.9#).

I think that if you do a really rigorous job of it you'll discover that
a hyperbolic function sneaks into the mix.

> Trying to flatten the catenary is where tension becomes increasingly
> stressful. If you attempted to hold the catenary to within 1 foot of
> flat, then this would be a depression of 1.3 degrees, resulting in a
> divisor of 0.022. The tension in the wire then becomes 0.215/0.022
> pounds (9.5#).
>
> If we were to add in the weight of the transmission line drop, RG-58
> comes in at roughly 0.029 pounds per foot or RG-11 as much as 0.096
> pounds per foot.
>
> Let's ballpark the last dipole with 1 foot sag to hold up 40 feet of
> RG-11 (whatever the practicality, and irrespective of the center
being
> held up, we are considering only a two point suspension). The added
> weight of the cable comes to 3.84 pounds. The tension in the wire
> then becomes 2.135/0.022 pounds (97#).
>

> The wire snaps.
>
> 73's
> Richard Clark, KB7QHC

w3rv

3310. Re: lighting replusion?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 03:11:43 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <PlQVd.36773$7z6.18189@lakeread04>
Source record: 81148

"Mike Coslo" <mcoslo@adelphia.net> wrote

/snip/

> I went on a tour of a TV station tower site last year, and they had a
> lightning suppression system that had a number of rods with a lot of
> fine metal (wires?) hanging off the ends - they looked a bit like a
> cheerleaders pom-pom. The individual rods hung from the sides of that
> tower at various heights on the tower. Height was either 1000 or 1200
> foot IIRC.
>
> And yes, it did protect the area around the tower.
>
> - Mike KB3EIA -

Mike,

The IEEE has nearly succeeded in quashing once and for all, the last ditch efforts of a desperate group of snake-oil salesmen pushing Early Streamer Emission (ESE) and Charge Transfer System (CTS) phony-science. The latest trick of these junk-science purveyors was to hire corrupt Russian scientists to publish "findings" that the ESE/CTS systems worked. Every other lightning expert in the world has rung-in on this already, and the theory is totally discredited, and without merit.

That didn't stop some engineers at various plants and stations around the world from trying the systems those CTS snake oil salesmen pushed. The system you described on that tower is CTS. And it never worked, anywhere. Anyone who still defends it today is too embarrassed to admit they paid upwards of 10x the cost of proven Franklin-rod lightning systems, for a totally discredited design that leaves them dangerously exposed to damage from lightning (if it was the only protection system).

Jack Painter
Virginia Beach, Virginia

3311. Re: Why a Short Lightning Ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 04:35:16 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4227e664$1_1@127.0.0.1>
Source record: 81149

Jack Painter wrote:
> A good friend who I have known for years and who provided many professional
> documents for my lightning systems review over the years was just struck
> (and injured) last summer.

I was once caught in a thunderstorm riding my bicycle at night in AZ.
I looked down and there were four continuous arcs running from my
wheel rims to the pavement on both sides of both tires. I'll never
forget it.
--
73, Cecil http://www.qsl.net/w5dxp

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3312. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 04:43:06 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns960ED30E6DC6spectrumhogstarbandn@207.106.93.175>
Source record: 81150

> hey burt
> i havent bought any in many years but
> reason 1 is cause americans DEMAND to much wages thanks to the unions

Don't know about you, but I'd find it kinda hard to maintain a decent
standard of living here at 50 cents per hour wages.

Ed

3313. Re: Endfed zepp questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 04:47:45 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <EGRVd.1037$6g7.746@bignews1.bellsouth.net>
Source record: 81151

"gil" <gi1pi@yahoo.com> wrote in message
news:1109902672.696699.310580@o13g2000cwo.googlegroups.com...
> Not having a lot of space for wire antennas (50 feet at best) would it
> be better for me to use an endfed zepp (50 feet) or a double zepp (25
> feet each leg) ?
>
> On the endfed zepp there is one side of the latter line that its not
> connected to the aerial, on the other end (in the shack) where does
> that end connect to...ground or should it be connected just like any
> other latter line on the tuner ?
>
> Just trying to get the best results out of a small space.
>

perhaps a loop.
more wire in the air to catch those signals

3314. Re: Why a Short Lightning Ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 04:54:49 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4227eaf7$1_2@127.0.0.1>
Source record: 81152

Jack Painter wrote:
> A good friend who I have known for years and who provided many professional
> documents for my lightning systems review over the years was just struck
> (and injured) last summer.

I got caught in a thunderstorm while riding my bicycle at
night in Queen Creek, AZ. I looked down and there were
four continuous bright arcs on both sides of my two wire
rims across the tires to ground. I'll never forget that.
--
73, Cecil http://www.qsl.net/w5dxp

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3315. Re: Is PVC pipe UV resistant?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 04:56:11 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4227eb49$1_2@127.0.0.1>
Source record: 81153

JimK2TL@gmail.com wrote:
> Does anyone know if typical schedule 40 PVC pipe is UV resistant?

The white stuff is not UV resistant. I've had it become
brittle and useless in both AZ and TX.
--
73, Cecil http://www.qsl.net/w5dxp

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3316. Re: Endfed zepp questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 05:09:36 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4227ee6e$1_2@127.0.0.1>
Source record: 81154

gil wrote:
> Not having a lot of space for wire antennas (50 feet at best) would it
> be better for me to use an endfed zepp (50 feet) or a double zepp (25
> feet each leg) ?

A 50 ft end-fed Zepp would be 1/2WL on 9.36 MHz. The quarter-
wave matching section would make it a three band antenna for
30m, 17m, and 10m.

A 50 ft center-fed dipole will work all frequencies from 14
MHz up with a suitable tuner.
--
73, Cecil http://www.qsl.net/w5dxp

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3317. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 05:24:23 UTC
From: "aunwin@insightbb.com"
Message-ID: <biSVd.30785$r55.6093@attbi_s52>
Source record: 81155

Reg
If he knew the TOA could he not ascertain the height of the reflecting layer
using your "hop distance" program:.
I suspect that your program on the same subject has a similar use so perhaps
you could answer your own question.
With my antenna having a TOA of 10 degrees I could work out backwards a
whole mine of information all based around your program, assuming your input
data is correct. Grin
Cheers
Art

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:d07422spl1@sparta.btinternet.com...
>
> "Cecil Moore"
>> Charlie wrote:
>> > Using a Hustler 5-BTV ground mounted with 72 radials. I have heard
> about > > antenna modeling but is there any way to do a real world take
> off
> angle
>> > measurement???
>>
>> Sure, just rent a helicopter and make field strength
>> measurements.
>>
> ==========
>
> What use would he make of take-off angle if he ever gets to know it.
>
>

3318. Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 05:41:29 UTC
From: "aunwin@insightbb.com"
Message-ID: <dySVd.30807$r55.174@attbi_s52>
Source record: 81156

I have just come to realise that if one drew a polygon of element phases in
a array
and all elements were 180 degrees to its companion element and excluding the
driven element, the max gain and max front to back will occur at the SAME
frequency!
Until now I was of the understanding that these two max figures could not
occur at
the same frequency. Is there anything written about this possibility?
Regards
Art

3319. Re: Endfed zepp questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 05:54:49 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <4227f529.33761306@news.crosslink.net>
Source record: 81157

On 3 Mar 2005 18:17:52 -0800, "gil" <gi1pi@yahoo.com> wrote:

>Not having a lot of space for wire antennas (50 feet at best) would it
>be better for me to use an endfed zepp (50 feet) or a double zepp (25
>feet each leg) ?
>
>On the endfed zepp there is one side of the latter line that its not
>connected to the aerial, on the other end (in the shack) where does
>that end connect to...ground or should it be connected just like any
>other latter line on the tuner ?
>
>Just trying to get the best results out of a small space.
>

Dear Gil,
At the tuner, the two sides of the ladder line connect to the balanced line terminals. Don't worry about the fact that up at the antenna, one side of the ladder line connects to the antenna and the other side is open. That was one of the best antennas that I ever had as a kid. Ideally, the length of the antenna should be 1/2 wavelength for this configuration.

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

3320. Re: Antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 05:57:27 UTC
From: nm5k@wt.net
Message-ID: <1109915847.631142.45160@g14g2000cwa.googlegroups.com>
Source record: 81158

OICU812 wrote:

> :
>
> I thought about hooking my Kenwood TS 520
> up to my car and doing the mobile thing also.Only problem is I have a
Honda
> Civic and it does not offera lot of room for the rig and was
wondering about
> current draw on my alternator ie would I need a bigger alternator for
that
> etc.

The alternator is probably ok, being you probably won't even be
50% duty cycle...The early 520's will work on 12v, but they are
sort of weird, being the voltages and regulation are not quite
as good as on 117v. But it will work. Probably at a reduced
power compared to 117v. Yea, kinda large too. Would have to
keep it on the seat, or floor...You might wanna save for a 12v
rig. Much easier to deal with mobile and portable. I had a 520
I rebuilt about 4-5 years ago..Sold it to a friend, and he ran
it mobile for a short time...It worked, but was kinda funky, and
he got a TS-450 shortly after that...He liked the 450 much better
when mobile, needless to say...I ran a IC-730 for a long time, but
the display board pooped out, and I couldn't get the part..:(
"goofy small 9 pin transformer in the dc-dc converter circuit"
So I broke down and bought a IC-706mk2g. I still plan to fix the
730 one of these days, when I get another junker to get the part.
Shame for it to collect dust...Other than the display board,
it works great...It's easier to use when driving than the 706,
cuz it has no menus...I can work nearly everything on it, just
by feel...MK

3321. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 06:09:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6quf21t1e3gplgfvmbltcp2c5jmnt5an38@4ax.com>
Source record: 81159
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Fri, 04 Mar 2005 01:57:06 GMT, gwhite <gwhite@deadend.com> wrote:
>> I suppose this means you failed the eye exam with the other eye.
>There's no need for supposition.

Hi OM,

I thought not.

73's
Richard Clark, KB7QHC

3322. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 06:15:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <luuf219fa7kg4up47ug631oc8fn6movce9@4ax.com>
Source record: 81160
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Fri, 04 Mar 2005 01:13:39 GMT, "Thomas Magma"
<somewhere@overtherainbow.com> wrote:

>Wow this is a long thread. Don't really know where I should put my two bits
>in, but here it goes.
>
>I have designed several RF PA sections in the past. 500MHz at about 50W.
>Pretty easy stuff if you have the right tools and know how to use them. The
>tools I like using for matching the power output FET is two triple stub
>tuners. One on the input of the FET and one on the output. So it
>goes...pre-amp (50 ohm output) -> stub tuner -> FET -> stub tuner -> 50 ohm
>dummy pad -> spectrum analyzer. Then just tune the stubs for the performance
>you desire, these include: efficiency (thermal issues), harmonic content,
>spurious emissions, load VSWR considerations, cold start, ect. Then remove
>the FET and look into the triple stub tuners with the network analyzer.
>Model and duplicate the network out of discrete components that can handle
>the voltage/power, send the design off to the enviro test lab, and head home
>early for the day.
>
>Cheers,
>Thomas

Hi Thomas,

Thanx, your two bits were worth more than the academic plug nickel.
This is something that our original poster should hearken to as his
needs were obviously production oriented. Bench experience will trump
cut-and-paste theory in a heart-beat.

However, triple stub is pretty aggressive. How long did it take you
to flatten response?

73's
Richard Clark, KB7QHC

3323. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 06:43:35 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <PiK2edAXOAKCFwh1@jmwa.demon.co.uk>
Source record: 81162
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Richard Clark <kb7qhc@comcast.net>
wrote (in <o71f21p2ckvbbd7b6cjmdpta9af74far3p@4ax.com>) about '1/4 vs
1/2 wavelength antenna', on Thu, 3 Mar 2005:
>On Thu, 3 Mar 2005 20:53:48 +0000, John Woodgate
><jmw@jmwa.demon.contraspam.yuk> wrote:
>
>>Doesn't everyone know that an audio amplifier that id designed to feed
>>an 8 ohm load MUST have an output source impedance of 0.0000001 ohms or
>>less.
>
>Hi John,
>
>I hope that was a joke.
>
If you read the whole paragraph, you will see.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

3324. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 06:45:33 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <cC8y2oANQAKCFwg0@jmwa.demon.co.uk>
Source record: 81161
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Tom Ring <news0001@taring.org>
wrote (in <4227cdce$0$92311$39cecf19@news.twtelecom.net>) about '1/4 vs
1/2 wavelength antenna', on Thu, 3 Mar 2005:

>He forgot to mention that for that output impedance to be relevant, you
>need superconducting wire to the speakers as well as superconducting
>voice coils.

See the last sentence, about the effect of an **8 ohm** source impedance
on damping.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

3325. Re: Antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 06:50:28 UTC
From: Buck <iam@this.site>
Message-ID: <eu0g21l8mlg933tjj0vb0aptjhqg5vdh5m@4ax.com>
Source record: 81163

On Thu, 03 Mar 2005 17:38:09 -0700, Wes Stewart <n7ws_@*yahoo.com>
wrote:

>On 3 Mar 2005 08:50:16 -0800, nm5k@wt.net wrote:
>
>>
>>Joe S. wrote:
>>> In 1996, I disassembled my antenna farm that graced the 3-acre plot
>>where we
>>> lived in Manassas, VA:
>>> -- 40- and 50-foot Rohn towers
>>> -- two 135-foot dipoles each center-fed with ladder line
>>> -- TH7
>>> -- assorted VHF and UHF beams
>>> -- 40-mtr inverted Vee
>>>
>>> Bundled it all up and moved from Virginia to Tennessee where I moved
>>into a
>>> restricted subdivision. The antenna farm stayed bundled up in the
>>crawl
>>> space.
>>>
>>> In 2003, sold the house and moved into an apartment at which point I
>>sold
>>> the antenna farm for a fraction of what I paid for it.
>>>
>>> Now, in 2005, living in an apartment on the Mississippi Gulf Coast
>>and
>>> trying to scrape together the money to build a house on a 100 x
>>100-foot lot
>>> where maybe I can put up a short dipole but will not be able to have
>>a
>>> tower.
>>>
>>> So -- what's the point? As I sit here and read the debates about
>>this wire,
>>> that vertical, some other yagi, yes/no on the Carolina Windom, advice
>>on an
>>> antenna for a 10-acre plot -- I can't help but think: If you have an
>>> antenna, thank the gods because any antenna radiates better than no
>>antenna.
>>>
>>> --
>>>

>>> -----
>>> Joe S.
>>
>>You can always operate from the car...Seriously...If I had no shack,
>>antennas, etc, I would still have a decent mobile rig. You can sit
>>in it, or just park it in the driveway, and run a coax to it, from
>>house, garage, etc...I've done the "remote mobile antenna" thing
>>many times when camping...I'll sit the rig on a picnic table, and
>>run coax to the car antenna. Works better than you might think.
>>The higher bands, very good. MK
>
>Sure. My Elmer and neighbor had an acre and lots of bux but he still
>liked his "mobile" rig.
>
>http://www.qsl.net/n7ws/w7uvr.jpg
>
>This was "state-of-the-art" in 1958.
>
>Full tilt with a high level modulated 4-1000A. Thirty foot "tower"
>and 2 el. beam for high bands and remotely tuned verticals for lower
>bands.

I'll bet he used the air conditioner in the winter time in that car :)

and I thought I was crazy with my mobile setup. Years ago I had two hustler MO mounts each with the three way spider for 80-10 meters. I had two 2- meter antennas and two 70 cm antennas on the car in addition to the am/fm broadcast antenna on the car. It was nick-named 'The Porcupine'. Going to Charleston one day I had a console of radios surrounding me. The IC-730, Kenwood TS-440SAT, a dual-band 2 meter/70 cm radio and one each of two meters and 70 cm rigs. I haven't established my antennas yet on my current car, but the IC-706 MKII replaces most of the above. I'll be looking for a good dual band for the car for FM to go with the 706. Then I can operate HF while listening to V/UHF and visa versa.

--
73 for now
Buck
N4PGW

3326. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 07:10:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4l1g215dhrbf9plkslhpk2t2b6i2q3kusq@4ax.com>
Source record: 81164

On Fri, 04 Mar 2005 05:24:23 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>With my antenna having a TOA of 10 degrees

Hi Art,

All antennas have a TOA of 10 degrees. That is possibly why Reggie
(and others) generally advise that worshiping at the altar of TOA is
illusory. Without some real data, like 0.2 dBi @ 10i¿½, simply saying
you have a TOA of 10 degrees is like trying to sell this wonderful car
because it has brakes that work.

73's
Richard Clark, KB7QHC

3327. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 13:13:57 UTC
From: "aunwin@insightbb.com"
Message-ID: <paZVd.90884$4q6.32395@attbi_s01>
Source record: 81165

TOA is deemed to be the angle at which maximum gain occurs.
Seems like you are fishing for something, but you will not get
it from me.

Art

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:4l1g215dhrbf9plkslhpk2t2b6i2q3kusq@4ax.com...
> On Fri, 04 Mar 2005 05:24:23 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>>With my antenna having a TOA of 10 degrees
>
> Hi Art,
>
> All antennas have a TOA of 10 degrees. That is possibly why Reggie
> (and others) generally advise that worshiping at the altar of TOA is
> illusory. Without some real data, like 0.2 dBi @ 10°, simply saying
> you have a TOA of 10 degrees is like trying to sell this wonderful car
> because it has brakes that work.
>
> 73's
> Richard Clark, KB7QHC

3328. Re: Why a Short Lightning Ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 13:36:30 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4228653c$1_2@127.0.0.1>
Source record: 81166

Justï¿½n Kï¿½se wrote:
> To believe that an errant lightening bolt could navigate around or over
> the obstructing mountains, and then single someone out for a lethal
> strike is a bit of a stretch, scary thing is that some people believe
> this nonsense.

Well, it was re-enacted on the Discovery Channel. If I
remember right, it happened to a lady on horseback.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
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3329. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 13:57:53 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <d09ph1$137u$1@f04n12.cac.psu.edu>
Source record: 81168

"gb" <onw9mapsgb@no.arrl.spam.net> wrote in message
news:pJOdnUjMtaKjVLrfRVn-oQ@comcast.com...
> "WA2SI" <wa2si@arrl.net> wrote in message
> news:1109885075.976970.77950@l41g2000cwc.googlegroups.com...
> > Hi folks,
> >
> > I just bought a batch of Amphenol PL-259 83-1SPs to assemble some
> > jumpers. When did Amphenol shift from 'Made In USA' to 'Assembled In
> > Mexico'? The whole reason for buying Amphenol was to:
> >
> > A) Enjoy that Amphenol quality. (BTW, they don't even look the same.
> > The dielectric has a cheap milky recycled look and the name and model
> > nr. are no longer stamped into the sleeve ring.)
> >
> > B) Support products 'Made In USA'.
> >
>
> NAFTA.
>
> gb
>
>

Corporate greed and Wall street greed, a deadly combination.

--
John Passaneau
Penn State University
jxp16@psu.edu

3330. I didn't expect that

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 14:00:47 UTC
From: D/C Hoogerwaard <hoogerwaard@wanadoo.nl>
Message-ID: <42286a0f$0$51891$dbd41001@news.wanadoo.nl>
Source record: 81167

made a 1/4 wave vertical (on the ground) for 40 m. (40 radials 1/4 wave)
and made a dipole at abt 45 feet high for 40 m.

I live on the countryside and my vertical is abt 15 feet from my house and
all other sides are clear.

The dipole is in 99.9 % better then the vertical in 99.9 %. A few times the
same. The dipole is abt 25 feet above the house and all other houses in the
village.

I only listened e.g. yesterday a YB station was 5-8/9 on the dipole and the
vertical was 4-6 with a lot of noise.

I am a fan for verticals but that the dipole worked so good I did not expect
that.

Did U.

73 pa3glf

3331. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 14:09:44 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <42286c7a_3@newsfeed.slurp.net>
Source record: 81169

"Richard Harrison" wrote:
> Radio transmitters don`t produce significant harmonics. It`s the law.
> They are linear power sources. We can and do tune them for all the power
> they will produce under their particular operating conditions of drive
> and d-c power supply. They operate at more than 50% efficiency which
> means that they don`t take power 100% of the time, but are switched-off
> during part of the r-f cycle. Output impedance is thus an average over
> the entire cycle. It`s OK. We have no harmonics. Gaps are filled by the
> tank circuit and other filters.

Note that without adjustment, modern, solid-state FM broadcast transmitters can (and do) provide 80% or better PA efficiency into a 50 ohm load across 20% bandwidth, with no tank circuit or other in-band filter(s).

If this is done in a commercial service, certainly it could be done in amateur radio devices. Physics is not application-selective.

Posters of various forms of "Absolute Truths" to the contrary might well do a bit more research.

RF

3332. Re: Why a Short Lightning Ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 15:52:00 UTC
From: richardharrison@webtv.net
Message-ID: <3272-42288420-17@storefull-3255.bay.webtv.net>
Source record: 81073

Cecil, W6DXP wrote:
"Well, it was re-enacted on the Discovery Channel."

There were no mountains around the medium-wave broadcast plants where I worked, but I can testify that atmospheric electrical activity there often started well in advance of the storm arrival while the sky overhead was still blue. Notably, tower guy insulators flashed over repeatedly. Transmitter overloads tripped the transmitters off the air for an instant to clear r-f arcs which followed the arc paths created by the static discharges.

Bolts do come out of the blue but do no damage in a well designed radio station.

Best regards, Richard Harrison, KB5WZI

3333. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 15:58:05 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42288778_2@127.0.0.1>
Source record: 81170

aunwin@insightbb.com wrote:
> TOA is deemed to be the angle at which maximum gain occurs.
> Seems like you are fishing for something, but you will not get
> it from me.

The problem seems to be that the definition of TOA is
not standardized. Literally, TOA can be any angle but
has a special meaning when quoting EZNEC. Neither my
antenna books nor "The IEEE Dictionary" define TOA.
I did a search for "take off angle" and "TOA" on my
ARRL Antenna Book CD with zero results.
--
73, Cecil, W5DXP

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

3334. Re: I didn't expect that

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 16:01:03 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42288875_2@127.0.0.1>
Source record: 81072

D/C Hoogerwaard wrote:
> I only listened e.g. yesterday a YB station was 5-8/9 on the dipole and the
> vertical was 4-6 with a lot of noise.

That matches my experience at my QTH.
--
73, Cecil, W5DXP

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
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3335. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 16:10:50 UTC
From: "mr. pl259" <259@amp.com>
Message-ID: <42288887.C2A074B3@amp.com>
Source record: 81074

Yes, they moved a lot of production to Mexico and other countries,
they are 'world wide' mfg co.

my last batch was mexico product, color of the insulator not important,
as long as you purchased it from good dealer, mouser, aes, etc...

73 rf dude

WA2SI wrote:

> Hi folks,
>
> I just bought a batch of Amphenol PL-259 83-1SPs to assemble some
> jumpers. When did Amphenol shift from 'Made In USA' to 'Assembled In
> Mexico'? The whole reason for buying Amphenol was to:
>
> A) Enjoy that Amphenol quality. (BTW, they don't even look the same.
> The dielectric has a cheap milky recycled look and the name and model
> nr. are no longer stamped into the sleeve ring.)
>
> B) Support products 'Made In USA'.
>
> Ok, this was my two minute rant. Tnx fer listening.
>
> 73 de Bert
> WA2SI
> FISTS #9384
> QRP ARCI #11782

3336. Re: Is PVC pipe UV resistant?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 16:12:44 UTC
From: "mr. pl259" <259@amp.com>
Message-ID: <422888FA.A538138E@amp.com>
Source record: 81075

Hi,
If you can use the grey pvc from electrical depts. that will last forever.

3337. Re: Is PVC pipe UV resistant?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 16:32:53 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd2h3dl.2tl0.bit-bucket@shell.config.com>
Source record: 81076

On Thu, 03 Mar 2005 22:56:11 -0600, Cecil Moore wrote:
> JimK2TL@gmail.com wrote:
>> Does anyone know if typical schedule 40 PVC pipe is UV resistant?
>
> The white stuff is not UV resistant. I've had it become
> brittle and useless in both AZ and TX.

Even more so - britllilier, uselesser, and faster - at 7,700' in Colorado!

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

3338. Re: rf channel

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 16:36:07 UTC
From: drwxr-xr-x <bit-bucket@config.com>
Message-ID: <slrnd2h3jn.2tl0.bit-bucket@shell.config.com>
Source record: 81077

On 2 Mar 2005 19:00:49 -0800, Jason wrote:
>
> I need to know more about walkie talkie and how the frequency range
> work.

Then try asking such Q's in some ng _other_ than "antenna".

3339. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 16:47:05 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <di0Wd.571108$8I.511502@pd7tw1no>
Source record: 81078
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Response is flattened through gain controlling the pre-amp from a look-up
table held in the micro's EEPROM. The alignment procedure is automated using
the HB-IP bus from the spectrum analyzer and a computer. The
computer/analyzer also looks for harmonic content and spurious emissions
during this procedure. Think it takes about ten seconds to do this.

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:luuf219fa7kg4up47ug631oc8fn6movce9@4ax.com...
> On Fri, 04 Mar 2005 01:13:39 GMT, "Thomas Magma"
> <somewhere@overtherainbow.com> wrote:
>
> >Wow this is a long thread. Don't really know where I should put my two
bits
> >in, but here it goes.
> >
> >I have designed several RF PA sections in the past. 500MHz at about 50W.
> >Pretty easy stuff if you have the right tools and know how to use them.
The
> >tools I like using for matching the power output FET is two triple stub
> >tuners. One on the input of the FET and one on the output. So it
> >goes...pre-amp (50 ohm output) -> stub tuner -> FET -> stub tuner -> 50
ohm
> >dummy pad -> spectrum analyzer. Then just tune the stubs for the
performance
> >you desire, these include: efficiency (thermal issues), harmonic content,
> >spurious emissions, load VSWR considerations, cold start, ect. Then
remove
> >the FET and look into the triple stub tuners with the network analyzer.
> >Model and duplicate the network out of discrete components that can
handle
> >the voltage/power, send the design off to the enviro test lab, and head
home
> >early for the day.
> >
> >Cheers,
> >Thomas
>
> Hi Thomas,
>
> Thanx, your two bits were worth more than the academic plug nickel.
> This is something that our original poster should hearken to as his
> needs were obviously production oriented. Bench experience will trump
> cut-and-paste theory in a heart-beat.

>
> However, triple stub is pretty aggressive. How long did it take you
> to flatten response?
>
> 73's
> Richard Clark, KB7QHC

3340. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 16:48:46 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <42289188.7FE6D8DB@deadend.com>
Source record: 81079
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Richard Clark wrote:
>
> On Fri, 04 Mar 2005 01:13:39 GMT, "Thomas Magma"
> <somewhere@overtherainbow.com> wrote:
>
> >Wow this is a long thread. Don't really know where I should put my two bits
> >in, but here it goes.
> >
> >I have designed several RF PA sections in the past. 500MHz at about 50W.
> >Pretty easy stuff if you have the right tools and know how to use them. The
> >tools I like using for matching the power output FET is two triple stub
> >tuners. One on the input of the FET and one on the output. So it
> >goes...pre-amp (50 ohm output) -> stub tuner -> FET -> stub tuner -> 50 ohm
> >dummy pad -> spectrum analyzer. Then just tune the stubs for the performance
> >you desire, these include: efficiency (thermal issues), harmonic content,
> >spurious emissions, load VSWR considerations, cold start, ect. Then remove
> >the FET and look into the triple stub tuners with the network analyzer.
> >Model and duplicate the network out of discrete components that can handle
> >the voltage/power, send the design off to the enviro test lab, and head home
> >early for the day.
> >
> >Cheers,
> >Thomas
>
> Hi Thomas,
>
> Thanx, your two bits were worth more than the academic plug nickel.
> This is something that our original poster should hearken to as his
> needs were obviously production oriented.

I doubt you understand what he wrote. I can't fathom why you would be concerned
with the OP when your own difficulties are so acute.

> Bench experience will trump
> cut-and-paste theory in a heart-beat.

How would you know?

> However, triple stub is pretty aggressive. How long did it take you
> to flatten response?

How long will it take you to figure out that he wrote not a wisp of a word on
what the "output-Z" of the amplifier is? He did write that he determines how
the amp was loaded to acheive power, something I've been saying is the prime
concern.

3341. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 17:04:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f45h21p426bhp6gnqog44i2svdenb6qlhd@4ax.com>
Source record: 81081
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Fri, 04 Mar 2005 16:47:05 GMT, "Thomas Magma"
<somewhere@overtherainbow.com> wrote:

>Response is flattened through gain controlling the pre-amp from a look-up
>table held in the micro's EEPROM. The alignment procedure is automated using
>the HB-IP bus from the spectrum analyzer and a computer. The
>computer/analyzer also looks for harmonic content and spurious emissions
>during this procedure. Think it takes about ten seconds to do this.
>

Hi Thomas,

10 seconds to adjust all 6 stubs?

73's
Richard Clark, KB7QHC

3342. Re: I didn't expect that

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 17:04:49 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d0a4fh$qp4$1@sparta.btinternet.com>
Source record: 81080

"D/C Hoogerwaard" wrote -
> made a 1/4 wave vertical (on the ground) for 40 m. (40 radials 1/4 wave)
> and made a dipole at abt 45 feet high for 40 m.
>
> I live on the countryside and my vertical is abt 15 feet from my house and
> all other sides are clear.
>
> The dipole is in 99.9 % better then the vertical in 99.9 %. A few times
the
> same. The dipole is abt 25 feet above the house and all other houses in
the
> village.
>
> I only listened e.g. yesterday a YB station was 5-8/9 on the dipole and
the
> vertical was 4-6 with a lot of noise.
>
> I am a fan for verticals but that the dipole worked so good I did not
expect
> that.
>
==========

On another band, at a different distance, in another direction, at another time of day, the vertical will be better than the dipole.

Don't throw anything away until you have listened to several hundred stations, over a period of 6 months, at random times of day, on random bands, using the same receiver, and have performed a statistical analysis.

3343. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 17:11:32 UTC
From: richardharrison@webtv.net
Message-ID: <3268-422896C4-418@storefull-3255.bay.webtv.net>
Source record: 81083

Richard Fry wrote:
"Physics is not application-selsctive."

True. The laws of physics are inviolable.

The FM amplifier does not need linearity. Amplitude distortion is irrevelant. Severe clipping to remove amplitude variations is common practice. Phase/frequency shift is the modulation of interest.

Clipping generates harmonics and FCC rules limit harmonic transmission in all services. Any manufacturer wants to require the fewest user adjustments. I`m not surprised that tuned frequency selective circuits are minimized.

I would be surprised if some final filter were not used to guarantee compliance with the rules.

Best regards, Richard Harrison, KB5WZI

3344. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 17:19:26 UTC
From: "aunwin@insightbb.com"
Message-ID: <yM0Wd.90836$tl3.29045@attbi_s02>
Source record: 81082

Exactly.
After all there is some gain at 0 degrees, very small of course,
but would anybody consider that as the TOA.?
It appears that many consider TOA of little importance, but just consider
a antenna with a single feed point such as a big yagi for 20m with say
a 60 foot boom. Even with the high gain its TOA is in the region of 13
degrees
where smaller boom antennas will be about 14 degrees.
Now say we have another antenna with a single feed that has a TOA of
10 degrees with the same gain as the big yagi !.
Which antenna will OPEN the band ? They do NOT open at the same time
even tho they have the same gain so where Reg states that no amount of
changing or shaking the antennas is going to make a scrap of difference to
the" hop" distance is patently incorrect.
As an aside losses in a signal is directly related to the number of hops
that it takes
one hop less to communicate means a louder signal.
You can design a single feed antenna with a TOA of +/- 25 percent
from the norm which makes a terrific distance to the "hop " distance,
especially
if the lower contour of the main lobe is below the competition, as the lobe
will
be noticable thinner with a low TOA. You can ,ofcourse, lower the take off
angle
by using multiple antenna feeds ie stacking but that is another matter of
discussion.
Regards
Art

"Cecil Moore" "<w5dxp@hotmail.com> wrote in message
news:42288778_2@127.0.0.1...
> aunwin@insightbb.com wrote:
>> TOA is deemed to be the angle at which maximum gain occurs.
>> Seems like you are fishing for something, but you will not get
>> it from me.
>
> The problem seems to be that the definition of TOA is
> not standardized. Literally, TOA can be any angle but
> has a special meaning when quoting EZNEC. Neither my
> antenna books nor "The IEEE Dictionary" define TOA.
> I did a search for "take off angle" and "TOA" on my
> ARRL Antenna Book CD with zero results.
> --
> 73, Cecil, W5DXP

>
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> News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+
> Newsgroups
> ----= East and West-Coast Server Farms - Total Privacy via Encryption
> =----

3345. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 17:39:04 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <Y21Wd.572129$6l.434229@pd7tw2no>
Source record: 81084
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

No the triple stub tuners are only for development. Production boards have discrete components to form the match network. Power levelling or "flattening the response" is computer adjusting the output power to compensate for the reactive components to ensure a constant output power over the entire band of the radio. We also put in a small temperature compensation coefficient into the EEPROM because the PA tends to put out more power when it is cold.

"Richard Clark" <kb7qhc@comcast.net> wrote in message news:f45h21p426bhp6gnqog44i2svdenb6qlhd@4ax.com...
> On Fri, 04 Mar 2005 16:47:05 GMT, "Thomas Magma"
> <somewhere@overtherainbow.com> wrote:
>
> >Response is flattened through gain controlling the pre-amp from a look-up
> >table held in the micro's EEPROM. The alignment procedure is automated using
> >the HB-IP bus from the spectrum analyzer and a computer. The
> >computer/analyzer also looks for harmonic content and spurious emissions
> >during this procedure. Think it takes about ten seconds to do this.
> >
>
> Hi Thomas,
>
> 10 seconds to adjust all 6 stubs?
>
> 73's
> Richard Clark, KB7QHC

3346. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 17:43:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <e27h21prenfrapksr4fpr3qaqe8vm4scud@4ax.com>
Source record: 81085

On Fri, 04 Mar 2005 17:19:26 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:
> Now say we have another antenna with a single feed that has a TOA of
>10 degrees with the same gain as the big yagi !.

Hi Art,

Simply using EZNEC's freely available yagi design, I can come up with
a 11.4 dBi figure at 10 degrees. Can you say we have another antenna
with a single feed that has a TOA of 10 degrees with more gain that
this?

73's
Richard Clark, KB7QHC

3347. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 18:07:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <a48h2159j2vg499cmpucn35i88o34df985@4ax.com>
Source record: 81086

On Fri, 4 Mar 2005 11:11:32 -0600, richardharrison@webtv.net (Richard
Harrison) wrote:
>"Physics is not application-selsctive."
>True. The laws of physics are inviolable.
...
>I would be surprised if some final filter were not used to guarantee
>compliance with the rules.

Hi Richard,

Yes, that would be the technical marvel of the ages, but just like our
rigs, even the biggest FM transmitters bend to the necessity for
output filtering:
http://www.broadcast.harris.com/product_portfolio/prod_media/Z%2DCD%20Bro%2DB.pdf

There is an amusing claim, however, for their power module(s)
"Each module is conservatively rated to produce
850W of power into a system VSWR of 1.5:11."

Not a very good copy editing job is my guess.

Looking at the "efficiency" side of the equation is simple here too:
>Power Consumption (nominal)
>ï¿½ Z2CD: 4.0kW at 2.2kW output power
55%
>ï¿½ Z3.5CD: 6.1kW at 3.75kW output power
61%
>ï¿½ Z5CD: 7.9kW at 5kW output power
63%
>ï¿½ Z7.5CD:11.7kW at 7.5kW output power
64%
>ï¿½ Z10CD: 15.3kW at 10kW output power
65%
>ï¿½ ZD20CD:31kW at 20kW output power
65%

73's
Richard Clark, KB7QHC

3348. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 18:09:08 UTC
From: Jim Kelley <jwkelley@nospam.edu>
Message-ID: <d0a8topok1@news.service.uci.edu>
Source record: 81090
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Thomas Magma wrote:
> No the triple stub tuners are only for development. Production boards have
> discrete components to form the match network. Power levelling or
> "flattening the response" is computer adjusting the output power to
> compensate for the reactive components to ensure a constant output power
> over the entire band of the radio. We also put in a small temperature
> compensation coefficient into the EEPROM because the PA tends to put out
> more power when it is cold.

Richard was asking how long it took you to tune the triple stub filters
during devolpment.

I am curious about the exact nature of the impedance transmformation
these devices provided.

jk

> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:f45h21p426bhp6gnqog44i2svdenb6qlhd@4ax.com...
>
>>On Fri, 04 Mar 2005 16:47:05 GMT, "Thomas Magma"
>><somewhere@overtherainbow.com> wrote:
>>
>>
>>>Response is flattened through gain controlling the pre-amp from a look-up
>>>table held in the micro's EEPROM. The alignment procedure is automated
>
> using
>
>>>the HB-IP bus from the spectrum analyzer and a computer. The
>>>computer/analyzer also looks for harmonic content and spurious emissions
>>>during this procedure. Think it takes about ten seconds to do this.
>>>
>>
>>Hi Thomas,
>>
>>10 seconds to adjust all 6 stubs?
>>
>>73's
>>Richard Clark, KB7QHC
>
>
>

3349. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 18:12:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <a39h215boqo45mq8k7pvbas78nhd1eiv28@4ax.com>
Source record: 81087
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Fri, 04 Mar 2005 17:39:04 GMT, "Thomas Magma"
<somewhere@overtherainbow.com> wrote:

>No the triple stub tuners are only for development.

Hi Thomas,

I thought 10 seconds was awful quick. How long would it take to
flatten the response when manually adjusting the triple stub tuners?

What merit did you find with triple that could not be found with
double stub tuners?

73's
Richard Clark, KB7QHC

3350. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 18:24:31 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4228a830_1@newsfeed.slurp.net>
Source record: 81088

"Richard Harrison" wrote
> The FM amplifier does not need linearity. Amplitude distortion is
> irrevelant. Severe clipping to remove amplitude variations
> is common practice.

Not so. You confuse receivers with transmitters. Limiting is supplied by the IF strips of FM receivers to reduce/remove AM components on the incoming wave, but FM broadcast transmitters are operated well below any limiting/clipping level, and that is probably true of ham FM txs also.

Synchronous and asynchcronous AM are low in broadcast FM tx RF stages (the FCC spec is -50dBc), but not because the FM amplifiers are "clipping." Broadcast FM txs easily can be adjusted over an output power range of ~25% to 105% or more simply by adjusting drive to the PA (keeping constant PA volts). This technique often is used for output power control/VSWR foldback, actually.

> Clipping generates harmonics and FCC rules limit harmonic
> transmission in all services. .. I would be surprised if some
> final filter were not used to guarantee compliance with the rules.

You are confused again. I wrote that no "tank circuit or in-band filter(s)" were necessary to achieve the high efficiency I described. Your post I was responding to states that a "tank circuit and other filters" are necessary for high efficiency -- that is not true.

Harmonics are present at the PA output of an FM transmitter, but "clipping" is not the process whereby they are generated, as I state above. They are reduced to legal values using a lowpass/harmonic filter. The FCC attenuation spec for harmonics and spurs more than 600kHz from Fc is 80dB below the unmodulated carrier.

The lowpass/harmonic filter does not improve efficiency--it has a small amount of insertion loss in the FM band.

RF

3351. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 18:25:54 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <SK1Wd.570713$Xk.418974@pd7tw3no>
Source record: 81089
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Hi gwhite,

I would have to agree with you on most everything you have said through this thread. I once saw my boss (with his "PHD") try to model and match a power amp based on the small signal parameters off the datasheet. He insisted that the stated input and output impedances were characteristic parasitics of that amp and wouldn't change between a small or large signal. It was kind of pathetic to watch him struggle for over a month on the matching network, and I think he had resorted to guessing in the end.

I've often questioned why manufactures put small signal parameters on their datasheets? Makes no sense to me. Even if they do publish some large signal parameters it is unlikely to be the exact same mode of operation that you need for your project.

Playing with triple stub tuners on PA's has shown me that there are many combinations of input and output impedances that appear to give similar results at any one frequency, but give different results at others frequencies. So it's a matter of finding the input and output impedance that give you adequate performance over the entire scope of your project.

Thomas

"gwhite" <gwhite@deadend.com> wrote in message
news:42289188.7FE6D8DB@deadend.com...
> Richard Clark wrote:
> >
> > On Fri, 04 Mar 2005 01:13:39 GMT, "Thomas Magma"
> > <somewhere@overtherainbow.com> wrote:
> >
> > >Wow this is a long thread. Don't really know where I should put my two
bits
> > >in, but here it goes.
> > >
> > >I have designed several RF PA sections in the past. 500MHz at about
50W.
> > >Pretty easy stuff if you have the right tools and know how to use them.
The
> > >tools I like using for matching the power output FET is two triple stub
> > >tuners. One on the input of the FET and one on the output. So it
> > >goes...pre-amp (50 ohm output) -> stub tuner -> FET -> stub tuner -> 50
ohm
> > >dummy pad -> spectrum analyzer. Then just tune the stubs for the
performance
> > >you desire, these include: efficiency (thermal issues), harmonic

content,
> > >spurious emissions, load VSWR considerations, cold start, ect. Then
remove
> > >the FET and look into the triple stub tuners with the network analyzer.
> > >Model and duplicate the network out of discrete components that can
handle
> > >the voltage/power, send the design off to the enviro test lab, and head
home
> > >early for the day.
> > >
> > >Cheers,
> > >Thomas
> >
> > Hi Thomas,
> >
> > Thanx, your two bits were worth more than the academic plug nickel.
> > This is something that our original poster should hearken to as his
> > needs were obviously production oriented.
>
> I doubt you understand what he wrote. I can't fathom why you would be
concerned
> with the OP when your own difficulties are so acute.
>
> > Bench experience will trump
> > cut-and-paste theory in a heart-beat.
>
> How would you know?
>
> > However, triple stub is pretty aggressive. How long did it take you
> > to flatten response?
>
> How long will it take you to figure out that he wrote not a wisp of a word
on
> what the "output-Z" of the amplifier is? He did write that he determines
how
> the amp was loaded to acheive power, something I've been saying is the
prime
> concern.

3352. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 18:33:41 UTC
From: "aunwin@insightbb.com"
Message-ID: <9S1Wd.32467$r55.19640@attbi_s52>
Source record: 81091

I don't think there would be a problem in beating that!
I would expect many could come up with one better than that at a feed
point height
of 1 wave length. Isn't the max gain theoretical obtainable just short of
16dbi ?
Allow for 0.5 db max losses seems like > 15.5 dbi is obtainable.
(using perfect flat terrain ofcourse with a 60 foot boom 'big' yagi)
With all the experts that reside on this group plus a zillion of antenna
reference books
I expect many to come up with antennas better than that.
Isn';t all now known about antennas and placed in print? (Grin)
It just needs is a bit of research or an expert to share his knowledge
with civility.
Art

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:e27h21prenfrapksr4fpr3qaqe8vm4scud@4ax.com...
> On Fri, 04 Mar 2005 17:19:26 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>> Now say we have another antenna with a single feed that has a TOA of
>>10 degrees with the same gain as the big yagi !.
>
> Hi Art,
>
> Simply using EZNEC's freely available yagi design, I can come up with
> a 11.4 dBi figure at 10 degrees. Can you say we have another antenna
> with a single feed that has a TOA of 10 degrees with more gain that
> this?
>
> 73's
> Richard Clark, KB7QHC

3353. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 18:41:25 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4228ae0b_1@127.0.0.1>
Source record: 81094

aunwin@insightbb.com wrote:
> You can ,ofcourse, lower the take off angle
> by using multiple antenna feeds ie stacking
> but that is another matter of discussion.

Art, if you really want perfect control of your
TOA, get a satellite tracking system. :-)
--
73, Cecil, W5DXP

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3354. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 18:42:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <kuah21hdh6om4phc0tnh9u1f9m1ljqj3cm@4ax.com>
Source record: 81092

On Fri, 04 Mar 2005 18:33:41 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:
>I expect many to come up with antennas better than that.

Hi Art,

Thanx, I just needed you to confirm that you, in fact, did not have
such a design.

73's
Richard Clark, KB7QHC

3355. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 18:42:47 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4228ac78$1_4@newsfeed.slurp.net>
Source record: 81093

"Richard Clark" wrote:
> Looking at the "efficiency" side of the equation is simple here too:
>>Power Consumption (nominal)
(clip)

Another case of writing without knowing, I see.

The power consumptions you cite are the TOTAL values for those transmitters, not of the RF power amplifiers alone. The total value includes the exciter, driver(s), power supply losses, control circuits, and RF combining losses, as well as power for the internal cooling fans. The PA modules have 80% or better efficiency, by themselves.

The reason I know is that I was the author of those specs.

RF

3356. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 19:09:20 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <An2Wd.572498$6l.35459@pd7tw2no>
Source record: 81095
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

If your amp has to operate over a wide frequency range it is not likely that you can flatten the response just with stubs. Stubs should be looked at as more single frequency devices than broadband networks. But you can use the stubs to plot out the appropriate impedance curve on the Smith Chart to ensure a flat response when you model in the discretes.

I usually just try to get the flatness of the response as close as possible and rely on a software calibration routine to flatten it off. Saves a lot of time.

It's my understanding that a triple stub tuner of the right length can reach anywhere on the Smith Chart where as a double stub can not.

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:a39h215boqo45mq8k7pvbas78nhd1eiv28@4ax.com...
> On Fri, 04 Mar 2005 17:39:04 GMT, "Thomas Magma"
> <somewhere@overtherainbow.com> wrote:
>
> >No the triple stub tuners are only for development.
>
> Hi Thomas,
>
> I thought 10 seconds was awful quick. How long would it take to
> flatten the response when manually adjusting the triple stub tuners?
>
> What merit did you find with triple that could not be found with
> double stub tuners?
>
> 73's
> Richard Clark, KB7QHC

3357. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 19:11:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <t5ch21196adk26bq0vlbucv7dfo4541u1f@4ax.com>
Source record: 81096

On Fri, 4 Mar 2005 12:42:47 -0600, "Richard Fry" <rfry@adams.net>
wrote:

>"Richard Clark" wrote:
>> Looking at the "efficiency" side of the equation is simple here too:
>>>Power Consumption (nominal)
>(clip)
>_________________
>
>Another case of writing without knowing, I see.

Hi OM,

Yes, I do recall your claims that contradicted Mendenhall's explicit
efficiency computations. So I see no need to pursue undocumented
claims you offer. Unless you can supply specific references from
Harris about this 80% efficiency, then such comments remain as suspect
as before.

>The reason I know is that I was the author of those specs.

I am still wondering about the odd entry of:
"Each module is conservatively rated to produce
850W of power into a system VSWR of 1.5:11."

I notice you passed on discussion to this particular point of
accuracy. 11s can be explained by hitting 1 too many times, or 80 by
hitting an errant 0 too many. One of those things that escape the
notice of a spell-checker.

73's
Richard Clark, KB7QHC

3358. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 19:20:51 UTC
From: richardharrison@webtv.net
Message-ID: <3270-4228B513-44@storefull-3255.bay.webtv.net>
Source record: 81099

Richard Clark wrote:
"There is an amusing claim, however, for their power module(s) "Each module is conservatively rated to produce 850W of power into a system VSWR of 1,5:11."
Not a very good copy editing job is my guess."

Richard must be right. I guess a finger was left too long on the no.1 key and nobody caught it in time.

I admire Gates` scheme of paralleling many relatively low powered amplifiers. If one fails, you can continue almost as if nothing happened. Very nice.

Best regards, Richard Harrison, KB5WZI

3359. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 19:34:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jtdh219fd51a8qfa85ucq4feho1amblv5m@4ax.com>
Source record: 81097
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Fri, 04 Mar 2005 19:09:20 GMT, "Thomas Magma"
<somewhere@overtherainbow.com> wrote:
>If your amp has to operate over a wide frequency range it is not likely that
>you can flatten the response just with stubs.

Hi Thomas,

Certainly not as conventional Triple Stubs. However, care to provide
some of the cogent details of that particular project? Any
interesting insights?

73's
Richard Clark, KB7QHC

3360. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 19:39:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <112hec9i750f44f@corp.supernews.com>
Source record: 81098

Judging by newsgroup postings, I'd say the most common meaning of "takeoff angle" is "that elevation angle at which an antenna radiates". For this to have any meaning, it's necessary to assume that the antenna radiates at only one angle and no others. Since this is a false assumption, the term "takeoff angle" as used by most amateurs is meaningless. I've never seen the term in any non-amateur publication -- it seems to be in the same category as "capture area" and "S unit", creations which only amateurs seem to have a need for.

As you say, it has a precise definition as used in EZNEC. The first versions of ELNEC, incidentally, didn't report "takeoff angle" because I thought it to be unnecessary to point out what anyone can see from a glance at the pattern, and felt that the term would be misunderstood and misused. Turns out I was right -- it's misunderstood and misused, despite my best effort at explicitly defining it. But you've gotta give the customer what he wants, not what he needs.

Roy Lewallen, W7EL

Cecil Moore wrote:
> aunwin@insightbb.com wrote:
>
>> TOA is deemed to be the angle at which maximum gain occurs.
>> Seems like you are fishing for something, but you will not get
>> it from me.
>
>
> The problem seems to be that the definition of TOA is
> not standardized. Literally, TOA can be any angle but
> has a special meaning when quoting EZNEC. Neither my
> antenna books nor "The IEEE Dictionary" define TOA.
> I did a search for "take off angle" and "TOA" on my
> ARRL Antenna Book CD with zero results.
> --
> 73, Cecil, W5DXP

3361. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 19:41:50 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4228ba4f_5@newsfeed.slurp.net>
Source record: 81100

"Richard Clark" wrote:
> Unless you can supply specific references from Harris
> about this 80% efficiency, then such comments remain
> as suspect as before.

You may take what I wrote as being "from Harris," because I was part of Harris FM Product Management for those transmitters before my retirement in 1999 (after 19 years there). I was responsible for documenting all performance features and parameters published for the product line, using numbers generated and approved by Engineering.

If the PAs alone were as (in)efficient as you imply with your calculations, power consumption for the entire transmitter would be considerably higher. Common sense should tell you that PA module efficiency would have to be much higher than the efficiency calculations you posted in order for total power consumption to be as stated on the Harris spec sheets.

> I am still wondering about the odd entry of:
> "Each module is conservatively rated to produce
> 850W of power into a system VSWR of 1.5:11."

Yes, that is a "typo," as you noted. Very good. It should read "...VSWR of 1.5:1."

RF

3362. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 19:44:13 UTC
From: richardharrison@webtv.net
Message-ID: <3268-4228BA8D-442@storefull-3255.bay.webtv.net>
Source record: 81103

Richard Fry wrote:
"Not so. You confuse receivers and transmitters."

FM transmitters often use Class C amplifiers and frequency multipliers on the modulated signal. An AM signal can not be amplified by a Class C amplifier because of severe distortion of the modulated signal. In FM, amplitude distortion is irrelevant no matter where it occurs, receiver or transmitter. The recovered audio will sound just fine. It`s one of the many advantages of FM.

Best regards, Richard Harrison, KB5WZI

3363. Re: Why a Short Lightning Ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 19:47:33 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4228bc34$1_2@127.0.0.1>
Source record: 81101

Justï¿½n Kï¿½se wrote:
> You reinforce the crux of my comment that there were NO mountains
> between the charged clouds and the ultimate strike point.

From Webster's: "mountain - (1b) an elongated ridge."
Perhaps you need to adjust your definition of "mountain".
--
73, Cecil http://www.qsl.net/w5dxp

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3364. MATCHING A VERTICLE?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 19:53:18 UTC
From: bob <drbob92031@aol.com>
Message-ID: <1109965998.090925.74510@l41g2000cwc.googlegroups.com>
Source record: 81102

Has any one any knowledge about using "T" or Gamma matches to a vert?
For impedance matching;Hair pin matches etc. because,next question;
Has any one any knowledge of using a director or reflector with a 20 M
monoband (hb) vert? Any help appreciated.
tnx es 73's Bob wa2eaw/4

3365. Re: MATCHING A VERTICLE?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 20:04:10 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4228c04c_2@127.0.0.1>
Source record: 81104

bob wrote:
> Has any one any knowledge of using a director or reflector with a 20 M
> monoband (hb) vert? Any help appreciated.

Look in the ARRL Antenna Book under phased vertical arrays.
--
73, Cecil http://www.qsl.net/w5dxp

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3366. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 20:10:43 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4228c1c8_1@127.0.0.1>
Source record: 81106

Richard Harrison wrote:

> Richard Fry wrote:
> "Not so. You confuse receivers and transmitters."
>
> FM transmitters often use Class C amplifiers and frequency multipliers
> on the modulated signal. An AM signal can not be amplified by a Class C
> amplifier because of severe distortion of the modulated signal. In FM,
> amplitude distortion is irrelevant no matter where it occurs, receiver
> or transmitter. The recovered audio will sound just fine. It`s one of
> the many advantages of FM.

The question seems to be: If an FM transmitter's output signal
is not a reasonably pure sine wave, is a low-pass filter used
between the transmitter and antenna to reduce the harmonics?
--
73, Cecil http://www.qsl.net/w5dxp

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3367. Antenna Encased in PVC

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 20:11:07 UTC
From: JE <Zeke@legs.com>
Message-ID: <vh3Wd.5900$DW.3875@newssvr17.news.prodigy.com>
Source record: 81105

I built a "J" pole out of 300 ohm inlead wire and have it trimmed where at 147.210 I have a SWR of 1.6 and on the low end at around 145.390 I have 1.2.

To protect it, I put in a 1" PVC pipe and now the SWR is way off the scale. Is it a bad idea to encase it in PVC or can I trim it down to get a better reading?

Thanks

--
Email no good, reply to group

3368. Re: Antenna Encased in PVC

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 20:15:29 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4228c352_2@127.0.0.1>
Source record: 81107

JE wrote:

> I built a "J" pole out of 300 ohm inlead wire and have it trimmed where at
> 147.210 I have a SWR of 1.6 and on the low end at around 145.390 I have 1.2.
>
> To protect it, I put in a 1" PVC pipe and now the SWR is way off the scale.
> Is it a bad idea to encase it in PVC or can I trim it down to get a better
> reading?

Assuming your PVC is non-conducting, it may be changing the
velocity factor. Trimming would be the way to go.
--
73, Cecil http://www.qsl.net/w5dxp

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3369. Re: Why a Short Lightning Ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 20:24:56 UTC
From: Dave <noone@nowhere.com>
Message-ID: <g7qdnchRqd-9WbXfRVn-hw@crocker.com>
Source record: 81108

"Just�n K�se" <chupacabra@operamail.com> wrote in message
news:4228ae2a.1811863@chupacabra...
> In Message-ID:<3272-42288420-17@storefull-3255.bay.webtv.net> posted on
> Fri, 4 Mar 2005 09:52:00 -0600, Richard Harrison wrote:
>

```
<Fatal misconception>
>but never has a strike totally "ignored" a tree or tower and directly hit
something at its base.
</Fatal misconception>
```

3370. Re: Antenna Encased in PVC

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 20:26:38 UTC
From: JE <Zeke@legs.com>
Message-ID: <2w3Wd.5912$DW.1629@newssvr17.news.prodigy.com>
Source record: 81109

Thanks Cecil. Any other kind of material I could use that might be better?

Thanks,
Jack

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:4228c352_2@127.0.0.1...
> JE wrote:
>
>> I built a "J" pole out of 300 ohm inlead wire and have it trimmed where
>> at 147.210 I have a SWR of 1.6 and on the low end at around 145.390 I
>> have 1.2.
>>
>> To protect it, I put in a 1" PVC pipe and now the SWR is way off the
>> scale. Is it a bad idea to encase it in PVC or can I trim it down to get
>> a better reading?
>
> Assuming your PVC is non-conducting, it may be changing the
> velocity factor. Trimming would be the way to go.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
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3371. Re: Antenna Encased in PVC

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 20:35:03 UTC
From: "aunwin@insightbb.com"
Message-ID: <XD3Wd.91056$tl3.55858@attbi_s02>
Source record: 81110

If you place it into a plastic pipe the resonant length will be shorter
Art
"JE" <Zeke@legs.com> wrote in message
news:2w3Wd.5912$DW.1629@newssvr17.news.prodigy.com...
> Thanks Cecil. Any other kind of material I could use that might be
> better?
>
> Thanks,
> Jack
>
>
> "Cecil Moore" <w5dxp@hotmail.com> wrote in message
> news:4228c352_2@127.0.0.1...
>> JE wrote:
>>
>>> I built a "J" pole out of 300 ohm inlead wire and have it trimmed where
>>> at 147.210 I have a SWR of 1.6 and on the low end at around 145.390 I
>>> have 1.2.
>>>
>>> To protect it, I put in a 1" PVC pipe and now the SWR is way off the
>>> scale. Is it a bad idea to encase it in PVC or can I trim it down to get
>>> a better reading?
>>
>> Assuming your PVC is non-conducting, it may be changing the
>> velocity factor. Trimming would be the way to go.
>> --
>> 73, Cecil http://www.qsl.net/w5dxp
>>
>>
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>

3372. Re: Antenna Encased in PVC

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 20:38:16 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4228c833_2@127.0.0.1>
Source record: 81111

JE wrote:
> Thanks Cecil. Any other kind of material I could use that might be better?

I believe that many commercial antennas are enclosed in
PVC. Assuming your PVC is non-conductive, it is simply
lowering the velocity factor of your antenna (assuming
you haven't turned it into a fractal by stuffing from
one end :-). Try trimming it. If you ruin it, build
another. Or just build yourself a J-Pole from copper
tubing.
--
73, Cecil http://www.qsl.net/w5dxp

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3373. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 20:42:10 UTC
From: "aunwin@insightbb.com"
Message-ID: <CK3Wd.91062$tl3.65646@attbi_s02>
Source record: 81112

Do you really think that I wasn't wise to the games you play ?
You was gearing up for an augument so I gave you nothing you
could argue about. Check mate !

Art

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:kuah21hdh6om4phc0tnh9u1f9m1ljqj3cm@4ax.com...
> On Fri, 04 Mar 2005 18:33:41 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>>I expect many to come up with antennas better than that.
>
> Hi Art,
>
> Thanx, I just needed you to confirm that you, in fact, did not have
> such a design.
>
> 73's
> Richard Clark, KB7QHC

3374. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 20:53:53 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <BV3Wd.11443$Pz7.6382@newssvr13.news.prodigy.com>
Source record: 81113

Cecil Moore wrote:
> Richard Harrison wrote:
>
>> Richard Fry wrote:
>> "Not so. You confuse receivers and transmitters."
>>
>> FM transmitters often use Class C amplifiers and frequency multipliers
>> on the modulated signal. An AM signal can not be amplified by a Class C
>> amplifier because of severe distortion of the modulated signal. In FM,
>> amplitude distortion is irrelevant no matter where it occurs, receiver
>> or transmitter. The recovered audio will sound just fine. It`s one of
>> the many advantages of FM.
>
>
> The question seems to be: If an FM transmitter's output signal
> is not a reasonably pure sine wave, is a low-pass filter used
> between the transmitter and antenna to reduce the harmonics?

How can a filter filter correctly when its input is terminated in
an indeterminate impedance?
73,
Tom Donaly, KA6RUH

3375. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 20:56:52 UTC
From: "aunwin@insightbb.com"
Message-ID: <oY3Wd.91083$tl3.85655@attbi_s02>
Source record: 81114

Don't professionals use the term? Seems like it shows up in pro computor
programs.
Doesn't the Antenna handbook refer to TOA ? I do know they made a graph of
incoming
RF ray angles which amounts to the same thing. What is wrong with the common
perception
that it is the angle of maximum gain?
If you were designing a 'point to point' antenna would you not look for the
angle of maximum gain?
If so what would you call that angle ? If you are refering to an antenna
lobe pattern could you not invoke
the +/- 3 db points as used in many other places in antenna work?
Methinks that people are looking for problems to argue about
Art

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:112hec9i750f44f@corp.supernews.com...
> Judging by newsgroup postings, I'd say the most common meaning of "takeoff
> angle" is "that elevation angle at which an antenna radiates". For this to
> have any meaning, it's necessary to assume that the antenna radiates at
> only one angle and no others. Since this is a false assumption, the term
> "takeoff angle" as used by most amateurs is meaningless. I've never seen
> the term in any non-amateur publication --
> it seems to be in the same category as "capture area" and "S unit",
> creations which only amateurs seem to have a need for.
>
> As you say, it has a precise definition as used in EZNEC. The first
> versions of ELNEC, incidentally, didn't report "takeoff angle" because I
> thought it to be unnecessary to point out what anyone can see from a
> glance at the pattern, and felt that the term would be misunderstood and
> misused. Turns out I was right -- it's misunderstood and misused, despite
> my best effort at explicitly defining it. But you've gotta give the
> customer what he wants, not what he needs.
>
> Roy Lewallen, W7EL
>
> Cecil Moore wrote:
>> aunwin@insightbb.com wrote:
>>
>>> TOA is deemed to be the angle at which maximum gain occurs.
>>> Seems like you are fishing for something, but you will not get
>>> it from me.
>>
>>

>> The problem seems to be that the definition of TOA is
>> not standardized. Literally, TOA can be any angle but
>> has a special meaning when quoting EZNEC. Neither my
>> antenna books nor "The IEEE Dictionary" define TOA.
>> I did a search for "take off angle" and "TOA" on my
>> ARRL Antenna Book CD with zero results.
>> --
>> 73, Cecil, W5DXP

3376. Re: Antenna Encased in PVC

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 20:57:36 UTC
From: JE <Zeke@legs.com>
Message-ID: <4Z3Wd.5928$DW.4847@newssvr17.news.prodigy.com>
Source record: 81115

Thanks for all the help, both of you guys!!

I trimmed little "smidges" several times and I'm back in the ballpark with
the SWR!!

Appreciate all of you help. This is my first time at tackleing something
like this.

Thanks again,
Jack

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:4228c833_2@127.0.0.1...
> JE wrote:
>> Thanks Cecil. Any other kind of material I could use that might be
>> better?
>
> I believe that many commercial antennas are enclosed in
> PVC. Assuming your PVC is non-conductive, it is simply
> lowering the velocity factor of your antenna (assuming
> you haven't turned it into a fractal by stuffing from
> one end :-). Try trimming it. If you ruin it, build
> another. Or just build yourself a J-Pole from copper
> tubing.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> -----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
> News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000
> Newsgroups
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3377. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 21:03:45 UTC
From: richardharrison@webtv.net
Message-ID: <29601-4228CD31-153@storefull-3256.bay.webtv.net>
Source record: 81118

Richard Fry wrote:
"Note that without adjustment, modern solid-state FM broadcast transmitters can (and do) provide 80% or better PA efficiency into a 50 ohm load across 20% bandwidth, with no tank circuit or other in-band filter(s)."

Well, Richard Fry didn`t say there were no out-of-band filters or traps.

One could have a low-pass filter that cut-off above 108 MHz, but below 176 MHz, and no harmonic would get through the filter.

80% or better efficiency isn`t coming from a Class A amplifier, so maybe it comes from a Class B amplifier.

One fly in the ointment is found on page 354 of Terman`s 1955 edition:
"The theoretical maximum possible plate efficiency that can be realized in a Class B amplifier is pi/4 or 78.5 per cent;---."

Best regards, Richard Harrison, KB5WZI

3378. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 21:13:51 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4228cfe0_3@newsfeed.slurp.net>
Source record: 81116

"Richard Harrison" wrote
>
> In FM, amplitude distortion is irrelevant no matter where
> it occurs, receiver or transmitter. The recovered audio
> will sound just fine. It`s one of the many advantages of FM.

It may sound just fine to you, but carefully made performance measurements of a received FM signal having high AM show otherwise. AM on FM is far from irrelevant.

RF

3379. Re: MATCHING A VERTICLE?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 21:14:11 UTC
From: Se&#65533;or Sombra <Shadow@escondido.com>
Message-ID: <Cc4Wd.44012$xt.35133@fed1read07>
Source record: 81117

See Antenna books for matching and phased verticals (not verticle -- hi hi)
ARRL pubs has several.
http://www.arrl.org/catalog/

--
Lamont Cranston

"bob" <drbob92031@aol.com> wrote in message
news:1109965998.090925.74510@l41g2000cwc.googlegroups.com...
> Has any one any knowledge about using "T" or Gamma matches to a vert?
> For impedance matching;Hair pin matches etc. because,next question;
> Has any one any knowledge of using a director or reflector with a 20 M
> monoband (hb) vert? Any help appreciated.
> tnx es 73's Bob wa2eaw/4
>

3380. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 21:19:56 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4228d14d_5@newsfeed.slurp.net>
Source record: 81119

"Cecil Moore" wrote:
> The question seems to be: If an FM transmitter's output signal
> is not a reasonably pure sine wave, is a low-pass filter used
> between the transmitter and antenna to reduce the harmonics?

Yes. This question was answered in my post in this thread of 00:24UTC today, which I will paste below:

"Harmonics are present at the PA output of an FM transmitter, but "clipping" is not the process whereby they are generated, as I state above. They are reduced to legal values using a lowpass/harmonic filter. The FCC attenuation spec for harmonics and spurs more than 600kHz from Fc is 80dB below the unmodulated carrier.

The lowpass/harmonic filter does not improve efficiency--it has a small amount of insertion loss in the FM band."

RF

3381. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 21:24:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <togh21dngbhljbtp7vsntu1hd3ltcis5t1@4ax.com>
Source record: 81120

On Fri, 4 Mar 2005 13:41:50 -0600, "Richard Fry" <rfry@adams.net>
wrote:

>If the PAs alone were as (in)efficient as you imply with your calculations,
>power consumption for the entire transmitter would be considerably higher.

The implication is drawn by and from your inertia.

>Common sense should tell you that PA module efficiency would have to be much
>higher than the efficiency calculations you posted in order for total power
>consumption to be as stated on the Harris spec sheets.

Hi OM,

It is tedious to have to carry your water for you. I had to chase
down your Mendenhall references, this seems to be a consistent trait.
Claims are generous in this group and heavily discounted due to the
paucity of facts. Such facts as may be drawn out, but could have had
been as easily offered by you:

"For even greater reliability, any
PA module can be used as an IPA module,
with absolutely no modification."

It is quite obvious that as an IPA, that in the lower wattage systems
it represents overkill at 845W to generate drive to final PAs to 2.2
KW output. Hence the lower total efficiency.

On the other hand, an IPA driving 845W to generate 22KW obviously
makes better efficiency sense and is found in the overall 64.5%
figure.

NOW, if the PA finals, accounting for 22KW are 80% efficient, that
must mean that they only consume 27.5KW of power to do so, and that
with a power input rating of 31KW then leaves the IPA (an identical
80% efficiency module) and control circuitry to absorb 3.5KW to
deliver the drive of .845KW.

It follows that for an 80% efficient IPA, it accounts for 1KW power
consumption. This remainder is easily attributable to power supply
losses (if we simply assign an industrial average efficiency of 95%
for power conversion) otherwise the system TTL circuits and LCD meters
suck down 2.5KW on their own.

This, as you put it (but fail to evidence), would quickly subdue
suspicion. And an equal treatment to more conventional, retail
Amateur Radio Transmitters also reveals efficiencies through the same
exercise. It is quite evident that such transmitters are no where

near these vaunted examples - but few dare venture into these dissections.

73's
Richard Clark, KB7QHC

3382. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 21:32:02 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4228d423_1@newsfeed.slurp.net>
Source record: 81121

"Richard Harrison"
> 80% or better efficiency isn`t coming from a Class A amplifier, so maybe
> it comes from a Class B amplifier.
>
> One fly in the ointment is found on page 354 of Terman`s 1955 edition:
> "The theoretical maximum possible plate efficiency that can be realized
> in a Class B amplifier is pi/4 or 78.5 per cent;---."

No fly to those who really know this subject. They are neither Class A or B.

Those wanting to comment on modern solid-state VHF amplifier designs and performance parameters really should research them before doing so.

We are 60 years beyond the date of this citation from Terman.

RF

3383. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 21:36:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <enkh21pmk38ri72b567j4pldg4nkrjmplg@4ax.com>
Source record: 81022

On Fri, 04 Mar 2005 20:42:10 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>Do you really think that I wasn't wise to the games you play ?
>You was gearing up for an augument so I gave you nothing you
> could argue about.

Now THAT sounds like playing games, when I ask for a technical
specification in a technical newsgroup.

>Check mate !

as does that.

Hi Art,

It remains extremely difficult to separate these obscure postings
which defy distinction between your work and your fantasies, Art.
This recent introduction of TOA appears to have been fantasy.

73's
Richard Clark, KB7QHC

3384. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 22:03:33 UTC
From: gwhite <gwhite@deadend.com>
Message-ID: <4228DB4C.BE525C4F@deadend.com>
Source record: 81023
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Thomas Magma wrote:

> I've often questioned why manufactures put small signal parameters on their
> datasheets? Makes no sense to me.

They might be of some use for specific cases. For example, if the PA is class A, is used well backed off because of high PEP-to-avg ratios of the signal, and you've managed to get the output load dialed in, s-params can be useful for a first cut at the amplifier *input* match. I've always still had to do some tweeking though. Also, with some work and considering the load-line match, they can give you an idea of what gain can be accomplished. This might already be in the data sheet though, as you mention.

> Even if they do publish some large signal
> parameters it is unlikely to be the exact same mode of operation that you
> need for your project.

One of the large signal parameters I like best is how much power the device can dissipate. ;-) Voltage breakdowns and Imax are nice too. ;-) ;-)

3385. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 22:11:50 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4228dd79_1@newsfeed.slurp.net>
Source record: 81024

"Richard Clark" wrote regarding Harris "Z" FM broadcast transmitters:
> "For even greater reliability, any
> PA module can be used as an IPA module,
> with absolutely no modification."
>
> It is quite obvious that as an IPA, that in the lower wattage systems
> it represents overkill at 845W to generate drive to final PAs to 2.2
> KW output. Hence the lower total efficiency. On the other hand,
> an IPA driving 845W to generate 22KW obviously makes better
> efficiency sense and is found in the overall 64.5% figure.

Yet another case where you write with guesswork, not knowing the facts.

Obviously you do not understand the architecture of this line of transmitters, even though what I am about to write is available on the Harris website. The PA and IPA modules are the same, and consist of two, independent amps--each amp capable of 425W output. Their actual output power depends on the tx they are installed in, and the power level required from it. The only thing they have in common is a heat sink. An IPA at any power level uses only one of these amps per 5kW (or less) block of PA amps. The other amp of the IPA remains unpowered and in reserve, and autoswitches on line if the active one fails.

The lower AC input to RF output efficiency of the lower powered transmitters arises from the fixed overhead in all units for losses OTHER than in the RF amplifiers, i.e., power supply losses, exciter and controller power, RF combiner and harmonic filter losses, and cooling power--the AC consumption for which in low power units is a larger proportion of the total.

> NOW, if the PA finals, accounting for 22KW are 80% efficient, that
> must mean that they only consume 27.5KW of power to do so, and that
> with a power input rating of 31KW then leaves the IPA (an identical
> 80% efficiency module) and control circuitry to absorb 3.5KW to
> deliver the drive of .845KW.
> It follows that for an 80% efficient IPA, it accounts for 1KW power
> consumption. This remainder is easily attributable to power supply
> losses (if we simply assign an industrial average efficiency of 95%
> for power conversion) otherwise the system TTL circuits and LCD meters
> suck down 2.5KW on their own.

Your analytical skills are seriously wanting. Please re-read my response above.

> It is quite evident that such transmitters are no where
> near these vaunted examples - but few dare venture into these
> dissections.

It is "evident" only to those who don't understand the subject. Others have not dared to venture into these dissections probably because THEY know better.

RF

3386. Re: MATCHING A VERTICLE?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 22:34:05 UTC
From: nm5k@wt.net
Message-ID: <1109975645.171560.111280@l41g2000cwc.googlegroups.com>
Source record: 81025

Look in the ARRL antenna handbook for "shunt feeding".
That is appx the same as a gamma match, etc.. Many
feed towers this way. IE: you drop a parallel wire down
from a certain point on the tower or mast, and usually is
combined with a capacitor. Directive elements don't
work too well with verticals. Better to feed as phased
arrays. MK

3387. Re: MATCHING A VERTICLE?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-04 22:35:16 UTC
From: nm5k@wt.net
Message-ID: <1109975716.688766.18700@g14g2000cwa.googlegroups.com>
Source record: 81026

I said directive elements don't work too well with
verticals...Maybe I should have said parasitic
elements...MK

3388. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 00:36:46 UTC
From: Tom Ring <news0001@taring.org>
Message-ID: <4228fe91$0$38731$39cecf19@news.twtelecom.net>
Source record: 81027
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

John Woodgate wrote:

> I read in sci.electronics.design that Tom Ring <news0001@taring.org>
> wrote (in <4227cdce$0$92311$39cecf19@news.twtelecom.net>) about '1/4 vs
> 1/2 wavelength antenna', on Thu, 3 Mar 2005:
>
>
>>He forgot to mention that for that output impedance to be relevant, you
>>need superconducting wire to the speakers as well as superconducting
>>voice coils.
>
>
> See the last sentence, about the effect of an **8 ohm** source impedance
> on damping.

Get a sense of humor. Or maybe more ice and mixer.

tom
K0TAR

3389. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 00:44:14 UTC
From: Tom Ring <news0001@taring.org>
Message-ID: <42290052$0$92310$39cecf19@news.twtelecom.net>
Source record: 81028
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

John Woodgate wrote:

> I read in sci.electronics.design that Tom Ring <news0001@taring.org>
> wrote (in <4227cdce$0$92311$39cecf19@news.twtelecom.net>) about '1/4 vs
> 1/2 wavelength antenna', on Thu, 3 Mar 2005:
>
>
>>He forgot to mention that for that output impedance to be relevant, you
>>need superconducting wire to the speakers as well as superconducting
>>voice coils.
>
>
> See the last sentence, about the effect of an **8 ohm** source impedance
> on damping.

Oh, and going from 8 ohms output impedance to 10e-7 (unless I
miscounted) would take the damping factor from 1 to 8e7, which is a bit
more than 2. Ignoring the speaker wires of course.

tom
K0TAR

3390. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 01:40:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ue1i211inthr9p29tgn22erhknu1kqpaq2@4ax.com>
Source record: 81029

On Fri, 4 Mar 2005 16:11:50 -0600, "Richard Fry" <rfry@adams.net>
wrote:

>"Richard Clark" wrote regarding Harris "Z" FM broadcast transmitters:
>> "For even greater reliability, any
>> PA module can be used as an IPA module,
>> with absolutely no modification."
>>
>> It is quite obvious that as an IPA, that in the lower wattage systems
>> it represents overkill at 845W to generate drive to final PAs to 2.2
>> KW output. Hence the lower total efficiency. On the other hand,
>> an IPA driving 845W to generate 22KW obviously makes better
>> efficiency sense and is found in the overall 64.5% figure.
>
>Yet another case where you write with guesswork, not knowing the facts.

Hi OM,

How amusing. :-)

>Obviously you do not understand the architecture of this line of
>transmitters, even though what I am about to write is available on the
>Harris website.

Yes it is, isn't it. What that has to do with MY intimate knowledge
of them is hardly the point when I asked YOU for details. But this
posting only gets better.

>The PA and IPA modules are the same,

As already noted in my direct quote above.

>and consist of two, independent amps--each amp capable of 425W output.

Not being particularly knowledgeable, and taking your advice about the
information's availability (seeing that I provided the link, not you):
"Each module is conservatively rated to produce
850W of power into a system VSWR of 1.5:11"

AH! there we are with that errant SWR again. I wonder how you
explained that without noting this other egregious error of 850W?
What is even more amusing is that either way (425/850) it has
absolutely no impact on the outcome. But this gets better, after the
snooze that follows:

>Their actual output
>power depends on the tx they are installed in, and the power level required
>from it. The only thing they have in common is a heat sink. An IPA at any

>power level uses only one of these amps per 5kW (or less) block of PA amps.

How boringly trivial. Does the recitation of irrelevant facts bear
on some point being drawn here?

>The other amp of the IPA remains unpowered and in reserve, and autoswitches
>on line if the active one fails.

Op. Cit.

>The lower AC input to RF output efficiency of the lower powered transmitters
>arises from the fixed overhead in all units for losses OTHER than in the RF
>amplifiers, i.e., power supply losses, exciter and controller power, RF
>combiner and harmonic filter losses, and cooling power--the AC consumption
>for which in low power units is a larger proportion of the total.

I said as much in the top section. However, if you enjoy your own
words that's fine, but it is becoming repetitive barring any obvious
point. (Both my and your entry could have as easily been left out -
did you say you were an editor?)

>> NOW, if the PA finals, accounting for 22KW are 80% efficient, that
>> must mean that they only consume 27.5KW of power to do so, and that
>> with a power input rating of 31KW then leaves the IPA (an identical
>> 80% efficiency module) and control circuitry to absorb 3.5KW to
>> deliver the drive of .845KW.
>> It follows that for an 80% efficient IPA, it accounts for 1KW power
>> consumption. This remainder is easily attributable to power supply
>> losses (if we simply assign an industrial average efficiency of 95%
>> for power conversion) otherwise the system TTL circuits and LCD meters
>> suck down 2.5KW on their own.
>
>Your analytical skills are seriously wanting. Please re-read my response
>above.

Let's see, I have offered an analysis that supports your thesis that
the efficiency of this transmitters elements are ballpark 80% and you
say I am WRONG?

What a hoot!

I can only wonder why you can't offer your own numbers to show my
error. :-)

I originally wondered why you couldn't offer your own numbers and
carry your own water. Go figure....

Like I said, this has been one wild ride.

>> It is quite evident that such transmitters are no where
>> near these vaunted examples - but few dare venture into these
>> dissections.
>
>It is "evident" only to those who don't understand the subject. Others have

>not dared to venture into these dissections probably because THEY know
>better.

I cannot say that I have enjoyed a more droll posting from your hand.

73's
Richard Clark, KB7QHC

3391. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 03:10:41 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <42292382_5@newsfeed.slurp.net>
Source record: 81030

"Richard Clark" wrote:
>>and consist of two, independent amps--each amp capable of 425W output.
> Not being particularly knowledgeable, and taking your advice about the
> information's availability (seeing that I provided the link, not you):
> "Each module is conservatively rated to produce
> 850W of power into a system VSWR of 1.5:11"

And so it is when operating as a PA output module, when both sides of the module are active. In IPA service only one side is active. The words on the website say so.

> Let's see, I have offered an analysis that supports your thesis that
> the efficiency of this transmitters elements are ballpark 80% and you
> say I am WRONG? What a hoot!

Only by an absurd conclusion that to get there "the IPA (an identical 80% efficiency module) and control circuitry to absorb 3.5KW to deliver the drive of .845KW." Note also your incorrect value for IPA output power. It is never more than 425W per 5kW (or less) block of PAs. If more PAs are used in that power level tx, another IPA and PA block are added. Of course, you would know that if you took the time to read and absorb the website data.

> I can only wonder why you can't offer your own numbers to show my
> error. :-) I originally wondered why you couldn't offer your own
> numbers and carry your own water. Go figure....

Honestly, given your penchant to ridicule and intimidate people in this newsgroup, I have little motivation to carry your water. There is much data about these txs on the Harris website, free for the reading. I am through trying to set you straight.

It is incredible how you, as someone with barely a perfunctory understanding of this transmitter system, feels qualified to argue about it here with someone who has been part of its development team. "Go figure..."

RF

3392. close antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 03:27:47 UTC
From: ml <m@di.net>
Message-ID: <m-3252F8.22274104032005@news.verizon.net>
Source record: 81031

well today i finished putting my dipole up

it's a center fed 25ft hot side 40ft approx rfgnd side.

at the base of a mast (5ft) i have a sgc237 tuner feeding 5ft of
450ladder (to the dipole)

with lmr400 (150ft run) one for hf one for 2/440 and one 8conductor
18ga control ccable for tuner

unfortunately i am about 4-5ft away from the building master
antenna--had no choice here

I did put a pro tvi filter just before the master tv ant amp by ice

Seems using about 20watt i can tx from 160-6m w/o any problem w/ 2
exceptions i noticed on a quick test

**1) i have 2 tvs a 'good' sony and a old toshiba , on 20m cheep
set will loose a little color when i tx it kinda makes bright red
for ex. into a dull red (all colors).

using a set side radio shack tv filter(back of tv) didn't help seems
to barley effect 4-11 but 2 and 13 are most effected on my cheep set

this practically had no effect on the 'good'sony

note: i have good grounds and lightning protectors inline and on my
rig, (both rig side) .. i also have a w2du balun near the sgc237 and i
also tried a drake tvi filter by my rig guess it's the 54mhz cut off
kind (didn't help)

***2 on ten meters I whipe out ch2 herring bone fuzz both sets
again filters set side didn't help

I also tried a drake hf tvi filter on my rig no effect

it's a bit strange i seem ok on 6m thought for certain i'd blow there
but we all know 10m can also cauz a bit of tvi

question:
anyone have any ideas how i might be able to reduce/elim the prob on 20
as it seems small,, and perhaps someone smarter than i might also have
a few tips for clearing up 10m

i guess having most bands but two isn't bad,

thanks all

m

3393. Re: Looking for the best 2M/440 mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 03:49:26 UTC
From: DLD <cindyd1@ptd.net>
Message-ID: <ogidnXkbv_fdsbTfUSdV9g@ptd.net>
Source record: 81032

Hi,

I have had good luck with the Larsen 2/440 with the NMO mount.

Good luck,

Doug W3IIY

C. J. Clegg wrote:
> Looking for the very best 2M/440 dual-band mobile antenna made.
> Looking primarily for the highest gain on both bands. Mounting and
> size (length) are not important, i.e. can be anything.
>
> Any suggestions?
>
> Thanks...
>

3394. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 03:59:02 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_42292f47@fidonet.org>
Source record: 81038

"Cecil Moore" bravely wrote to "All" (04 Mar 05 09:58:05)
--- on the heady topic of "Re: How can I measure or observe my hf antenna's take off angle?"

CM> From: Cecil Moore <w5dxp@hotmail.com>
CM> Xref: aeinews rec.radio.amateur.antenna:26384

CM> aunwin@insightbb.com wrote:
> TOA is deemed to be the angle at which maximum gain occurs.
> Seems like you are fishing for something, but you will not get
> it from me.

CM> The problem seems to be that the definition of TOA is
CM> not standardized. Literally, TOA can be any angle but
CM> has a special meaning when quoting EZNEC. Neither my
CM> antenna books nor "The IEEE Dictionary" define TOA.
CM> I did a search for "take off angle" and "TOA" on my
CM> ARRL Antenna Book CD with zero results.

I hope this, from an old antenna book, is relevant in finding
something called "vertical lobing".

It has:
(for a 1/2 wave vertical dipole, I gather)

N = Height in ft. x Frequency in Mc

984

where the number N is number of wavelengths. It locates the angle
above ground at which the 1st maximum lobe is transmitted.

then using this approximation gets the maximum signal at:
tan (theta) = H/D

and the zero signal:
sin (theta) = 1/2N

where H is the height above "flat" earth of the receiving antenna
and D is the path length (in the same units)

when H/D = 1/(4N) a 1st maximum lobe is attained at the receiving
antenna.

There's more for the actual height at the receiving location and other
lobes, nulls, etc...

A*s*i*m*o*v

... And some fell upon stony ground and had no THC at all.

3395. Re: Proper Phasing of two Andrew DB224 Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 04:15:43 UTC
From: CWB <cboone@nospam.earthlink.net>
Message-ID: <PnaWd.42365$Qz1.16152@fe2.texas.rr.com>
Source record: 81033
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

Did you order DB224-A (150-160MHz) or 224-E (140-150MHz) range models? The harnesses on the antennas are for their proper range....the harness between the two antennas can be easily made up of 75 ohm RG11 coax cut in ODD multiples of 1/4wavelength (taking Velocity Factor into account!). The lengths would be the same on each side of the T to the 224 feedpoints. Easy to do....the harnesses on the antennas are made to match 100ohm elements down to a single 50 ohm point.....but as long as both antennas are the same range, you only need to worry about the harness between the separate 224s

Chris
WB5ITT

Don Winn wrote:
>> I would like to install two Andrew DB224 4-element colinear antennas
> as a
>> DB228 (8 element). When the antennas were ordered to replace a
> Celwave P654, I
>> was told that two 224 and and the proper phasing harness would be the
> same. The
>> antennas and harness were ordered but I have a problem. The antennas
> were
>> shipped but I'm now told the phasing harness for the amateur
> frequencies (-007)
>> is no longer available. I have received some information on the
> phasing harness
>> but from the drawings provided, the two outputs are not the same
> length
>> therefore will not be in phase. Since the antennas are the same,
> wouldn't the
>> two outputs of the phasing harness be in or is it normal to provide
> some
>> downward tilt. Unless I'm badly mistaken,the antenna element should
> be fed
>> in-phase giving maximun gain in the horz.direction.
>> Don AF4Z
>

3396. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 05:29:11 UTC
From: CW <cmagers@earthlink.net>
Message-ID: <MfmdneOiJcJW37TfRVn-jg@comcast.com>
Source record: 81034

The answers you get on this group are likely to be far less than useful. I would recommend rec.radio.shortwave.

"clvrmnky" <clvrmnky-uunet@coldmail.com.invalid> wrote in message news:6fnVd.92674$vO1.578577@nnrp1.uunet.ca...
> I've got a little shortwave receiver that has a decent amount of gain in
> it's antenna input. I've been experimenting with different lengths and
> placements of the wire, and seen some interesting homebrew antennas I
> might try once the snow melts.
>
> I know that receivers are less demanding of impedance matching in
> general, but my readings suggest that I should have a balun (unun) of
> some sort to match the impedance better, since I'm pretty much stuck
> with end-fed longwires. This should get more signal to my front-end,
> and a proper shielded connection to my receiver should help minimize
> stray RF noise.
>
> I'm a renter, so I'm going to experiment with running a wire along the
> eaves on the balcony, which is open to two sides of the house (wooden
> two-story.) That is, I do not have the luxury of using the yard, trees
> or anything.
>
> So, my idea is to have a long wire (or folded longwire made from a
> length of twin-lead) go to a balun (or unun, since this is really
> unbalanced-to-unbalanced) and then run a downwire from there to my
> receiver through a window.
>
> I'm guessing the real advantage would be realized if I had a good RF
> ground at the receiver and/or balun. This will be sort of tricky. I
> don't even think I have copper cold-water pipes anywhere, and running
> copper braid over the balcony, down the side of the building and into
> 6-foot rod just ain't going to happen. I've heard of people using
> houseplants for poor grounds when no other was available, and I have
> many kilos of wet earth on the balcony.
>
> I've seen a neat artificial ground/antenna tuner from MFJ (I think)
> which seems to offer a lot of bang for the buck. It even has multiple
> inputs for high-Z single wires. Would this be useful for SW?
>
> Finally, I'm probably just going to wind my own balun out of a ferrite
> core. I just can't seem to find the details on how to wind the copper.
> Do I wind the primary first around the whole core, and then the
> secondary on top of it? Sorry if this is stupid question, but I've got
> most of the math figured out (i.e., no. of turns and such) but since

> I've never seen a balun... my assumption (right or wrong) is that it is
> just a special transformer.
>
> Thanks for your comments.
>
> -- cm

3397. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 05:30:40 UTC
From: CW <cmagers@earthlink.net>
Message-ID: <zZOdnTYTmYu43rTfRVn-gg@comcast.com>
Source record: 81035

Classic. I new someone would come up with the "stick a coat hanger in your antenna socket and be happy" line.

"Roy Lewallen" <w7el@eznec.com> wrote in message news:112cro1nahrpv98@corp.supernews.com...
> Try this simple test.
>
> Tune your receiver to a part of the dial where there's no station.
> Disconnect the antenna from your receiver. If the noise level drops,
> impedance matching won't help your signal/noise ratio, it'll just make
> everything louder. You can accomplish the same thing by turning up the
> volume control.
>
> Roy Lewallen, W7EL
>
> clvrmnky wrote:
> > I've got a little shortwave receiver that has a decent amount of gain in
> > it's antenna input. I've been experimenting with different lengths and
> > placements of the wire, and seen some interesting homebrew antennas I
> > might try once the snow melts.
> >
> > I know that receivers are less demanding of impedance matching in
> > general, but my readings suggest that I should have a balun (unun) of
> > some sort to match the impedance better, since I'm pretty much stuck
> > with end-fed longwires. This should get more signal to my front-end,
> > and a proper shielded connection to my receiver should help minimize
> > stray RF noise.
> >
> > I'm a renter, so I'm going to experiment with running a wire along the
> > eaves on the balcony, which is open to two sides of the house (wooden
> > two-story.) That is, I do not have the luxury of using the yard, trees
> > or anything.
> >
> > So, my idea is to have a long wire (or folded longwire made from a
> > length of twin-lead) go to a balun (or unun, since this is really
> > unbalanced-to-unbalanced) and then run a downwire from there to my
> > receiver through a window.
> >
> > I'm guessing the real advantage would be realized if I had a good RF
> > ground at the receiver and/or balun. This will be sort of tricky. I
> > don't even think I have copper cold-water pipes anywhere, and running
> > copper braid over the balcony, down the side of the building and into
> > 6-foot rod just ain't going to happen. I've heard of people using
> > houseplants for poor grounds when no other was available, and I have

> > many kilos of wet earth on the balcony.
> >
> > I've seen a neat artificial ground/antenna tuner from MFJ (I think)
> > which seems to offer a lot of bang for the buck. It even has multiple
> > inputs for high-Z single wires. Would this be useful for SW?
> >
> > Finally, I'm probably just going to wind my own balun out of a ferrite
> > core. I just can't seem to find the details on how to wind the copper.
> > Do I wind the primary first around the whole core, and then the
> > secondary on top of it? Sorry if this is stupid question, but I've got
> > most of the math figured out (i.e., no. of turns and such) but since
> > I've never seen a balun... my assumption (right or wrong) is that it is
> > just a special transformer.
> >
> > Thanks for your comments.
> >
> > -- cm

3398. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 05:48:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <112ii185jb4m306@corp.supernews.com>
Source record: 81036

Do you believe that what I posted isn't true, or do you just wish it
isn't true?

Roy Lewallen, W7EL

CW wrote:
> Classic. I new someone would come up with the "stick a coat hanger in your
> antenna socket and be happy" line.
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:112cro1nahrpv98@corp.supernews.com...
>
>>Try this simple test.
>>
>>Tune your receiver to a part of the dial where there's no station.
>>Disconnect the antenna from your receiver. If the noise level drops,
>>impedance matching won't help your signal/noise ratio, it'll just make
>>everything louder. You can accomplish the same thing by turning up the
>>volume control.
>>
>>Roy Lewallen, W7EL

3399. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 06:07:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <112ij4s4oom9h8a@corp.supernews.com>
Source record: 81037

aunwin@insightbb.com wrote:
> Don't professionals use the term?

I don't believe so.

Seems like it shows up in pro computor
> programs.

Yes, it's a carryover from the amateur programs. Brian Beezley, K6STI was, I believe, the first to use it in an antenna analysis program. (You won't find it in NEC-2, NEC-4, or even MININEC.) Those of us who followed were pretty much forced to include it because of demand from the amateur customers. I can't speak for other programs, but it's in EZNEC pro simply to keep the amateur and pro programs similar.

> Doesn't the Antenna handbook refer to TOA ? I do know they made a graph of
> incoming
> RF ray angles which amounts to the same thing.

The ARRL Antenna Book probably uses TOA. It's a publication intended for amateurs. No, a graph of incoming ray angles is not a graph of TOA as used by EZNEC and other programs. You've just given a good example of the misunderstanding and confusion that the term is subject to.

What is wrong with the common
> perception
> that it is the angle of maximum gain?

Nothing at all. It's just that a lot of people think it means something else. In some of your postings, in fact, I get the sense that you don't always use it with that meaning. For example, you sometimes seem to give a lot of weight to the TOA as a figure of merit, and none at all to the field strength or gain at the angle at which communication is taking place. So either you're using TOA in a different sense, or you have no interest in maximizing the ability of an antenna to communicate effectively.

> If you were designing a 'point to point' antenna would you not look for the
> angle of maximum gain?

No, and there's an example of the perception problem. If you don't understand why, please go back and re-read posts I've made in response to your earlier postings on the topic.

> If so what would you call that angle ?

In EZNEC, the term takeoff angle means exactly that. My well-confirmed fear is that people would use it as you seem to be doing.

If you are refering to an antenna
> lobe pattern could you not invoke
> the +/- 3 db points as used in many other places in antenna work?

Lobe pattern? Invoke? Sorry, I have no idea what you're asking.

> Methinks that people are looking for problems to argue about
> Art

On that we agree.

Roy Lewallen, W7EL

3400. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 07:16:21 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <xXupTQAFzVKCFwUQ@jmwa.demon.co.uk>
Source record: 81039
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Tom Ring <news0001@taring.org>
wrote (in <42290052$0$92310$39cecf19@news.twtelecom.net>) about '1/4 vs
1/2 wavelength antenna', on Fri, 4 Mar 2005:
>John Woodgate wrote:
>
>> I read in sci.electronics.design that Tom Ring <news0001@taring.org>
>> wrote (in <4227cdce$0$92311$39cecf19@news.twtelecom.net>) about '1/4 vs
>> 1/2 wavelength antenna', on Thu, 3 Mar 2005:
>>
>>
>>>He forgot to mention that for that output impedance to be relevant, you
>>>need superconducting wire to the speakers as well as superconducting
>>>voice coils.
>>
>>
>> See the last sentence, about the effect of an **8 ohm** source impedance
>> on damping.
>
>Oh, and going from 8 ohms output impedance to 10e-7 (unless I
>miscounted) would take the damping factor from 1 to 8e7, which is a bit
>more than 2. Ignoring the speaker wires of course.
>
Also ignoring the ***voice-coil resistance***. If that is included, as
it must be for a correct analysis, you get 2.

F Langford-Smith 'invented' the concept of damping factor, and around
1949 accepted the point made by James Moir that, by not properly taking
into account the effect of the voice-coil resistance, it was a seriously
misleading concept. Yes, 60 years later, people are still being misled.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

3401. Drill vs. MagMount ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 07:51:18 UTC
From: Everett <news.20.038099@spamgourmet.com>
Message-ID: <fGdWd.6103$WE1.3509@fe07.lga>
Source record: 81040

All things being equal, is there a performance advantage (in 2meter/70cm bands) permanently mounting an antenna via a hole in the roof vs. using a MagMount??

How about other bands??

Thanks,
Everett

3402. winscanner / wintransceiver

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 09:21:58 UTC
From: stacker <cmi007@hotmail.com>
Message-ID: <d0btnl$569$1@news1.zwoll1.ov.home.nl>
Source record: 81041
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

Hi,

i've been trying to get WinScanner or WinTransceiver from Malzev for the
resident Jackson: Winjack.exe,
and also for the Icom IC-240: ic240.exe.

I found all I need at a TriPod hosted site:
http://members.tripod.com/~Malzev/cb-adio/jackson.htm
http://members.tripod.com/~Malzev/cb-funk/ic-240.htm

The llinks to the needed executables are:
http://members.tripod.com/~Malzev/radiodoc/software/ic-240.exe
and
http://members.tripod.com/~Malzev/radiodoc/software/winjack.exe

But Tripod blocks the download of executables.
Anyone knows how to get a hold of this software?

tnx...Marco
cmi007@hotmail.com

3403. Re: Endfed zepp questions

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 10:59:47 UTC
From: KC1DI <elbc2@pivot.net>
Message-ID: <42299123.6000303@pivot.net>
Source record: 81042

gil wrote:
> Not having a lot of space for wire antennas (50 feet at best) would it
> be better for me to use an endfed zepp (50 feet) or a double zepp (25
> feet each leg) ?
>
> On the endfed zepp there is one side of the latter line that its not
> connected to the aerial, on the other end (in the shack) where does
> that end connect to...ground or should it be connected just like any
> other latter line on the tuner ?
>
> Just trying to get the best results out of a small space.
>
> Thanks
>
> Gil
>
HI Gil ,
From a purely signal perspective. it would make no difference if it
were fed at the end or in the middle. However from a matching
perspective the center fed arrangement will give you the easiest
matching situation for the tuner to handle and less chance of unwanted
R.F. in the Shack. I'd go for the center fed if possible. if not the
endfed will work but may present you with matching problems on some
bands. also you could allow extra wire to drop down vertically from the
end in the center fed arrangement giving you a better match 80 or 40
Meters if desired. Make the total lenght about 88 feet and you'll have
a good all band antenna. that would be 25 feet horizontal on each leg
and 19ft dropped veritcally.
Remember though any wire is better than no wire.
73 Dave

3404. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 11:27:38 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d0c53a$7g8$1@titan.btinternet.com>
Source record: 81043

> How can a filter filter correctly when its input is terminated in
> an indeterminate impedance?

==========

No problem! The frequency response of a filter, input to output terminals,
is independent of the source resistance.

3405. unequal lenght issue

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 11:46:46 UTC
From: ml <m@di.net>
Message-ID: <m-0CB272.06464105032005@news.verizon.net>
Source record: 81044

I just started to wonder something

always thought it was 'ok' to have a center fed dipole equal length arms
if that is your goal

many have mentioned that using my sgc237 it's better to have the rf
hot shorter then the rf gnd/counterpoise

got confused here why is that better, i mean understand many have
said it prevents the rf gnd from radiating the coax shield (bad)

but what is the diff thing i am mising?

tnx

3406. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 13:18:45 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <mcbj21d9fivc6oj2glkop6u0bctar0584r@4ax.com>
Source record: 81045

On Fri, 4 Mar 2005 21:30:40 -0800, "CW" <cmagers@earthlink.net> wrote:

>Classic. I new someone would come up with the "stick a coat hanger in your
>antenna socket and be happy" line.

As a rule I subscribe to the school that says every antenna should be
well-matched, in the clear and fed with low loss line, even those used
for receiving. Must come from my VHF/DXing background.

That said, I know my friend Roy is correct and I am wrong when he
gives this advice. Generally speaking, the SNR is set at the antenna
and nothing done after that will make much difference. This isn't
always the case if there are noise sources that can nulled or reduced
by phasing or other directive techniques that don't reduce the signal
simultaneously.

Roy did not mention this at all. He spoke to "impedance matching."

Wes N7WS

ps. You have no idea how hard it is to type with one (the "wrong")
hand while doing drugs. I had 2 1/2 hours of surgery putting my rt.
shoulder together on Thursday. Just in time to keep me out of the DX
contest---good planning :(

>
>"Roy Lewallen" <w7el@eznec.com> wrote in message
>news:112cro1nahrpv98@corp.supernews.com...
>> Try this simple test.
>>
>> Tune your receiver to a part of the dial where there's no station.
>> Disconnect the antenna from your receiver. If the noise level drops,
>> impedance matching won't help your signal/noise ratio, it'll just make
>> everything louder. You can accomplish the same thing by turning up the
>> volume control.
>>
>> Roy Lewallen, W7EL
[snip]

3407. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 14:09:17 UTC
From: Tom Ring <news0001@taring.org>
Message-ID: <4229bd3a$0$92313$39cecf19@news.twtelecom.net>
Source record: 81046
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

John Woodgate wrote:

> I read in sci.electronics.design that Tom Ring <news0001@taring.org>
> wrote (in <42290052$0$92310$39cecf19@news.twtelecom.net>) about '1/4 vs
> 1/2 wavelength antenna', on Fri, 4 Mar 2005:
>
> Also ignoring the ***voice-coil resistance***. If that is included, as
> it must be for a correct analysis, you get 2.
>
> F Langford-Smith 'invented' the concept of damping factor, and around
> 1949 accepted the point made by James Moir that, by not properly taking
> into account the effect of the voice-coil resistance, it was a seriously
> misleading concept. Yes, 60 years later, people are still being misled.

Good point. I stand corrected.

The only nit I would pick would be that impedance be used, since you
need to measure it at the frequency(ies) in question, not DC. And then
there is that pesky crossover in most systems. Personally I like biamping.

tom
K0TAR

3408. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 14:30:50 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <4229c299$0$10944$cc9e4d1f@news-text.dial.pipex.com>
Source record: 81047
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"gwhite" <gwhite@deadend.com> wrote in message
news:421E98CC.6E3BDC78@deadend.com...
> Richard Clark wrote:
>>
>> On Wed, 23 Feb 2005 19:08:20 GMT, gwhite <gwhite@deadend.com> wrote:
>>
>> >RF transmitters are not ....
>>
>> Sorry OM,
>>
>> This was all nonsense.
>
> Nice articulation. I don't know who OM is, but RF transmitter power amps
> are
> not "impedance matched." Neither are audio power amps for that matter.

'OM' is radio ham speak for 'Old man'. 8-)

Leon
--
Leon Heller, G1HSM
http://www.geocities.com/leon_heller

3409. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 14:34:11 UTC
From: "aunwin@insightbb.com"
Message-ID: <DrjWd.94230$tl3.31087@attbi_s02>
Source record: 81048

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:112ij4s4oom9h8a@corp.supernews.com...
> aunwin@insightbb.com wrote:
>> Don't professionals use the term?
>
> I don't believe so.
snip

>
> The ARRL Antenna Book probably uses TOA. It's a publication intended for
> amateurs. No, a graph of incoming ray angles is not a graph of TOA as used
> by EZNEC and other programs. You've just given a good example of the
> misunderstanding and confusion that the term is subject to.

They give an incoming angle not a spread

>
> What is wrong with the common
>> perception
>> that it is the angle of maximum gain?
>
> Nothing at all. It's just that a lot of people think it means something
> else. In some of your postings, in fact, I get the sense that you don't
> always use it with that meaning. For example, you sometimes seem to give a
> lot of weight to the TOA as a figure of merit, and none at all to the
hing> field strength or gain at the angle at which communication is taking
> place. So either you're using TOA in a different sense, or you have no
> interest in maximizing the ability of an antenna to communicate
> effectively.
snip

Roy,
by now you must know that I experiment a lot using computor models
and actual building. I built a 80 meter boom yagi which was neat because
the underside of the first lobe captured a lot of signals as the band is
opening. So was the next step to make even a longer boom yagi to drive
the underside of the lobe lower, no ....because I am now too old and weaker.
So I now pursue the object of a lower take of angle by using more elements
with more coupling and one that can rotate in a circle equivalent to a
two element beam. I believe this can be accomplished with the same gain
and a lower take off angle than a 60 foot boom yagi. Thus TOA becomes
the most important thing for me as well as the "thickness" of the lobe.
That is the sense that your response questioned regarding my maximisation of
antenna
performance for which I use TOA.

Best regards
Art

3410. Re: Why a Short Lightning Ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 16:09:37 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4229daa4$1_1@127.0.0.1>
Source record: 81049

Justï¿½n Kï¿½se wrote:

> Cecil Moore wrote:
>>From Webster's: "mountain - (1b) an elongated ridge."
>>Perhaps you need to adjust your definition of "mountain".
>
> Re-read your original post, especially the first line where you said;
> "There were no mountains around the medium-wave broadcast plants where I
> worked, but I can testify that atmospheric electrical activity there..."

I *NEVER* said any such thing. Please stop misquoting me.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

3411. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 16:36:24 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <AM9VIYAIAeKCFwD2@jmwa.demon.co.uk>
Source record: 81050
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Tom Ring <news0001@taring.org>
wrote (in <4229bd3a$0$92313$39cecf19@news.twtelecom.net>) about '1/4 vs
1/2 wavelength antenna', on Sat, 5 Mar 2005:
>Personally I like
>biamping.

So do I.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

3412. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 17:24:10 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d0cpvq$7cd$1@hercules.btinternet.com>
Source record: 81051

"Cecil Moore" wrote
> The problem seems to be that the definition of TOA is
> not standardized.

==========

Cecil, it's worse than that. TOA is almost meaningless.

Whoever coined the phrase "Take Off Angle" in conjunction with Eznec-type radiation patterns should be made to provide a 5000-word written explanation before he went to bed on his wedding night. Another form of safe sex?

In the first place, your suggestion to hire a helicopter to fly around the sky in the vicinity of an antenna to determine the TOA would provide a completely different TOA from that provided by Eznec. Especially at low angles, say less than 30 degrees.

That's because the angle at which radiation is strongest in the vicinity of a vertical antenna, of height 5/8-wavelength or shorter, is ALWAYS at an angle of ZERO degrees. ie., it is strongest along the ground surface regardless of soil conditions. Distance from the antenna is too short for the ground wave to be appreciably attenuated.

Somehow or other, Eznec manages to calculate relative field strength at some great distance from the antenna. Which is, of course, an ultimate worthwhile but unobtainable objective.

Unfortunately, Eznec ignores what that distance may be, whether the receiver is at ground level or at aircraft height, or in the stratosphere. In the extreme state of uncertainty it ignores the height of the ionospheric reflecting layer and the number of hops. In other words, if the location of the receiving antenna in space or time of day are unknown then the Eznec TOA is meaningless.

So why is so much importance or significance attached to an Eznec TOA? It is merely one of the infinite number of angles contained in a very broad lobe of a radiation pattern.

The path actually taken by a particular radio wave is of far greater importance. And knowing the location on the Earth's surface of both transmitting and receiving antennas, the path taken, including elevation angle, is calculable purely by geometric means. It has nothing to do with the antenna, not even a G5RV.

If the ballpark Eznec TOA, by chance, happens to crudely coincide with the actual radio path angle to a distant receiver then that's the best which can be expected. If not, then there's nothing you can do about it except change

the antenna, all the soil in your back yard, or your geograhical location.

Save yourself the going-rate per hour of the fee for hiring a helicopter.
;o)

By the way, this assessment of the situation in no way demeans the value and usefulness of Roy's Eznec - an excellent practical, educational and free-issue program. My only criticism is that it requres a 4-week course of self-instruction, two hours per day, to understand how to use it. But I suppose, starting from scratch, this is inevitable. I imagine that simply to point to Eznec in response to an elementary query on this newsgroup can often lead to a waste of time down-loading it, disappointment and frustration.

Reg, G4FGQ

3413. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 18:07:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gunj219804i97gss3k8itp9c1agj3ju5bi@4ax.com>
Source record: 81052

On Sat, 05 Mar 2005 14:34:11 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>Thus TOA becomes
> the most important thing for me as well as the "thickness" of the lobe.
>That is the sense that your response questioned regarding my maximisation
>of
>antenna
> performance for which I use TOA.

Hi Art,

Back when fractal antennas ruled the sky - at least on paper - the
bragging rights were carefully tailored to fit the design.

Some of this was arguably targeted to a user population that would
have enjoyed the advantage. Anyway, such an example is shown at:
http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm

The fractal flyer, and its superior, simpler cousin the H Flyer showed
a real, improved, DX response at 10 degrees. This was not their best
response angle which you call TOA. In fact, both designers studiously
ignored what you call TOA because it was not particularly notable.

So, as a bald statement, both designs constitute very small antennas
that exhibit BETTER gain figures at a TOA of 10 degrees than a full
sized dipole held at a comparable height. Also, these antennas show a
F/B that is very much better than a full sized antenna. Further, both
designs, but notably the H Flyer, show full band matching. However,
having said that, sans actual response levels or context, is having
said nothing.

However, let's look at the full characteristics, not simply the
claims:

Best Response:
Std Dipole 0 dBi @ 90ï¿½
fractal flyer -0.81 dBi @ 39ï¿½
H Flyer -0.6 dBi @ 45ï¿½

10 Deg. Response:
Std Dipole -7.51 dBi
fractal flyer -4.85 dBi
H Flyer -4.75 dBi

2:1 Match Range:
Std Dipole 0.85 MHz

fractal flyer 0.5 MHz
H Flyer 1.0 MHz

As can be seen, the H Flyer was the best design across the board, IF you accepted the limitations originally imposed (very low, very small, and scrutinized at 10 degree take off). Does this qualify it as a good antenna? Depends on if you are space and height limited.

One last point, as poor as a valuation of -5dBi is, there are very few designs (barring the two shown here) that can perform better and still fit in the box.

So, let's return to claims, especially for the H Flyer:
Smallest resonant antenna;
Highest DX Gain;
Widest Bandwidth:
Best F/B;
Not a Fractal.

73's
Richard Clark, KB7QHC

3414. Re: unequal lenght issue

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 19:39:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <u72k21d6j2a9skffbuakn0ahod2em640ma@4ax.com>
Source record: 81053

On Sat, 05 Mar 2005 11:46:46 GMT, ml <m@di.net> wrote:
>many have mentioned that using my sgc237 it's better to have the rf
>hot shorter then the rf gnd/counterpoise

Hi Myles,

I didn't see that/those particular posting(s), but I cannot imagine
that being an issue.

>got confused here why is that better, i mean understand many have
>said it prevents the rf gnd from radiating the coax shield (bad)

Sounds like bum advice. However, to snub radiating currents on the
coax shield you use a choke. The choke can be either with ferrites or
air winding the coax itself. This was discussed previously in this
forum, consult the archive with a search against your postings:
http://groups-beta.google.com/group/rec.radio.amateur.antenna?hl=en&lr=&ie=UTF-8
to get your bearings, and:
http://groups-beta.google.com/advanced_search?q=&hl=en&lr=&ie=UTF-8&
to perform a specific search.

I notice from another posting, you report mixed results about
interfering with TV reception. This can come from a mix of possible
problems, again, all this has been discussed in previous postings of
your threads. One thing I see missing in your description of your new
antenna is confirmation that you have also choked the control lines to
your SGC 237. If not, do it.

73's
Richard Clark, KB7QHC

3415. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 19:48:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <203k21thsp1o544dgrfb7tj5a9fm5054or@4ax.com>
Source record: 81054

On Sat, 05 Mar 2005 06:18:45 -0700, Wes Stewart <n7ws_@*yahoo.com>
wrote:

>ps. You have no idea how hard it is to type with one (the "wrong")
>hand while doing drugs. I had 2 1/2 hours of surgery putting my rt.
>shoulder together on Thursday. Just in time to keep me out of the DX
>contest---good planning :(
>

Hi Wes,

I don't think this will boost your spirits by more than one S-Unit,
but in today's NYT there was a report of a fellow that chopped off
both hands, and had them sewn back on.
graphic:
http://graphics8.nytimes.com/images/2005/03/05/nyregion/05hands2.jpg
story:
http://www.nytimes.com/2005/03/05/nyregion/05hands.html

73's
Richard Clark, KB7QHC

3416. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 20:19:40 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <bp4k21hm8mscr4v1b8i3fvkdsafskobelq@4ax.com>
Source record: 81055

On Sat, 05 Mar 2005 11:48:01 -0800, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Sat, 05 Mar 2005 06:18:45 -0700, Wes Stewart <n7ws_@*yahoo.com>
>wrote:
>
>>ps. You have no idea how hard it is to type with one (the "wrong")
>>hand while doing drugs. I had 2 1/2 hours of surgery putting my rt.
>>shoulder together on Thursday. Just in time to keep me out of the DX
>>contest---good planning :(
>>
>
>Hi Wes,
>
>I don't think this will boost your spirits by more than one S-Unit,
>but in today's NYT there was a report of a fellow that chopped off
>both hands, and had them sewn back on.
>graphic:
>http://graphics8.nytimes.com/images/2005/03/05/nyregion/05hands2.jpg
>story:
>http://www.nytimes.com/2005/03/05/nyregion/05hands.html

Oh my, that's gotta hurt.

Some years ago my wife had hand surgery and afterwards was getting
physical therapy. Another patient there had lost a thumb to a
circular saw. They made him a new one out of another finger.

3417. Re: 1/4 vs 1/2 wavelength antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 21:09:22 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <6epWd.12391$OU1.5474@newssvr21.news.prodigy.com>
Source record: 81056

Reg Edwards wrote:
>>How can a filter filter correctly when its input is terminated in
>>an indeterminate impedance?
>
>
> ============================
>
> No problem! The frequency response of a filter, input to output terminals,
> is independent of the source resistance.
>
>

That may be true in the Danelaw where you live, Reg, but not in the
rest of the universe. Imagine a circuit consisting of a voltage source
in series with a source resistance followed by a shunt capacitance in
parallel with a load resistor. Write the output voltage equation for this
circuit. Now, replace the source resistance with a short. Write the
output equation for _this_ circuit. Compare the two equations.
Are the frequency responses the same? Now use an indeterminate
impedance for the source resistance. Can you tell what the voltage output
of this circuit is?
73,
Tom Donaly, KA6RUH

3418. antenna high

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 22:32:43 UTC
From: Kenneth Opskar <opskar@online.no>
Message-ID: <cnqWd.956$SL4.14447@news4.e.nsc.no>
Source record: 81058

I wonder abt antenna high. How do we count the antenna high? Is it referenced from the ground, or the roof of a building. Say I put a 3 el yagi on a mast connected to my roof, apx 5 meters above ground. Does this distance from the roof to the ground count, or do I have to put it up another 1/2 wave from the roof top ? Any experience?

Regards
Ken

3419. antenna high above ground

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 22:33:37 UTC
From: Kenneth Opskar <opskar@online.no>
Message-ID: <2oqWd.957$SL4.14569@news4.e.nsc.no>
Source record: 81057

I wonder abt antenna high. How do we count the antenna high? Is it referenced from the ground, or the roof of a building. Say I put a 3 el yagi on a mast connected to my roof, apx 5 meters above ground. Does the distance from the roof to the ground count, or do I have to put it up another 1/2 wave from the roof top ? Any experience?

Regards
Ken

3420. antenna high

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 22:34:17 UTC
From: Kenneth Opskar <opskar@online.no>
Message-ID: <FoqWd.958$SL4.14205@news4.e.nsc.no>
Source record: 81059

I wonder abt antenna high. How do we count the antenna high? Is it referenced from the ground, or the roof of a building. Say I put a 3 el yagi on a mast connected to my roof, apx 5 meters above ground. Does this distance from the roof to the ground count, or do I have to put it up another 1/2 wave from the roof top ? Any experience?

Regards
Ken

3421. Re: antenna high above ground

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 22:46:22 UTC
From: nick smith <NickS@ntlworld.com>
Message-ID: <2FqWd.4464$4x2.2635@newsfe4-gui.ntli.net>
Source record: 81060

Do you mean "height" ?

If so, it's height above ground that counts for propagation purposes. However it would also be important to site the antenna well above the roof as well to avoid interaction from the roof - all height helps !

I assume you are putting up a 10 metre 3 ele beam ?

Nick

"Kenneth Opskar" <opskar@online.no> wrote in message news:2oqWd.957$SL4.14569@news4.e.nsc.no...
> I wonder abt antenna high. How do we count the antenna high? Is it
> referenced from the ground, or the roof of a building. Say I put a 3 el yagi
> on a mast connected to my roof, apx 5 meters above ground. Does the distance
> from the roof to the ground count, or do I have to put it up another 1/2
> wave from the roof top ? Any experience?
>
> Regards
> Ken
>
>

3422. Re: Antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 23:22:39 UTC
From: OICU812 <oicu8122@emailaccount.comnospam>
Message-ID: <nbidnR4GIrrPorffRVn-jA@adelphia.com>
Source record: 81061

<nm5k@wt.net> wrote in message
news:1109915847.631142.45160@g14g2000cwa.googlegroups.com...
:
: OICU812 wrote:
:
: > :
: >
: > I thought about hooking my Kenwood TS 520
: > up to my car and doing the mobile thing also.Only problem is I have a
: Honda
: > Civic and it does not offera lot of room for the rig and was
: wondering about
: > current draw on my alternator ie would I need a bigger alternator for
: that
: > etc.
:
: The alternator is probably ok, being you probably won't even be
: 50% duty cycle...The early 520's will work on 12v, but they are
: sort of weird, being the voltages and regulation are not quite
: as good as on 117v. But it will work. Probably at a reduced
: power compared to 117v. Yea, kinda large too. Would have to
: keep it on the seat, or floor...You might wanna save for a 12v
: rig. Much easier to deal with mobile and portable. I had a 520
: I rebuilt about 4-5 years ago..Sold it to a friend, and he ran
: it mobile for a short time...It worked, but was kinda funky, and
: he got a TS-450 shortly after that...He liked the 450 much better
: when mobile, needless to say...I ran a IC-730 for a long time, but
: the display board pooped out, and I couldn't get the part..:(
: "goofy small 9 pin transformer in the dc-dc converter circuit"
: So I broke down and bought a IC-706mk2g. I still plan to fix the
: 730 one of these days, when I get another junker to get the part.
: Shame for it to collect dust...Other than the display board,
: it works great...It's easier to use when driving than the 706,
: cuz it has no menus...I can work nearly everything on it, just
: by feel...MK

IOW I should look for maybe a mobile unit to work with to do mobile
dx.Gotcha.
See ,the reason I kinda brought this thing up is I have a landlord who is
not real keen on me having an antenna farm or even something like it on his
premises.I could get sneaky and do the dipole in the attic thing I guess.I
also need to get an atenna tuner when I plan to get stealthy.Ebay here we
come.

3423. Re: Antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 23:24:47 UTC
From: OICU812 <oicu8122@emailaccount.comnospam>
Message-ID: <d7SdnXDFOexMorffRVn-1w@adelphia.com>
Source record: 81062

<nm5k@wt.net> wrote in message
news:1109915847.631142.45160@g14g2000cwa.googlegroups.com...
:
: OICU812 wrote:
:
: > :
: >
: > I thought about hooking my Kenwood TS 520
: > up to my car and doing the mobile thing also.Only problem is I have a
: Honda
: > Civic and it does not offera lot of room for the rig and was
: wondering about
: > current draw on my alternator ie would I need a bigger alternator for
: that
: > etc.
:
: The alternator is probably ok, being you probably won't even be
: 50% duty cycle...The early 520's will work on 12v, but they are
: sort of weird, being the voltages and regulation are not quite
: as good as on 117v. But it will work. Probably at a reduced
: power compared to 117v. Yea, kinda large too. Would have to
: keep it on the seat, or floor...You might wanna save for a 12v
: rig. Much easier to deal with mobile and portable. I had a 520
: I rebuilt about 4-5 years ago..Sold it to a friend, and he ran
: it mobile for a short time...It worked, but was kinda funky, and
: he got a TS-450 shortly after that...He liked the 450 much better
: when mobile, needless to say...I ran a IC-730 for a long time, but
: the display board pooped out, and I couldn't get the part..:(
: "goofy small 9 pin transformer in the dc-dc converter circuit"
: So I broke down and bought a IC-706mk2g. I still plan to fix the
: 730 one of these days, when I get another junker to get the part.
: Shame for it to collect dust...Other than the display board,
: it works great...It's easier to use when driving than the 706,
: cuz it has no menus...I can work nearly everything on it, just
: by feel...MK
:

I also am led to believe my 7136's are going on the fringe also.It is a
radio given to me as a gift so you know how that goes.

3424. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-05 23:39:44 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <lkgk21hmo7o2vcfr8ed2dtq61o8r8p0qc3@4ax.com>
Source record: 81063

On Sat, 05 Mar 2005 13:19:40 -0700, Wes Stewart <n7ws_@*yahoo.com>
wrote:

>On Sat, 05 Mar 2005 11:48:01 -0800, Richard Clark <kb7qhc@comcast.net>
>wrote:
>
>>On Sat, 05 Mar 2005 06:18:45 -0700, Wes Stewart <n7ws_@*yahoo.com>
>>wrote:
>>
>>>ps. You have no idea how hard it is to type with one (the "wrong")
>>>hand while doing drugs. I had 2 1/2 hours of surgery putting my rt.
>>>shoulder together on Thursday. Just in time to keep me out of the DX
>>>contest---good planning :(
>>>
>>
>>Hi Wes,
>>
>>I don't think this will boost your spirits by more than one S-Unit,
>>but in today's NYT there was a report of a fellow that chopped off
>>both hands, and had them sewn back on.
>>graphic:
>>http://graphics8.nytimes.com/images/2005/03/05/nyregion/05hands2.jpg
>>story:
>>http://www.nytimes.com/2005/03/05/nyregion/05hands.html
>
>Oh my, that's gotta hurt.

Last week in the news some lady got mad at her man and cut his
ying-yang off and flushed down the toilet. It was later recovered,
taken to the hospital, cleaned up and sewn back on the man.

Now that would hurt...

Bob
k5qwg

>
>Some years ago my wife had hand surgery and afterwards was getting
>physical therapy. Another patient there had lost a thumb to a
>circular saw. They made him a new one out of another finger.

3425. More antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 00:16:44 UTC
From: "Joe S." <nobody@nowhere.net>
Message-ID: <d0di510hfo@news1.newsguy.com>
Source record: 81064

Many thanks to all who commented on my initial "antenna philosophy" article.

Looks as though the time is coming when my antenna no longer will be philosophical but will be REAL. After some tribulations, we signed a contract to purchase a lot on the Mississippi Gulf Coast (where we are now living in an apartment). We are now wrestling with a floor plan and should break ground in mid-April.

The lot is covered with 70-foot-plus pine trees, all of which will be cleared -- you don't want them anywhere near the house because they tend to fall over in hurricanes. However, along the back edge of the lot are three slender oak trees -- 40 to 50 feet tall -- and before I could say anything, my XYL announced that we had to keep the oak trees so I could hang antennas!!!

The two most distant oak trees are 85 feet apart so now I'll need to sort out a multi-band dipole with 85 feet of horizontal -- guess I could use 135 feet and hang 25 feet vertically or sloping off each end.

Stay tuned.

--

Joe S.

3426. Re: Typical Doublet Tension?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 01:04:46 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <OGsWd.3092$603.2439@newsread2.news.atl.earthlink.net>
Source record: 81065

"Just�n K�se" <chupacabra@operamail.com> wrote in message
news:4227fde5.1822820@chupacabra...
> In Message-ID:<dgOVd.610$603.389@newsread2.news.atl.earthlink.net>
> posted on Fri, 04 Mar 2005 00:49:13 GMT, Dan/W4NTI wrote:
>
>>
>>"Bob Miller" <NOSPAM@neosoft.com> wrote in message
>>news:950f21h779agc9kg2fpgll7i7e0lfaseib@4ax.com...
>>> On 3 Mar 2005 06:54:30 -0800, "Jim Miller" <jim@jtmiller.com> wrote:
>>>
>>>>What's the "typical" tension necessary to keep a 88ft doublet aloft?
>>>>I'll also be supporting the midpoint where the feedline attaches.
>>>>Insulated 18awg will be used as the antenna wire.
>>>>
>>>>tnx
>>>>jtm
>>>
>>> This isn't very scientific, but I just pull the wire tight until most
>>> of the sag is gone. Never had one break. Also, if using trees for
>>> support, a screen door spring at each end, between the tree and the
>>> insulator, will keep the swaying tree from snapping the doublet.
>>>
>>> Bob
>>> k5qwg
>>>
>>>
>>
>>I tried all that scientific formula stuff, and the KISS stuff. But
>>neither
>>made the tree rats happy.
>>
>>So my answer is; put it up until the squirels find the line and chew it
>>in
>>half, then put it back up.
>>
>>Dan/W4NTI
>>
>
> Can't you use stainless fishing leader at the gnaw point for squirrels?
> --
>
> JK

Not a bad idea actually. But how do I tell where the gnaw point is? These tree rats are like dogs, they do it when and where they want to.

Dan/W4NTI

3427. Re: More antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 01:05:45 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <JHsWd.3095$603.291@newsread2.news.atl.earthlink.net>
Source record: 81066

"Joe S." <nobody@nowhere.net> wrote in message
news:d0di510hfo@news1.newsguy.com...
> Many thanks to all who commented on my initial "antenna philosophy"
> article.

> slender oak trees -- 40 to 50 feet tall -- and before I could say
> anything,
> my XYL announced that we had to keep the oak trees so I could hang
> antennas!!!
>

Hey Joe, your wife is a KEEPER! <Grin>

3428. Re: More antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 01:48:19 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <3omk215vk6a18r13kron3r0jo2heue9fio@4ax.com>
Source record: 81067

On Sat, 5 Mar 2005 18:16:44 -0600, "Joe S." <nobody@nowhere.net>
wrote:

[snip]
>
>The lot is covered with 70-foot-plus pine trees, all of which will be
>cleared -- you don't want them anywhere near the house because they tend to
>fall over in hurricanes.

So how many years of *not* having blown down in hurricanes does it
take to grow a 70' pine tree?

I'm likely way off base here and just don't understand Mississippi but
I'm reminded of some of my neighbors who buy an acre or two of the
most beautiful desert on the planet and blade it to bare ground
because they don't like cactus. Or those who move here from somewhere
else and complain that it's too hot, it doesn't rain enough, it's too
brown, there aren't enough trees, traffic is awful, schools are
overcrowded and there are no good paying jobs.

Sorry if I offend, I just can't help myself.

3429. Re: antenna high

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 01:56:28 UTC
From: George Kinzer <horseflygk@worldnet.att.net>
Message-ID: <grtWd.332964$w62.116739@bgtnsc05-news.ops.worldnet.att.net>
Source record: 81068

```
read the ARRL handbook
or do a search.
```

3430. Re: More antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 02:05:38 UTC
From: Harold Burton <hwburton@cableone.net>
Message-ID: <112kpbeo72ejada@corp.supernews.com>
Source record: 81069

"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:3omk215vk6a18r13kron3r0jo2heue9fio@4ax.com...
> On Sat, 5 Mar 2005 18:16:44 -0600, "Joe S." <nobody@nowhere.net>
> wrote:
>
> [snip]
>>
> I'm likely way off base here and just don't understand Mississippi but
> I'm reminded of some of my neighbors who buy an acre or two of the
> most beautiful desert on the planet and blade it to bare ground
> because they don't like cactus. Or those who move here from somewhere
> else and complain that it's too hot, it doesn't rain enough, it's too
> brown, there aren't enough trees, traffic is awful, schools are
> overcrowded and there are no good paying jobs.
>
> Sorry if I offend, I just can't help myself.

You are speaking truth. I've read about the thousands of easterners and
Worst Coasters who moved to the Arizona desert for their health, insisted on
planting the same trees and plants that created their allergies back "home"
and ruined the air in their new home too.

HWB

3431. Re: cartoon Martian antennas: practical?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 02:15:31 UTC
From: George Kinzer <horseflygk@worldnet.att.net>
Message-ID: <7JtWd.333045$w62.37611@bgtnsc05-news.ops.worldnet.att.net>
Source record: 81070

depends on the output of your radio ....i.e. 2 watts
divide by 1/4 =
multiply by the brain cells you have =
then find the square root =
then multiply by 3.14 (pi) =

3432. Re: More antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 02:16:09 UTC
From: "Joe S." <nobody@nowhere.net>
Message-ID: <d0dp4u02h3m@news3.newsguy.com>
Source record: 80973

Pine trees grow like weeds here. A 70-foot pine tree is likely 20 or so years old. And, the problem is not just the hurricanes, it's the near-hurricanes. Every one of these trees has limbs that were ripped off and several of them have tops that were blown out over the past 20 years or so. Most of these are tall and straight enough to produce lumber so the guy who is clearing the lot is not charging anything as he will sell the logs, which will more than cover his cost to clear.

We are leaving the low trees and shrubs -- live oaks, bay, coast myrtle, etc.

--

Joe S.

"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:3omk215vk6a18r13kron3r0jo2heue9fio@4ax.com...
> On Sat, 5 Mar 2005 18:16:44 -0600, "Joe S." <nobody@nowhere.net>
> wrote:
>
> [snip]
> >
> >The lot is covered with 70-foot-plus pine trees, all of which will be
> >cleared -- you don't want them anywhere near the house because they tend
to
> >fall over in hurricanes.
>
> So how many years of *not* having blown down in hurricanes does it
> take to grow a 70' pine tree?
>
> I'm likely way off base here and just don't understand Mississippi but
> I'm reminded of some of my neighbors who buy an acre or two of the
> most beautiful desert on the planet and blade it to bare ground
> because they don't like cactus. Or those who move here from somewhere
> else and complain that it's too hot, it doesn't rain enough, it's too
> brown, there aren't enough trees, traffic is awful, schools are
> overcrowded and there are no good paying jobs.
>
> Sorry if I offend, I just can't help myself.

3433. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 02:22:15 UTC
From: Dan Richardson <dwr@mailinator.com>
Message-ID: <q9qk219asv9ik225778ml09p8ka7jaqcp7@4ax.com>
Source record: 81071

On Sat, 05 Mar 2005 23:39:44 GMT, Bob Miller <NOSPAM@neosoft.com>
wrote:

>Now that would hurt...

There you go Wes. Do you feel any better now? <G>

Danny, K6MHE

3434. Visualizing radiation pattern

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 02:26:21 UTC
From: kc7jfv@hotmail.com
Message-ID: <781c67d2.0503051826.37a592dd@posting.google.com>
Source record: 80972

Would be nice if someone invents a "X-Ray" like device that lets one to see the radiation pattern emanating from an antenna. That would make it so much easier to see how your antenna works, wouldn't it?

Is it only my dream or such device really exists?

3435. Re: More antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 02:35:02 UTC
From: Dan Richardson <dwr@mailinator.com>
Message-ID: <hoqk215jt6jijalb9sn4vpjs7iume1j3u4@4ax.com>
Source record: 80974

On Sat, 05 Mar 2005 18:48:19 -0700, Wes Stewart <n7ws_@*yahoo.com>
wrote:

>So how many years of *not* having blown down in hurricanes does it
>take to grow a 70' pine tree?

The older they get the easier they fall. We got some 100+ foot white fir trees here that come down at only 40-50 MPH winds. Douglas firs and redwoods normally take a little more wind. Believe me when one of the babies (weighing several tons) come down right next to you house you'll think quite differently. That's why I cleared them out from around my house.

Danny, K6MHE

3436. Re: Visualizing radiation pattern

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 02:40:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fark21hkbnkai50qlkeg0rdkbinqg6e4pp@4ax.com>
Source record: 80975

On 5 Mar 2005 18:26:21 -0800, kc7jfv@hotmail.com (Jim) wrote:
>Is it only my dream or such device really exists?

Hi Jim,

Not a device, but rather from modelers and Mathcad:
http://home.comcast.net/~kb7qhc/antennas/Fields/index.htm

Select the antenna of choice to see the "xray" you speak of.

73's
Richard Clark, KB7QHC

3437. Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 03:05:06 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_422a73e7@fidonet.org>
Source record: 80983

Hi,

Just wondering what adding horizontal parasitics to a UHF loop does?

A*s*i*m*o*v

... "If it ain't broke, you're not tryin!" - Red Green

3438. Re: More antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 03:22:58 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <mIuWd.3021$CW2.875@newsread3.news.atl.earthlink.net>
Source record: 80976

"Joe S." <nobody@nowhere.net> wrote in message
news:d0dp4u02h3m@news3.newsguy.com...
> Pine trees grow like weeds here. A 70-foot pine tree is likely 20 or so
> years old. And, the problem is not just the hurricanes, it's the
> near-hurricanes. Every one of these trees has limbs that were ripped off
> and several of them have tops that were blown out over the past 20 years
or
> so. Most of these are tall and straight enough to produce lumber so the
guy
> who is clearing the lot is not charging anything as he will sell the logs,
> which will more than cover his cost to clear.
>
> We are leaving the low trees and shrubs -- live oaks, bay, coast myrtle,
> etc.
>
>
While clearing the pines I hope you are clearing out all the trees near your
house. One of the home repair shows stated that if you have a bunch of
trees around and remove most of them the ones that are left will blow over
easy. Seems they are depending on each other to help shield the wind. If a
tree is out by its self then it puts down more of a root system and will not
blow over as easy.

3439. Re: More antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 03:47:28 UTC
From: Clarence_A <no@No.com>
Message-ID: <k3vWd.12449$OU1.1681@newssvr21.news.prodigy.com>
Source record: 80977

"Ralph Mowery" wrote
> "Joe S." wrote

> > Pine trees grow like weeds here.
> > A 70-foot pine tree is likely 20 or so years old.
<snip>
> > Most of these are tall and straight enough to produce
> > lumber so the guy who is clearing the lot is not
> > charging anything as he will sell the logs,
> > which will more than cover his cost to clear.
> >

<snip>

My father had ten acres of that kind of "Weeds" cut a while back.
The sale of the logs was enough to retire on for life! Nice of
the guy to not charge you for making him a small fortune!

Logs that size bring from $1,000 to $3,000 each!

3440. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 04:09:31 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <112l0isnalegtee@corp.supernews.com>
Source record: 80978

An equation that I find useful when starting to think about a tradeoff between antenna height of a horizontally polarized antenna and performance is:

Beta-N = ArcSin(N * 74.948/H * F)

N is an integer. H is the height of a horizontal antenna above a flat, perfectly reflecting surface in meters. F is the frequency of operation in MHz. Beta-N is in degrees.

For N = 0, 2, 4, 6 ..., Beta-N is the angle above the horizon of a (theoretical) null.

For N = 1, 3, 5 ..., Beta-N is the angle above the horizon of a maximum.

I store this equation in my calculator and can solve for any of the variables. Thus: at 18 MHz, it takes a height of 32.2 meters to have the first null (above the horizon itself) at 15 degrees (N=2) - and, at the same height, the first peak (N=1) will be at 7.4 degrees.

Of course, the earth is not flat and is not perfectly reflecting (even for horizontally polarized waves) and so on ... However, this equation helps with a first cut.

[For those who use feet, the coefficient is 245.89 rather than 74.948.]

73, Mac N8TT
--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net

3441. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 04:25:06 UTC
From: "aunwin@insightbb.com"
Message-ID: <BCvWd.37205$r55.3476@attbi_s52>
Source record: 80979

I really do not understand what you are getting at.
Your antennas are very small but are outside my interests.

I am looking for as long a hop that I can get on 20 meters
and ofcourse it must accept power.Beyond a 80 foot boom I am
constricted , thus I work backwards and start off with a smaller
antenna to which I apply changes in design to obtain the equivalent
of a 60 foot antenna based on the contour of the main lobe bottom.
(this includes changing the structure so that the gain and
front to back maximises at the same frequency
which is where the f/b is really meaningfull)

This is a long, long way from what you are describing and I might add that
my antenna design must be multi banded when I have attained the 60 foot boom
equivalency. Armed with this achievement I can now proceed to attacking
the
problem of exceeding the 60 foot boom yagi performance by using the now
freed
up land space

Can you re phrase your posting, possibly from a different direction, exacty
what
you are trying to add to this thread especially where it affects what I have
posted.
Regards
Art

ard Clark" <kb7qhc@comcast.net> wrote in message
news:gunj219804i97gss3k8itp9c1agj3ju5bi@4ax.com...
> On Sat, 05 Mar 2005 14:34:11 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>>Thus TOA becomes
>> the most important thing for me as well as the "thickness" of the lobe.
>>That is the sense that your response questioned regarding my maximisation
>>of
>>antenna
>> performance for which I use TOA.
>
> Hi Art,
>
> Back when fractal antennas ruled the sky - at least on paper - the
> bragging rights were carefully tailored to fit the design.
>
> Some of this was arguably targeted to a user population that would

> have enjoyed the advantage. Anyway, such an example is shown at:
> http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm
>
> The fractal flyer, and its superior, simpler cousin the H Flyer showed
> a real, improved, DX response at 10 degrees. This was not their best
> response angle which you call TOA. In fact, both designers studiously
> ignored what you call TOA because it was not particularly notable.
>
> So, as a bald statement, both designs constitute very small antennas
> that exhibit BETTER gain figures at a TOA of 10 degrees than a full
> sized dipole held at a comparable height. Also, these antennas show a
> F/B that is very much better than a full sized antenna. Further, both
> designs, but notably the H Flyer, show full band matching. However,
> having said that, sans actual response levels or context, is having
> said nothing.
>
> However, let's look at the full characteristics, not simply the
> claims:
>
> Best Response:
> Std Dipole 0 dBi @ 90°
> fractal flyer -0.81 dBi @ 39°
> H Flyer -0.6 dBi @ 45°
>
> 10 Deg. Response:
> Std Dipole -7.51 dBi
> fractal flyer -4.85 dBi
> H Flyer -4.75 dBi
>
> 2:1 Match Range:
> Std Dipole 0.85 MHz
> fractal flyer 0.5 MHz
> H Flyer 1.0 MHz
>
> As can be seen, the H Flyer was the best design across the board, IF
> you accepted the limitations originally imposed (very low, very small,
> and scrutinized at 10 degree take off). Does this qualify it as a
> good antenna? Depends on if you are space and height limited.
>
> One last point, as poor as a valuation of -5dBi is, there are very few
> designs (barring the two shown here) that can perform better and still
> fit in the box.
>
> So, let's return to claims, especially for the H Flyer:
> Smallest resonant antenna;
> Highest DX Gain;
> Widest Bandwidth:
> Best F/B;
> Not a Fractal.

>
> 73's
> Richard Clark, KB7QHC

3442. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 05:32:59 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <422a96f7$1_2@127.0.0.1>
Source record: 80980

Wes Stewart wrote:
> Some years ago my wife had hand surgery and afterwards was getting
> physical therapy. Another patient there had lost a thumb to a
> circular saw. They made him a new one out of another finger.

I saw on TV the other day where they made a guy
a new thumb from one of his toes.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

3443. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 07:06:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rbal21tvp2927m3qbr3m38in9mnb89e54a@4ax.com>
Source record: 80981

On Sun, 06 Mar 2005 04:25:06 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>Can you re phrase your posting, possibly from a different direction, exacty
>what
>you are trying to add to this thread especially where it affects what I have
>posted.
=
>> both designs exhibit BETTER gain figures at a TOA of 10 degrees than a full
>> sized dipole held at a comparable height. However,
>> having said that, sans actual response levels or context, is having
>> said nothing.

If you neglect giving us response levels, or context (like height,
length, frequency, ground conditions) then telling us you have a great
10 degree TOA is meaningless.

More to the matter of the thread, it you cannot tell us antenna
location and that location of the intended DX, and the height of the
skip layer, then a great 10 degree TOA could easily be useless.

If this is simply about bragging rights that knowing the DX location
is inconsequential because you will hit somebody, that could as easily
be said about a great 20 degree TOA antenna which makes the great 10
degree TOA antenna another face in the crowd.

>> 73's
>> Richard Clark, KB7QHC
>

3444. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 07:36:35 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d0ebu2$ni9$1@titan.btinternet.com>
Source record: 80982

```
> Beta-N = ArcSin(N * 74.948/H * F)
>
The equation is not doubted.
Could somebody please check that Eznec nulls at N=2 and N=4 agree with it
above a perfect ground.
----
Reg, G4FGQ
```

3445. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 07:52:51 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d0ecsjodb1@titan.btinternet.com>
Source record: 80984

"J. Mc Laughlin" wrote
>
> Beta-N = ArcSin(N * 74.948/H * F)
>
==========

Mac, you are of the same heart as myself.

If you have an equation simple enough to write here which computes the
relative magnitudes of the maximums, could you please oblige?

I could write a program which incorporates it.

Reg, G4FGQ

3446. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 07:54:17 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <JDyWd.2306$c72.2010@bignews3.bellsouth.net>
Source record: 80985

"Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote in message
news:MSGID_1=3a167=2f133.0_422a73e7@fidonet.org...
> Hi,
>
> Just wondering what adding horizontal parasitics to a UHF loop does?
>
> A*s*i*m*o*v
>
> ... "If it ain't broke, you're not tryin!" - Red Green
>
depends - but you CAN make a beam - er a directional antenna
like a quad driven element, and a yagi-type reflector and/or director
element(s).
it works - been done

3447. Re: antenna high

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 07:57:19 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <zGyWd.2316$c72.68@bignews3.bellsouth.net>
Source record: 80986

"Kenneth Opskar" <opskar@online.no> wrote in message
news:cnqWd.956$SL4.14447@news4.e.nsc.no...
> I wonder abt antenna high. How do we count the antenna high? Is it
> referenced from the ground, or the roof of a building. Say I put a 3 el
yagi
> on a mast connected to my roof, apx 5 meters above ground. Does this
> distance from the roof to the ground count, or do I have to put it up
> another 1/2 wave from the roof top ? Any experience?
>
> Regards
> Ken

I would think its the height above ground
if the roof is metal, it could very well be ground.
if its raining, then hmmm

3448. Re: Drill vs. MagMount ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 08:39:37 UTC
From: F8BOE <f8boe-8@bluemail.ch>
Message-ID: <422ac1cb$0$16354$626a14ce@news.free.fr>
Source record: 80987

Hello,

On 2m/70cm some antennas work better when you use a mag mount (Sirio HP2070 for example) because they are tuned to be used with a mag mount: added parasitic capacity between bottom of the mount and the car's steel. Expected you do not drive a 'vette or an Audi...

For lower frequencies it's better to drill holes or to properly ground the antenna to the car, as most mag mounts are not wider than a sq foot and you would quickly be annoyed by the potential differencies between the car's ground and the antenna ground, resulting in HF re-entry problems as your antenna will be then antenna + coax cable and all the hassles of bad and/or variable SWR.

73 de F8BOE Olivier ...-.-

3449. Re: unequal lenght issue

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 11:51:17 UTC
From: ml <m@di.net>
Message-ID: <m-BB0D2A.06511706032005@news.verizon.net>
Source record: 80988

dear rich thank you very much for your responce

I did use a w2du inline choke thing topside I didn't choke the
dataline comming from the tuner up there , my choke place was out of
those nice snap on's i'll get them soon

i do have the smartlock 'box' down to my house so it's not just 12v
going to it however i thought the choke was (on the tuner lines) was
only if say my rf made the tuner malfuction

I ran 18g 8 conductor down (thought some extra pair might come in handy)
of which the tuner uses 4wires the unused currently is just unconn both
ends.

can those control lines somehow get my rf in them and radiate?

rich what do you think of this I left a litte too much slack up to my
at, abut say 2ft didn't know what to do w/it, afraid to make a coil
I folded it back along the coax so it's like a long skinny ovel
--could this be causing my 20m slight interference (i'll presume my 10m
interf is expected)

thanks again

m

In article <u72k21d6j2a9skffbuakn0ahod2em640ma@4ax.com>,
Richard Clark <kb7qhc@comcast.net> wrote:

> On Sat, 05 Mar 2005 11:46:46 GMT, ml <m@di.net> wrote:
> >many have mentioned that using my sgc237 it's better to have the rf
> >hot shorter then the rf gnd/counterpoise
>
> Hi Myles,
>
> I didn't see that/those particular posting(s), but I cannot imagine
> that being an issue.
>
> >got confused here why is that better, i mean understand many have
> >said it prevents the rf gnd from radiating the coax shield (bad)
>
> Sounds like bum advice. However, to snub radiating currents on the
> coax shield you use a choke. The choke can be either with ferrites or
> air winding the coax itself. This was discussed previously in this
> forum, consult the archive with a search against your postings:
> http://groups-beta.google.com/group/rec.radio.amateur.antenna?hl=en&lr=&ie=UTF
> -8

> to get your bearings, and:
> http://groups-beta.google.com/advanced_search?q=&hl=en&lr=&ie=UTF-8&
> to perform a specific search.
>
> I notice from another posting, you report mixed results about
> interfering with TV reception. This can come from a mix of possible
> problems, again, all this has been discussed in previous postings of
> your threads. One thing I see missing in your description of your new
> antenna is confirmation that you have also choked the control lines to
> your SGC 237. If not, do it.
>
> 73's
> Richard Clark, KB7QHC

3450. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 12:17:55 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d0esdj$8gf$1@hercules.btinternet.com>
Source record: 80989

>
> "J. Mc Laughlin" wrote
> >
> > Beta-N = ArcSin(N * 74.948/H * F)
> >
> ========================

There are two typing errors in the above equation.

Beta-N does not mean Beta minus N.
It just means the N'th value of Beta.

And the intended equation should be -

Beta = ArcSin(74.948*N/H/F) degrees.

Alternatively,

Sin(Beta) = 74.948*N/H/F degrees.

That is, divide by F, NOT multiply by F.

Reg, G4FGQ

3451. tower

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 12:41:05 UTC
From: LA7GIA - Ken <opskar@online.no>
Message-ID: <wOCWd.833$ai7.16863@news2.e.nsc.no>
Source record: 80990

I plan to use some of the trees at my QTH as a tower. I have to parallell trees that is apx 50'. At the top they will be abt 15'' thick. They are spaced 20'' which makes it easy to build a ladder so that I can climb up. I plan to build a metal plate and install a rotor on the top of the parallell trees, so that I can turn my 15' boom lengt 3 el 20m yagi beam. This tower would be very cost effective.

Of course I am aware of the potential problems regarding maintenance etc, but does anyone have experience with this kind of tower? Will it be stable, what abt guying etc. Comments is welcome before I settle this project.

3452. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 13:39:00 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_422b09e8@fidonet.org>
Source record: 80998

"Hal Rosser" bravely wrote to "All" (06 Mar 05 02:54:17)
--- on the heady topic of "Re: Circular Parasitic"

HR> Xref: aeinews rec.radio.amateur.antenna:26501

HR> "Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote in
HR> message news:MSGID_1=3a167=2f133.0_422a73e7@fidonet.org...
> Just wondering what adding horizontal parasitics to a UHF loop does?

HR> depends - but you CAN make a beam - er a directional antenna
HR> like a quad driven element, and a yagi-type reflector and/or director
HR> element(s).
HR> it works - been done

You made me recall the cubical quad. But a single loop with yagi-style
elements added each face might have a directed beam pattern instead of
bidirectional? BTW would that work too with circular polarization?

A*s*i*m*o*v

... I'm not loafing, I'm doing research on inertia.

3453. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 14:11:30 UTC
From: "aunwin@insightbb.com"
Message-ID: <mcEWd.98198$tl3.61258@attbi_s02>
Source record: 80991

Now I understand where you are coming from !.
I've given a lot of info out about the antenna
and its attributes, many of which are unique.
Also why I am following this path
I do not consider these posts mention of the attributes such as
feed point height or details regarding F/B as meaningless
and certainly not points about which to argue.
I did ask on another posting if there was anything written on a particular
subject regarding a particular feature but there was no response so there is
not a lot of interest in some aspects
If I have declared something that is impossible I would be happy to debate
it
but at this point I am not ready to publish all details which I am sure that
you
understand
Art

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:rbal21tvp2927m3qbr3m38in9mnb89e54a@4ax.com...
> On Sun, 06 Mar 2005 04:25:06 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>>Can you re phrase your posting, possibly from a different direction,
>>exacty
>>what
>>you are trying to add to this thread especially where it affects what I
>>have
>>posted.
> =
>>> both designs exhibit BETTER gain figures at a TOA of 10 degrees than a
>>> full
>>> sized dipole held at a comparable height. However,
>>> having said that, sans actual response levels or context, is having
>>> said nothing.
>
> If you neglect giving us response levels, or context (like height,
> length, frequency, ground conditions) then telling us you have a great
> 10 degree TOA is meaningless.
>
> More to the matter of the thread, it you cannot tell us antenna
> location and that location of the intended DX, and the height of the
> skip layer, then a great 10 degree TOA could easily be useless.
>
> If this is simply about bragging rights that knowing the DX location

> is inconsequential because you will hit somebody, that could as easily
> be said about a great 20 degree TOA antenna which makes the great 10
> degree TOA antenna another face in the crowd.
>
>>> 73's
>>> Richard Clark, KB7QHC
>>
>

3454. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 14:29:54 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <112m4u33uouqc6c@corp.supernews.com>
Source record: 80992

Providing actual values should have resolved any latent ambiguity.
Nevertheless, I should have assumed the use of a TI calculator.

Beta-sub-N = ArcSin((N * 74.948)/(H * F))

The argument of the ArcSin is the product of N times the indicated
coefficient all divided by the product of the height times the frequency.

Height is in meters. Frequency is in MHz. N is an integer. Even values of
N apply to nulls. Odd values of N apply to peaks. Beta-sub-N is an angle
in degrees measured from the horizon towards the zenith.

The equation assumes an isotropic*, purely horizontally polarized antenna;
and a ground that is flat and has a reflection coefficient of minus-one for
an incident horizontally polarized wave independent of the
angle-of-incidence.

* Note: In this context, isotropic is to be understood to mean broadside
gain is constant and is independent of angle.

Fortunately, broadside to most horizontally antennas and for most
grounds, the conditions are close to being satisfied for Beta up to perhaps
30 degrees. The angles that are important for "DX," I have found to be
between two and twelve degrees. In other words, if long distance contacts
are desired, it is desirable to have most of an antenna's gain be between 2
and 12 degrees above the horizon.

Consider the person who places a 14.2 MHz Yagi at 60 meters (the magic
height above which one has to deal with the FAA). As a first approximation,
such an antenna is expected to have a peak at about 5 degrees and a null at
about 10 degrees. When the band opens, such a system is likely to dominate.
When propagation is better, those with lower antennas might have more gain
at the useful angle.

73 Mac N8TT
--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:d0esdj$8gf$1@hercules.btinternet.com...
> >
> > "J. Mc Laughlin" wrote
> > >
> > > Beta-N = ArcSin(N * 74.948/H * F)
> > >
> > ========================
>

> There are two typing errors in the above equation.
>
> Beta-N does not mean Beta minus N.
> It just means the N'th value of Beta.
>
> And the intended equation should be -
>
> Beta = ArcSin(74.948*N/H/F) degrees.
>
> Alternatively,
>
> Sin(Beta) = 74.948*N/H/F degrees.
>
> That is, divide by F, NOT multiply by F.
> ----
> Reg, G4FGQ
>
>

3455. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 16:33:55 UTC
From: "aunwin@insightbb.com"
Message-ID: <ThGWd.39892$r55.26641@attbi_s52>
Source record: 80993

"J. Mc Laughlin" <jcm@power-net.net> wrote in message
news:112m4u33uouqc6c@corp.supernews.com...
snip

. The angles that are important for "DX," I have found to be
> between two and twelve degrees. In other words, if long distance contacts
> are desired, it is desirable to have most of an antenna's gain be between
> 2
> and 12 degrees above the horizon.

At last reason prevails.......
For DX purposes only the bottom half of the
main lobe is usefull. If your TOA is 13 to 14 degrees which is average
then more than 50 percent of the main lobe is serving no purpose.

If one wants to capture the highest possible number
of DX contacts then the TOA should be the angle where the
upper side of the main lobe is 3db down from the TOA.
Lower than this point renders the antenna useless as propagation sets in.
Mac shows this with a antenna having a TOA at 5 degrees that
has a theoretical NULL at 10 degrees which means 50 percent of
incoming signals are not available to the antenna user

>
> Consider the person who places a 14.2 MHz Yagi at 60 meters (the magic
> height above which one has to deal with the FAA). As a first
> approximation,
> such an antenna is expected to have a peak at about 5 degrees and a null
> at
> about 10 degrees. When the band opens, such a system is likely to
> dominate.
> When propagation is better, those with lower antennas might have more gain
> at the useful angle.
>
> 73 Mac N8TT
> -->> Reg, G4FGQ

Regards

Art

>>
>>
>
>

3456. Re: tower

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 16:40:57 UTC
From: Buck <iam@this.site>
Message-ID: <t5cm215jla1en7te0c3mu4mrq4nqaqd82u@4ax.com>
Source record: 80994

On Sun, 6 Mar 2005 13:41:05 +0100, "LA7GIA - Ken" <opskar@online.no>
wrote:

>I plan to use some of the trees at my QTH as a tower. I have to parallell
>trees that is apx 50'. At the top they will be abt 15'' thick. They are
>spaced 20'' which makes it easy to build a ladder so that I can climb up. I
>plan to build a metal plate and install a rotor on the top of the parallell
>trees, so that I can turn my 15' boom lengt 3 el 20m yagi beam. This tower
>would be very cost effective.
>
>Of course I am aware of the potential problems regarding maintenance etc,
>but does anyone have experience with this kind of tower? Will it be stable,
>what abt guying etc. Comments is welcome before I settle this project.
>
>
>
Assuming you are talking about two parallel trees, not trees grown
together all the way up, I don't think you will have the results you
expect. The trees WILL sway towards and away from each other and
destroy any means of connecting them together. If you were to use one
tree, you might get away with mounting the antenna there.
Unfortunately on a windy day your antenna is subject to being whipped
to pieces as it not only gets hit with the wind at it's natural speed,
but also as the tree whips it back against the wind increasing the
wind load to as much as two to three times or more.

I have never mounted a beam in a tree, but I have mounted verticals at
the tops of trees. I have never had to go up and bring down one of
those verticals. Relative to some of the trees I used, you have a
short tree and if it's fat enough, it may not sway as much.

I would test your theory with an inexpensive or throw-away antenna
first before setting up your beam.

Good luck.

--
73 for now
Buck
N4PGW

3457. Re: More antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 16:41:58 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <qpGWd.3319$CW2.2641@newsread3.news.atl.earthlink.net>
Source record: 80995

"Clarence_A" <no@No.com> wrote in message
news:k3vWd.12449$OU1.1681@newssvr21.news.prodigy.com...
>
> My father had ten acres of that kind of "Weeds" cut a while back.
> The sale of the logs was enough to retire on for life! Nice of
> the guy to not charge you for making him a small fortune!
>
> Logs that size bring from $1,000 to $3,000 each!

Yes I totally agree, before you sign ANYTHING with this guy, get
a logger in there and make some money off this.

WB7FFI

3458. Re: tower

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 16:46:31 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <HtGWd.3323$CW2.523@newsread3.news.atl.earthlink.net>
Source record: 80997

Remember a tree is living, unless you limb the tree and kill it. If
you do, then the tree will start to rot after a while. If you decide to keep
it alive, things will change as the tree continues to grow. Myself I would
prefer a tower, I have strung wire antennas from trees, that works well, IF
you maintain things.
73,
WB7FFI

"LA7GIA - Ken" <opskar@online.no> wrote in message
news:wOCWd.833$ai7.16863@news2.e.nsc.no...
>I plan to use some of the trees at my QTH as a tower. I have to parallell
> trees that is apx 50'. At the top they will be abt 15'' thick. They are
> spaced 20'' which makes it easy to build a ladder so that I can climb up.
> I
> plan to build a metal plate and install a rotor on the top of the
> parallell
> trees, so that I can turn my 15' boom lengt 3 el 20m yagi beam. This tower
> would be very cost effective.
>
> Of course I am aware of the potential problems regarding maintenance etc,
> but does anyone have experience with this kind of tower? Will it be
> stable,
> what abt guying etc. Comments is welcome before I settle this project.
>
>
>
>

3459. Re: Typical Doublet Tension?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 16:47:09 UTC
From: CW <cmagers@earthlink.net>
Message-ID: <94mdnUuCm_2srrbfRVn-ig@comcast.com>
Source record: 80996

I remember reading somewhere about a cure for the squirrels. I believe it was a mixture of cayenne pepper and molasses on the support ropes. I had a cat once that snapped food out of your hand like a dog. Fed him a jalape&#65533;o one day. Cured him.

"Dan/W4NTI" <w4nti@mindNOSPAMATALLspring.com> wrote in message news:dgOVd.610>
> So my answer is; put it up until the squirels find the line and chew it in
> half, then put it back up.
>
> Dan/W4NTI
>
>

3460. Re: AM Radio reception

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 17:46:01 UTC
From: StrikitRich <strikitrich@nospam.excite.com>
Message-ID: <strikitrich-FA4C70.12460106032005@comcast.dca.giganews.com>
Source record: 80999

In article <tspUd.43136$xt.30982@fed1read07>,
"sombra" <sombra@escondido.com> wrote:

> GE Super Radio is a good one
>
> And this works well for an indoor antenna Select-A-Tenna AM Antenna
>
> http://www.ccrane.com/select-am-antenna.aspx

I'll second the GE Super or the Sangean CCRadio. I also have a
Select-A-Tenna which I use with the portables and a hardwired TERK
version which I use with a Denon TU-800. Both work very well, but you
may need to buy a Lazy-Susan to get the best use of the portable radio
with the external loops mentioned.

CCrane is a great place to start looking.

SR1

3461. Re: More antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 17:48:10 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd2mgiq.fm2.bit-bucket@shell.config.com>
Source record: 81000

On Sat, 5 Mar 2005 20:05:38 -0600, Harold Burton wrote:
> "Wes Stewart" <n7ws_@*yahoo.com> wrote:
>> On Sat, 5 Mar 2005 18:16:44 -0600, "Joe S." wrote:
>>> [snip]
>>>
>> I'm likely way off base here and just don't understand Mississippi but
>> I'm reminded of some of my neighbors who buy an acre or two of the
>> most beautiful desert on the planet and blade it to bare ground
>> because they don't like cactus. Or those who move here from somewhere
>> else and complain that it's too hot, it doesn't rain enough, it's too
>> brown, there aren't enough trees, traffic is awful, schools are
>> overcrowded and there are no good paying jobs.
>>
>> Sorry if I offend, I just can't help myself.
>
> You are speaking truth. I've read about the thousands of easterners and
> Worst Coasters who moved to the Arizona desert for their health, insisted on
> planting the same trees and plants that created their allergies back "home"
> and ruined the air in their new home too.

The definition of a developer is someone that cuts down all
the trees and names all the new streets after them.

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

3462. Re: unequal lenght issue

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 18:15:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <d1im21t2j87vj2f7chal01qc0q8610qeke@4ax.com>
Source record: 81001

On Sun, 06 Mar 2005 11:51:17 GMT, ml <m@di.net> wrote:

>can those control lines somehow get my rf in them and radiate?

Oh Yeah!

RF doesn't know one wire from another or coax. It doesn't care. It
is quite promiscuous.

Hi Myles

>rich what do you think of this I left a litte too much slack up to my
>at, abut say 2ft didn't know what to do w/it, afraid to make a coil

No need to be afraid, because:
>I folded it back along the coax so it's like a long skinny ovel
You did. Won't hurt a thing.

73's
Richard Clark, KB7QHC

3463. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 18:22:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <l9im21ptmkhn9tvno6lv9m0317bqt5qi6q@4ax.com>
Source record: 81002

On Sun, 06 Mar 2005 14:11:30 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>Now I understand where you are coming from !.
>I've given a lot of info out about the antenna
>and its attributes, many of which are unique.

Hi Art,

To that, all that info rarely comes in one post or even within the
scope of one thread.

>Also why I am following this path
>I do not consider these posts mention of the attributes such as
>feed point height or details regarding F/B as meaningless
>and certainly not points about which to argue.

No, no argument, simply put, it is needed information to base any
discussion upon. When it is lacking (and when only you can supply
it), then there is no point for discussion. You might want to
consider this in light of your next quoted line:
>I did ask on another posting if there was anything written on a particular
>subject regarding a particular feature but there was no response so there is
>not a lot of interest in some aspects

>but at this point I am not ready to publish all details which I am sure that
>you
>understand
I don't, but that is not the point. If you don't have all the
details, that is fine as long as you say so. This allows
correspondents to add their own insights to help you. If you do have
all the details, and say nothing, there is not much to talk about and
we have to wonder why you are posting at all.

73's
Richard Clark, KB7QHC

3464. Re: More antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 19:24:31 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <4flm215ie1s284p4orn6f0q6q9dbfgnikr@4ax.com>
Source record: 81003

On Sat, 5 Mar 2005 20:16:09 -0600, "Joe S." <nobody@nowhere.net>
wrote:

>Pine trees grow like weeds here. A 70-foot pine tree is likely 20 or so
>years old. And, the problem is not just the hurricanes, it's the
>near-hurricanes. Every one of these trees has limbs that were ripped off
>and several of them have tops that were blown out over the past 20 years or
>so. Most of these are tall and straight enough to produce lumber so the guy
>who is clearing the lot is not charging anything as he will sell the logs,
>which will more than cover his cost to clear.
>
>We are leaving the low trees and shrubs -- live oaks, bay, coast myrtle,
>etc.

Okay, better understood now. As a novice woodworker, I would suggest
that you get a better deal on the timber than just having it removed
"for free." But maybe again I don't understand the economics of MS.

My 35' high Saguaro cacti are probably 150 years old so things work a
little slower here. (g)

I realize that we have to remove vegetation to plant our houses, I
just go ballistic when I see a developer clear cut an area to plant a
dozen California-style stuucoboxes on an acre, when by selective
cutting and building few-higher quality homes he could make just as
much money and cut down (sorry Danny) on the Californication of
Arizona.

3465. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 20:05:56 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <112mok4dr796o21@corp.supernews.com>
Source record: 81004

Needing a break from the exceedingly excruciating task of preparing income taxes, I took a break to investigate what EZNEC/4 has to say.

To facilitate checking and to use an antenna with more vertical pattern than that of a dipole, I used as an antenna the 14.2 MHz five-element Yagi provided with EZNEC. I looked at the first and second peak and the first null (above the horizon) for three types of ground. I also used three heights.

---We all know the uncertainties with estimates of the characteristics of ground, so let us not replay the issue.---

The conductivity in SI units and the relative dielectric constant immediately follow the height in meters. Angles are in degrees above horizon.

H = 22 meters
0.005 13
peak 12.5; null 28.3; second peak 41.6
0.01 14
peak 12.6; null 28.3; second peak 41.6
0.002 10
peak 12.5; null 28.4; second peak 41.6
Use of equation:
N = 1: 13.9; N = 2: 28.7; N= 3: 46.0

H = 33 meters
0.005 13
peak 8.7; null 18.5; second peak 27.8
0.01 14
peak 8.6; null 18.5; second peak 27.6
0.002 10
peak 8.6; null 18.6; second peak 27.7
Use of equation:
N=1: 9.2; N = 2: 18.7; N = 3: 28.7

H = 44 meters
0.005 13
peak 6.6; null 13.8; second peak 20.7
0.01 14
peak 6.7; null 13.8; second peak 20.7
0.002 10
peak 6.6; null 13.8; second peak 20.7
Use of equation:
N = 1: 6.9; N = 2: 13.9; N= 3: 21.1

One could conclude that the farther above ground one is and the smaller the relevant angles are, the better the fit with the equation. Think about why the first peak above real ground occurs at a smaller angle than what would be the case with a perfect ground.

As several have commented, what counts is to have gain at the angles to be used for propagation. The equation provides some useful information but it needs to be understood. No substitute exists for having a horizontally polarized antenna at heights that are appropriate for the task.

One extensive project that I worked on involved distances less than one hop. A significant issue was the desire to minimize gain at low angles where interference resided. Among other things, it was important to suppress vertical radiation as much as possible by choking the transmission lines and by having the wires be close to horizontal.

A point in engineering is to know/learn what the desired end results are and then to use tools that are to-hand to approximate the desired end results. In the case of HF systems, as many have observed, a statistical knowledge of propagation plays a large role.

Back to taxes. Any man-made system of such complexity is inherently inequitable.

73 Mac N8TT

P.S. For receiving purposes, combining a high antenna with an identical antenna about 0.5 WL lower can almost cancel the second lobe and thus attenuate much of the first hop (strong) QRM. Such a scheme does little for transmitting effectiveness. Compare the placement of the null using H= 33 with the second peak using H = 44.

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net

3466. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 20:27:42 UTC
From: "aunwin@insightbb.com"
Message-ID: <2JJWd.40154$r55.33680@attbi_s52>
Source record: 81005

This is not my thread which is about TOA. I did add a posting remarking about
TOA and you took on yourself to say it was meaningless. In your normal
fashion you took on laying a foundation for augument rather than
correcting the term to make it meaningfull.If you contribute to the thread by
giving the correct term for the angle of take off, then many would be
interested.
On the other hand I did initiate a post regarding max gain and F/b being on the
same frequency and the basis or logic that I drew upon to make that
statement.
You often take the aproach that all is known (or you know it all) and if there
is no written evidence pertaining to it then it is false and an augument
then follows.
Now that is you chance for you to wax and wane as to why that logic is faulty
which by being the author I would be duty bound to respond and defend my
statement .
All I do ask for is you keep your responses to the subject at hand and not to invoke
Shakespeare or the Doyle Carte company renderance of the Pirates of Penzance as proof
knoiweledge of your critique.

"Richard Clark" <kb7qhc@cocast.net> wrote in message
news:l9im21ptmkhn9tvno6lv9m0317bqt5qi6q@4ax.com...
> On Sun, 06 Mar 2005 14:11:30 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>>Now I understand where you are coming from !.
>>I've given a lot of info out about the antenna
>>and its attributes, many of which are unique.
>
> Hi Art,
>
> To that, all that info rarely comes in one post or even within the
> scope of one thread.
>
>>Also why I am following this path
>>I do not consider these posts mention of the attributes such as
>>feed point height or details regarding F/B as meaningless
>>and certainly not points about which to argue.

>
> No, no argument, simply put, it is needed information to base any
> discussion upon. When it is lacking (and when only you can supply
> it), then there is no point for discussion. You might want to
> consider this in light of your next quoted line:
>>I did ask on another posting if there was anything written on a particular
>>subject regarding a particular feature but there was no response so there
>>is
>>not a lot of interest in some aspects
>
>>but at this point I am not ready to publish all details which I am sure
>>that
>>you
>>understand
> I don't, but that is not the point. If you don't have all the
> details, that is fine as long as you say so. This allows
> correspondents to add their own insights to help you. If you do have
> all the details, and say nothing, there is not much to talk about and
> we have to wonder why you are posting at all.
>
> 73's
> Richard Clark, KB7QHC

3467. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 21:21:24 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d0fs8k$h5q$1@titan.btinternet.com>
Source record: 81006

If one writes the equation, for elevation angles of nulls and maximums, in terms of free-space wavelength instead of frequency, an even more simple equation is obtained :

Beta = ArcSin(N * Lambda / 4 / Height) degrees.

Where Lambda is free-space wavelength
and Height is height above ground.

When N is odd, Beta corresponds to a maximum in the pattern.
When N is even, Beta correspnds to a null in the pattern.

Reg, G4FGQ

3468. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 21:52:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dptm21tvf1bhc2phhtghd1qgmng4a1n9td@4ax.com>
Source record: 81007

On Fri, 04 Mar 2005 05:41:29 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>I have just come to realise that if one drew a polygon of element phases in
>a array
>and all elements were 180 degrees to its companion element and excluding the
>driven element, the max gain and max front to back will occur at the SAME
>frequency!
>Until now I was of the understanding that these two max figures could not
>occur at
>the same frequency. Is there anything written about this possibility?
>Regards
>Art

OK Art,

This posting has been swinging in the wind for a couple of days now.
Given that you threw your frustration in my face that no one shows any
interest in it. Stop blaming them for their failure to recognize your
genius and get down from Calvary - blame me instead! ;-)

WTF do you mean by
> if one drew a polygon of element phases in a array
and WTF should we care?

73's
Richard Clark, KB7QHC

3469. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 21:58:02 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <112mv6e5oq93uda@corp.supernews.com>
Source record: 81008

Dear Reg:
Quite. I have found it more useful to use frequency.
73 Mac N8TT

P.S. The peaks and nulls suggested by the equation agree quite well when
compared to those resulting from using a "perfect" ground with EZNEC/4 as
long as the angles are less than about 30 degrees. In FS, the Yagi is down
1 db at 21.5 degrees and down 2 db at just under 30 degrees.

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:d0fs8k$h5q$1@titan.btinternet.com...
> If one writes the equation, for elevation angles of nulls and maximums, in
> terms of free-space wavelength instead of frequency, an even more simple
> equation is obtained :
>
> Beta = ArcSin(N * Lambda / 4 / Height) degrees.
>
> Where Lambda is free-space wavelength
> and Height is height above ground.
>
> When N is odd, Beta corresponds to a maximum in the pattern.
> When N is even, Beta correspnds to a null in the pattern.
> ----
> Reg, G4FGQ
>
>

3470. Re: Does a 5/8 wave antenna need a metal ground plane?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 22:26:41 UTC
From: CWB <cboone@nospam.earthlink.net>
Message-ID: <BsLWd.47741$Qz1.37863@fe2.texas.rr.com>
Source record: 81009

A 1/2wl antenna theoretically does not need one because of current
distribution...a 5/8wl on the other hand, does...
(personally, I use a gp on a 1/2wl anyway ;)
On a 5/8wl antenna, use a ground plane...at least (4) 1/4wl radials in
length at 90deg to each other. For max performance, the antenna should be in
the center of a solid metal ground plane at least [1.5*(1/4wl of freq)] x
[the same amount]...on 2m, that would be 28 x 28 inches

Chris
WB5ITT

"bbnn" <jl@fnn.gfd> wrote in message news:cvdk7i02t79@enews4.newsguy.com...
>I know that a 1/4 antenna needs one to work but do 1/2 and 5/8 ant. need a
>metal gnd plane.
> Or will they work on a wooden building?

3471. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 23:03:28 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <AWLWd.6333$Q83.2533@bignews5.bellsouth.net>
Source record: 81010

"Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote in message
news:MSGID_1=3a167=2f133.0_422b09e8@fidonet.org...
"Hal Rosser" bravely wrote to "All" (06 Mar 05 02:54:17)
--- on the heady topic of "Re: Circular Parasitic"

HR> Xref: aeinews rec.radio.amateur.antenna:26501

HR> "Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote in
HR> message news:MSGID_1=3a167=2f133.0_422a73e7@fidonet.org...
> Just wondering what adding horizontal parasitics to a UHF loop does?

HR> depends - but you CAN make a beam - er a directional antenna
HR> like a quad driven element, and a yagi-type reflector and/or director
HR> element(s).
HR> it works - been done

You made me recall the cubical quad. But a single loop with yagi-style
elements added each face might have a directed beam pattern instead of
bidirectional? BTW would that work too with circular polarization?

I assume you could have unidirectional and bidirectional capability.
Depends on lengths of the parasitic elements and proximity to driven
element.
As for circular polarity - I have to admit my ignorance of that subject and
decline comment.
regahds

3472. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-06 23:31:40 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <wpMWd.72656$Dc.5244@trnddc06>
Source record: 81011

Asimov

Do you have an actual application for this circularly polarized
directional UHF antenna with the "loop" included?
A simple "Turnstile" will give good CP. The satellite guys use them with
reflectors.
I can give some information about simple crossed dipole antennas that give
pretty good CP recpiton at VHF.

Jerry

"Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote in message
news:MSGID_1=3a167=2f133.0_422b09e8@fidonet.org...
"Hal Rosser" bravely wrote to "All" (06 Mar 05 02:54:17)
--- on the heady topic of "Re: Circular Parasitic"

HR> Xref: aeinews rec.radio.amateur.antenna:26501

HR> "Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote in
HR> message news:MSGID_1=3a167=2f133.0_422a73e7@fidonet.org...
> Just wondering what adding horizontal parasitics to a UHF loop does?

HR> depends - but you CAN make a beam - er a directional antenna
HR> like a quad driven element, and a yagi-type reflector and/or director
HR> element(s).
HR> it works - been done

You made me recall the cubical quad. But a single loop with yagi-style
elements added each face might have a directed beam pattern instead of
bidirectional? BTW would that work too with circular polarization?

A*s*i*m*o*v

... I'm not loafing, I'm doing research on inertia.

3473. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 01:02:18 UTC
From: "aunwin@insightbb.com"
Message-ID: <uKNWd.40571$r55.25538@attbi_s52>
Source record: 81012

1bhc2phhtghd1qgmng4a1n9td@4ax.com...
> On Fri, 04 Mar 2005 05:41:29 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>>I have just come to realise that if one drew a polygon of element phases
>>in
>>a array
>>and all elements were 180 degrees to its companion element and excluding
>>the
>>driven element, the max gain and max front to back will occur at the SAME
>>frequency!
>>Until now I was of the understanding that these two max figures could not
>>occur at
>>the same frequency. Is there anything written about this possibility?
>>Regards
>>Art
>
> OK Art,
>
> This posting has been swinging in the wind for a couple of days now.
> Given that you threw your frustration in my face that no one shows any
> interest in it.

Not frustration It just shows that no one is aware of any mention of it
in antenna books per my question.We have many experts and antenna book
owners among the group and if one had seen mention of it they would
have replied
It would appear that I have come across something new.
How about that ?

>
> WTF do you mean by
>> if one drew a polygon of element phases in a array
> and WTF should we care?

If your interest is in provoking auguments rather than exploring the
"new " then you will have to go else where. I know who you are and
what you are by personal experience so don't expect that your
tactics will work with me. If you are civil and stick to the subject at
hand then we have communication otherwise forget it.

The posting on TOA has hosted a lot of comment besides yours
and another that point to it as meaningless.Actually
Mac has now added very interesting info that has even got the
attention of Reg which is in my book shows that there is really

an interest which is also evidenced by the extra large number
of postings.
End of discussion

Art KB9MZ

>
> 73's
> Richard Clark, KB7QHC

3474. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 01:11:53 UTC
From: jgboyles@aol.com
Message-ID: <1110157913.512157.58250@o13g2000cwo.googlegroups.com>
Source record: 81013

CW wrote:
> The answers you get on this group are likely to be far less than
useful. I
> would recommend rec.radio.shortwave.

CW, I would suggest you refresh yourself on Signal-to-Noise Ratio, and what it has to do with antennas. I took a look at the shortwave group, and found a lot of garbage with little or no technical content. This thread has had some excellent content, care to explain why it was far less than useful?

3475. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 01:21:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ddan21hd67bd40fsj2qalf4cfq5v5hcg1s@4ax.com>
Source record: 81014

On Mon, 07 Mar 2005 01:02:18 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>It would appear that I have come across something new.

No wonder no one came to this party.

73's
Richard Clark, KB7QHC

3476. Roof Mounting bracket For Rohn HD-70 Mast?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 01:35:44 UTC
From: WS6S <sam@nospam.severs.com>
Message-ID: <060320051735443330%sam@nospam.severs.com>
Source record: 81015

Can anyone tell me of a roof mounting bracket for the Rohn HD-70 mast?
I have a Rohn catalog but can find no mounting for it that they
manufacture. I would like to roof mount one I aquired recently.

73, Sam WS6S

3477. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 01:50:33 UTC
From: Wes Stewart <*n7ws*@yahoo.com>
Message-ID: <cpcn21p94fpvng04qs97hvlche1k4r1jhv@4ax.com>
Source record: 81016

On Sun, 06 Mar 2005 17:21:26 -0800, Richard Clark <kb7qhc@comcast.net>
wrote:

|On Mon, 07 Mar 2005 01:02:18 GMT, "aunwin@insightbb.com"
|<aunwin@insightbb.com@insightbb.com> wrote:
|
|>It would appear that I have come across something new.
|
|No wonder no one came to this party.

It could be new, but he can't tell us about, so how do we know?

3478. master amps?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 02:10:48 UTC
From: ml <m@di.net>
Message-ID: <m-78B259.21104206032005@news.verizon.net>
Source record: 81017

just wondering if anyone had any knowledge of the blounder tongue tv master at amp-- it's used in my 13story apt building

I can't read the model number looks like it must be at least a few yrs old by guess

how are they hf interference wise?? I put a ice tvi filter in front of it but still get a little tvi on 20m on older tvs and a ton on 10(all sets)

think an additional filter after the amp might help

would replacing the amp w/a newer /better one help ?

any tips suggestons appreciated just looking to see if anyone has experience w/this

tnx

3479. Re: More antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 02:22:58 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <6WOWd.4049$CW2.3140@newsread3.news.atl.earthlink.net>
Source record: 81018

"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:4flm215ie1s284p4orn6f0q6q9dbfgnikr@4ax.com...
> On Sat, 5 Mar 2005 20:16:09 -0600, "Joe S." <nobody@nowhere.net>

> when by selective cutting and building few-higher quality homes he could
> make just as
> much money and cut down (sorry Danny) on the Californication of Arizona.

Geeez I haven't seen that term used since Gov Tom McCall of Oregon,
stated: Californians come here and spend your money on vacations then GO
HOME. That was supposed to be a joke but nobody took it that way.

3480. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 03:46:48 UTC
From: "aunwin@insightbb.com"
Message-ID: <I8QWd.41423$r55.37037@attbi_s52>
Source record: 81019

Wes,
I described a polygon of element phases where pairs of elements were equal
and opposite and where the director was either alone or was joined by
another
element of the same phase. This polygon aproach was used often before the
computor era A polygon as described above not only makes for a wide single
direction lobe but enforces among other things the same frequency for both
parameters i.e. gain and f/b
If such a polygon can be drawn as stated above it shows that it is possible.
I don't see how anything can be added to the above to emphasise the point
I am making which is why I asked if anybody knew of any book references to
the above.
If you are not aware of the phase polygon aproach I can find you a
reference. or, if you prefer;
a simulated diagram of a polygon that illustrates my point .
If that is beyond your ken I could also mail to you a computor compilation
of
phase and currents of an array that also illustrates my point.
But my main question still remains a pointer to a technical article that
discusses the possibility or impossibility of what I have stated.
If you have a deeper interest in the subject I could supply
to you alone the whole computor model of such an antenna
and a photograph of the actual antenna which is for 20 meters.
All I would ask for is complete privacy of what I provide as I
have a further pursuit connected with the above.
Regards
Art

Stewart" <*n7ws*@ yahoo.com> wrote in message
news:cpcn21p94fpvng04qs97hvlche1k4r1jhv@4ax.com...
> On Sun, 06 Mar 2005 17:21:26 -0800, Richard Clark <kb7qhc@comcast.net>
> wrote:
>
> |On Mon, 07 Mar 2005 01:02:18 GMT, "aunwin@insightbb.com"
> |<aunwin@insightbb.com@insightbb.com> wrote:
> |
> |>It would appear that I have come across something new.
> |
> |No wonder no one came to this party.
>
> It could be new, but he can't tell us about, so how do we know?
>

3481. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 04:04:42 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_422bd6cb@fidonet.org>
Source record: 80925

"Jerry Martes" bravely wrote to "All" (06 Mar 05 23:31:40)
--- on the heady topic of "Re: Circular Parasitic"

JM> From: "Jerry Martes" <j.jmartes@verizon.net>
JM> Xref: aeinews rec.radio.amateur.antenna:26527

JM> Do you have an actual application for this circularly polarized
JM> directional UHF antenna with the "loop" included?

Just curious about the UHF loop antenna as it is said to have a gain
of +1dB in the vertical position and -3dB in the horizontal position.

JM> A simple "Turnstile" will give good CP. The satellite guys use them
JM> with reflectors.

IIRC satellite folk use double or quad counter-rotating wire
corkscrews sticking out of a reflector don't they? A turnstile seems
pretty much omnidirectional but doesn't it need to be phased somehow?

JM> I can give some information about simple crossed dipole antennas
JM> that give pretty good CP recpiton at VHF.

This would be the same phasing techniques as with the turnstile? I've
seen a large 6 element array near my area and that impressed me but I
think the neighbours would be forming a posse if they saw one here.

BTW I made a portable antenna for low vhf using a 3/4 in. dia. plastic
curtain rod as a long coil form. The conductor is wound around the 6
ft long plastic rod with about 1/4 inch spacing. It works okay but it
is quite sensitive to proximity effects due to the spread inductance
and the 200pF cap used to series resonnate it. It is far shorter than
the wavelengths it receives but does the job. It isn't classy.

A*s*i*m*o*v

... CAUTION: I drive just like you do!

3482. Re: master amps?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 04:18:19 UTC
From: dplatt@radagast.org
Message-ID: <112nlgbf6o0do69@corp.supernews.com>
Source record: 81020

>how are they hf interference wise?? I put a ice tvi filter in front of
>it but still get a little tvi on 20m on older tvs and a ton on 10(all
>sets)

>think an additional filter after the amp might help

Might also try filtering the AC power line cords. It's not unusual
for TV sets to suffer from RF incursion through the power supply.
Adding a ferrite or two to each set (one on the power cord, on as a
common-mode choke for the coax from the distribution amplifier) as
close as possible to the set may help.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3483. Re: How can I measure or observe my hf antenna's take off angle?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 04:25:01 UTC
From: richardharrison@webtv.net
Message-ID: <2126-422BD79D-126@storefull-3252.bay.webtv.net>
Source record: 80922

Art Unwin wrote:
Gon`t professionals use the term (take off angle)?"

The FCC publishes vertical radiation patterns for grounded vertical radiators of several heights between 0.25 and 0.625 wavelengths. These and selected other curves are made a part of the rules. These curves must be used to compute the probable skywave intensity in another station`s service area whenever it appears a questionable interference may occur. Skywave computations are approximate but give results which are reliable over a fairly predictable percentage of the time.

The term used by the FCC is "elevation angle" or departure angle. The FCC governs radiation.

Determining radiation from broadcast stations is a job for professionals who use the term "elevation angle".

Best regards, Richard Harrison, KB5WZI

3484. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 04:34:21 UTC
From: BKR <TAKEOUTTHISPARTrchvid7@lycos.comREMOVE>
Message-ID: <112nmfi5dhep5b6@corp.supernews.com>
Source record: 81021

A quagi type antenna seems to be close to what you want.
Try these links:

http://www.geocities.com/garyntricia/quagi.html
http://commfaculty.fullerton.edu/woverbeck/quagi.htm

Asimov wrote:
> Hi,
>
> Just wondering what adding horizontal parasitics to a UHF loop does?
>
> A*s*i*m*o*v
>
> ... "If it ain't broke, you're not tryin!" - Red Green
>

3485. Satellite TV for FREE!!!! (Decoders) 74bSViR

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 05:57:09 UTC
From: "Mr. Amazing!!!!!!!!" <MbuvB@4iA9uPmZ.com>
Message-ID: <252a$422bed35$83d8a3c5$4945@allthenewsgroups.com>
Source record: 80923

New XP2500A
The World's #1 Digital Satellite Television
Receiver Descrambler is Now Available to you!!!!!

Order Yours at: http://www.fta9000.3322.org

No Monthly Subscription Charges of ANY Sort!
No Service Contracts of ANY Sort!
No Telephone Connections of ANY Sort!!!!
Does NOT use ANY Sort of Satellite Access Card
The World's Number One "Cardless" Satellite Receiver!!!!

A NEW Product for the NEW Year of 2005
Our New XP2500A Digital Satellite Television Receiver Descrambler allows you to view at your convenience the following with the USA, Canada, Cuba, Bahamas, Jamaica, Virgin Islands and Mexico:

View Over 600+ Digital Television Stations FREE! (Everything!)
View Over 200+ Digital Commercial Free Music Stations FREE !(all categories)
View Over 40 Pay-Per-View Movies Channels FREE!
View 8 HBO's/5 Cinemax's/10 Showtime's/8 Starz, etc. FREE!
View Seven Adult Channels FREE FREE FREE 24 Hours A Day (Non-Stop Action)!
Boxing/Football/Soccer/Baseball/Basketball ALL Sports Packages FREE (With No Black Outs)!
Receive Home-Town Local Broadcast Television Stations from 4 Time Zones
Use this New Television Descrambler at Home/Office/Truck/RV etc.
Works In the USA and Canada plus ALL of North and South America and Territories!
Works on: Nagravision, Seca, Viaccess #1 and #2, Irdeto One and Betacrypt Digital Satellite Signals!!!!

NOTE TO AUSTRAILIANS: We get many request about the Australia's "Foxtel Channel". Our New XP2500A Receiver works nearly ANY where in the world - but it will NOT receive "Australia's FOXTEL Broadcast Channel" as of yet.....they use Irdeto #2 a Decoding System.....so wait patiently - our Descrambling Technicians are working HARD on this one, to brake the code.
International Customers.

Our NEW XP2500A Digital Satellite Television Receiver - NOW UNSCRAMBLES THE FOLLOWING SIGNALS:
ABsat
ABS-CBN
Arabesque (ART)
Astro TV
BBC Prime
C+ NL
Canada's Bell ExpressVU
Canal + France
Canal 7 TV Madrid
Canal Pro TV

Canal Rural
Canal Rural
Canal Satellite
Canal Sky-net
Canal+ Digital
Canal+ Digital Aerial
Canal+ Vlanderen
CanalSat
CFI Peco Pro
Channel RAI TV
Cine+ Digital
Cohem sweden
C-SKY NET
CYFRA+
DigiFunClub
Digital+
Dish Network (USA)
Dream TV
EMI Special Channel
Eurosport
Euskaltel
FT Cable
Globe Cast MMBN
GlobeCast
GlobeCast Espana
GlobeCast France
HRT
MCM Europe
Mediaset
Mediavision
MiniMax
MMBN
MTV networks
Orbit Network
ORF Austria
Parabole reunion
Polsat
Premiere
SABC
Selector Tele
Senda/Boxer
SRG Swiss
SVT Europa
Taipei International
TBL TV
Televisa
TPS
TV Cabo
TV Slovenia
TVBS

ViaSat Europe
ViaSat Nordic

Okay.....So STOP PAYING THOSE MONTHLY SUBSCRIPTION COST FOR SUBSCRIPTION CABLE OR SATELLITE TELEVISION��
Get Our New XP2500A Digital Satellite Television Receiver Now - go to the URL below NOW:

Don't Delay Order Yours at: http://www.fta9000.3322.org

1j0iuYHpyRlJ1vZKyQJbslKgQ0DNTZYT

3486. Re: Drill vs. MagMount ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 07:02:29 UTC
From: Everett <news.20.038099@spamgourmet.com>
Message-ID: <s8TWd.828$QK1.494@fe03.lga>
Source record: 80924

Thanks Oliver, very clear.

73 with gratitude
Everett

"F8BOE" <f8boe-8@bluemail.ch> wrote in message
news:422ac1cb$0$16354$626a14ce@news.free.fr...
> Hello,
>
> On 2m/70cm some antennas work better when you use a mag mount (Sirio
> HP2070 for example) because they are tuned to be used with a mag mount:
> added parasitic capacity between bottom of the mount and the car's steel.
> Expected you do not drive a 'vette or an Audi...
>
> For lower frequencies it's better to drill holes or to properly ground the
> antenna to the car, as most mag mounts are not wider than a sq foot and
> you would quickly be annoyed by the potential differencies between the
> car's ground and the antenna ground, resulting in HF re-entry problems as
> your antenna will be then antenna + coax cable and all the hassles of bad
> and/or variable SWR.
>
> 73 de F8BOE Olivier ...-.-
>

3487. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 08:29:20 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <AhUWd.57350$EL5.24269@trnddc05>
Source record: 80926

"Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote in message
news:MSGID_1=3a167=2f133.0_422bd6cb@fidonet.org...
"Jerry Martes" bravely wrote to "All" (06 Mar 05 23:31:40)
--- on the heady topic of "Re: Circular Parasitic"

JM> From: "Jerry Martes" <j.jmartes@verizon.net>
JM> Xref: aeinews rec.radio.amateur.antenna:26527

JM> Do you have an actual application for this circularly polarized
JM> directional UHF antenna with the "loop" included?

Just curious about the UHF loop antenna as it is said to have a gain
of +1dB in the vertical position and -3dB in the horizontal position.

JM> A simple "Turnstile" will give good CP. The satellite guys use them
JM> with reflectors.

IIRC satellite folk use double or quad counter-rotating wire
corkscrews sticking out of a reflector don't they? A turnstile seems
pretty much omnidirectional but doesn't it need to be phased somehow?

JM> I can give some information about simple crossed dipole antennas
JM> that give pretty good CP recpiton at VHF.

This would be the same phasing techniques as with the turnstile? I've
seen a large 6 element array near my area and that impressed me but I
think the neighbours would be forming a posse if they saw one here.

BTW I made a portable antenna for low vhf using a 3/4 in. dia. plastic
curtain rod as a long coil form. The conductor is wound around the 6
ft long plastic rod with about 1/4 inch spacing. It works okay but it
is quite sensitive to proximity effects due to the spread inductance
and the 200pF cap used to series resonnate it. It is far shorter than
the wavelengths it receives but does the job. It isn't classy.

A*s*i*m*o*v

Asimov

At first I was thinking that you were curious about building a UHF antenna
with a loop as the driven element then try to include some parasitic dipoles
to produce some directivity. I couldnt offer any thoughts on that. But,
when you mentioned circular polarization and directivity, I wondered why you
wouldnt consider a helix for UHF.

On loopgain --
I wouldnt want to argue about the gain of a loop being anything above or
below that of a dipole. I would expect a loop to have very nearly the same

gain (directivity) as the dipole. I even thought that small loops have exactly the same pattern shape as a short dipole. That would make their gain the same if their efficiency is good.

On turnstile --
The turnstile is two crossed dipoles in the same plane fed 90 degrees out of phase. It produces RHCP in one direction and LHCP in the other direction.
The antenna I use is two crossed dipoles spaced 1/4 wave apart and fed in phase. That gives good RHCP (or LHCP, whichever you want) toward both directions.

Jerry

3488. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 13:14:47 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <422c5419$1_5@newsfeed.slurp.net>
Source record: 80927

JM> Do you have an actual application for this circularly
polarized directional UHF antenna with the "loop" included?

A*s*i*m*o*v >Just curious about the UHF loop antenna as it is
said to have a gain of +1dB in the vertical position and -3dB
in the horizontal position.

A planar, circular loop of diameter ~0.1 lambda is linearly polarized, with peak gain* in the plane of the loop. This loop will have vertical polarization when in the vertical position, and horizontal polarization when in the horizontal position.

Lacking ~equal h-pol & v-pol gain at the same time, such a loop is not circularly polarized -- even though the physical configuration of the loop is a circle.

*theoretically about 1.74dBi (far field, free space)

RF

3489. Good fox kit / schematic?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 14:55:01 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <1110207301.317793.237380@l41g2000cwc.googlegroups.com>
Source record: 80928
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Does anyone have experience with a good (and preferably inexpensive)
fox kit that has a range of atleast 30 miles? I don't have a frequency
range in mind, and am open to suggestions. Any additional suggestions
regarding the best equipment/antenna to track it with is also
appreciated.

Thanks in advance!
Dave

3490. Re: tower

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 15:43:05 UTC
From: steve <stephen.lawrence@btinternet.com>
Message-ID: <d0hsq9jus1@hercules.btinternet.com>
Source record: 80929

No let me look at the calendar is it 1st April!.

Sorry this is just too unbelivable!,

"LA7GIA - Ken" <opskar@online.no> wrote in message
news:wOCWd.833$ai7.16863@news2.e.nsc.no...
>I plan to use some of the trees at my QTH as a tower. I have to parallell
> trees that is apx 50'. At the top they will be abt 15'' thick. They are
> spaced 20'' which makes it easy to build a ladder so that I can climb up.
> I
> plan to build a metal plate and install a rotor on the top of the
> parallell
> trees, so that I can turn my 15' boom lengt 3 el 20m yagi beam. This tower
> would be very cost effective.
>
> Of course I am aware of the potential problems regarding maintenance etc,
> but does anyone have experience with this kind of tower? Will it be
> stable,
> what abt guying etc. Comments is welcome before I settle this project.
>
>
>
>

3491. What if doublet bends a bit laterally?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 16:47:44 UTC
From: Jim Miller <jim@jtmiller.com>
Message-ID: <1110214064.353466.58450@g14g2000cwa.googlegroups.com>
Source record: 80930

Still working out how to put up my 88ft doublet. One option puts the midspan support a bit off the natural fall line. The result is that in addition to the modest double catenary droops made possible by midspan support it would also bend by perhaps 1 to 2ft off the normal gravity plane right at the midspan support.

This would allow me to put it deeper into the woods and away from neighbors' eyes.

Is this a big problem?

tnx
jtm

3492. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 17:08:24 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <cU%Wd.42023$uc.41263@trnddc01>
Source record: 80931

Richard

Do you know the approximate input impedance of a 0.1 lambda diameter
single turn loop?

Jerry

"Richard Fry" <rfry@adams.net> wrote in message
news:422c5419$1_5@newsfeed.slurp.net...
> JM> Do you have an actual application for this circularly
> polarized directional UHF antenna with the "loop" included?
>
> A*s*i*m*o*v >Just curious about the UHF loop antenna as it is
> said to have a gain of +1dB in the vertical position and -3dB
> in the horizontal position.
> _____________
>
> A planar, circular loop of diameter ~0.1 lambda is linearly polarized,
> with peak gain* in the plane of the loop. This loop will have vertical
> polarization when in the vertical position, and horizontal polarization
> when in the horizontal position.
>
> Lacking ~equal h-pol & v-pol gain at the same time, such a loop is not
> circularly polarized -- even though the physical configuration of the loop
> is a circle.
>
> *theoretically about 1.74dBi (far field, free space)
>
> RF

3493. Re: What if doublet bends a bit laterally?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 17:35:48 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <e64p2192igdvd24m6grpla40fblqd1vdhu@4ax.com>
Source record: 80932

On 7 Mar 2005 08:47:44 -0800, "Jim Miller" <jim@jtmiller.com> wrote:

>Still working out how to put up my 88ft doublet. One option puts the
>midspan support a bit off the natural fall line. The result is that in
>addition to the modest double catenary droops made possible by midspan
>support it would also bend by perhaps 1 to 2ft off the normal gravity
>plane right at the midspan support.
>
>This would allow me to put it deeper into the woods and away from
>neighbors' eyes.
>
>Is this a big problem?

No, it's not even a little problem.

3494. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 18:43:56 UTC
From: richardharrison@webtv.net
Message-ID: <29879-422CA0EC-300@storefull-3253.bay.webtv.net>
Source record: 80934

Art Unwin wrote:
"But my main question still remains a pointer to a technical article
that discusses the possibility or impossibility of what I have stated."

I don`t get the question, but it seems to me, Art wants to know if anyone has written of a method to make maximum gain correspond with maximum front-to-back ratio in a Yagi.

I haven`t seen it. There is a third factor in the compromise, 50-ohm feedpoint (or some other convenient impedance).

Kraus gives the Yagi-Uda story in "Antennas" There has been much experimentation and the tradeoffs still exist. Don`t close the patent office yet. Almost everything can be improved. Art may be implying that he thinks he has a way to make a better Yagi. I hope so.

The "ARRL Antenna Book" is a good place to see where the art was at the time of publication. The Antenna Book devotes a chapter to the Yagi, No. 11 in my 19th edition. The directional patterns show a pair of troublesome sidelobes in addition to the mainlobe. It`s the sidelobes which are suppressed at the sacrifice of a little gain. Parasitic arrays are close-spaced for significant excitation. Close-spacing means close-coupling which lowers the drivepoint impedance. It`s a tradeoff again because low impedance eventually limits the antenna`s efficiency.

Best regards, Richard Harrison, KB5WZI

3495. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 18:43:58 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <422ca141_4@newsfeed.slurp.net>
Source record: 80933

"Jerry Martes"
> Do you know the approximate input impedance of
> a 0.1 lambda diameter single turn loop?

About 2.5 ohms.

RF

3496. Re: What if doublet bends a bit laterally?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 19:09:53 UTC
From: Al - VA3KAI <niittyma@sympatico.ca>
Message-ID: <PF1Xd.8313$JH1.431852@news20.bellglobal.com>
Source record: 80936

The only problem might be that burying 1 leg only into the woods may impact matching at higher frequencies - the doublet may become less "balanced" due to proximity to moist vegetation, especially during the summer and rainy times. I have found that lower frequencies are less impacted by trees, etc.

As far as bending the doublet, as long as any bend isn't more than about 90 degress (as a rule of thumb), it should work just fine - try to keep both legs more-or-less symetrical. Most of the radiation is from near the feed-point so the longer the wires before bending or drooping the better. Just some thoughts from my past experiences and previously published comments I have read before.

Good luck..... al, va3kai

"Jim Miller" <jim@jtmiller.com> wrote in message news:1110214064.353466.58450@g14g2000cwa.googlegroups.com...

> Still working out how to put up my 88ft doublet. One option puts the
> midspan support a bit off the natural fall line. The result is that in
> addition to the modest double catenary droops made possible by midspan
> support it would also bend by perhaps 1 to 2ft off the normal gravity
> plane right at the midspan support.
>
> This would allow me to put it deeper into the woods and away from
> neighbors' eyes.
>
> Is this a big problem?
>
> tnx
> jtm
>

3497. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 19:13:14 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <eJ1Xd.66266$uc.26297@trnddc08>
Source record: 80935

"Richard Fry" <rfry@adams.net> wrote in message
news:422ca141_4@newsfeed.slurp.net...
> "Jerry Martes"
>> Do you know the approximate input impedance of
>> a 0.1 lambda diameter single turn loop?
> ----------
>
> About 2.5 ohms.
>
> RF

Richard

Can you guide me to a web site where that loop input impedance is given in R+jX? I will set up and measure some loop input impedance at 137 MHz within the next few days. But, I'd like to have a better "feel" for what I'm doing before I take time to build the loop and set up the test equipment.

Thanks
Jerry

3498. Ham Radio Forums

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 19:34:28 UTC
From: Eric <k4sci@hamradioforums.com>
Message-ID: <1110224068.934901.149740@f14g2000cwb.googlegroups.com>
Source record: 80937

Come and visit Ham Radio Forums at http://www.hamradioforums.com -
Registration only takes a minute, and the site has many features for
registered users.

Ham Radio Forums has a Photo Classifieds section where you can buy,
sell, and auction your gear with up to 3 pictures per listing! There
is a Photo Galleries department where every user gets 10 megs of photo
storage, Ham related or not! The extensive Forums section allows you
to read and post messages about anything Ham related. Registered users
have full access to the chat rooms, fully integrated into the site.
And there is an Articles section, where users can publish articles Ham
related.

And it's all FREE! So come check it out at
http://www.hamradioforums.com

Thank You,

k4sci

3499. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 19:36:24 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <112pb9u2csf5pbb@corp.supernews.com>
Source record: 80938

There's yet another tradeoff -- bandwidth, of both the pattern and the impedance. Close spacing, in particular, reduces the range of frequencies over which the pattern is acceptable ("acceptable" being in itself subject to compromise) and over which the SWR is acceptable. But close spaced or not, it's much easier to tweak a design to work perfectly at a single frequency than make one that will retain some semblance of that perfection over a wider range of frequencies.

Roy Lewallen, W7EL

Richard Harrison wrote:
> Art Unwin wrote:
> "But my main question still remains a pointer to a technical article
> that discusses the possibility or impossibility of what I have stated."
>
> I don`t get the question, but it seems to me, Art wants to know if
> anyone has written of a method to make maximum gain correspond with
> maximum front-to-back ratio in a Yagi.
>
> I haven`t seen it. There is a third factor in the compromise, 50-ohm
> feedpoint (or some other convenient impedance).
>
> Kraus gives the Yagi-Uda story in "Antennas" There has been much
> experimentation and the tradeoffs still exist. Don`t close the patent
> office yet. Almost everything can be improved. Art may be implying that
> he thinks he has a way to make a better Yagi. I hope so.
>
> The "ARRL Antenna Book" is a good place to see where the art was at the
> time of publication. The Antenna Book devotes a chapter to the Yagi, No.
> 11 in my 19th edition. The directional patterns show a pair of
> troublesome sidelobes in addition to the mainlobe. It`s the sidelobes
> which are suppressed at the sacrifice of a little gain. Parasitic
> arrays are close-spaced for significant excitation. Close-spacing means
> close-coupling which lowers the drivepoint impedance. It`s a tradeoff
> again because low impedance eventually limits the antenna`s efficiency.
>
> Best regards, Richard Harrison, KB5WZI
>

3500. Re: What if doublet bends a bit laterally?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 19:58:44 UTC
From: Jim Miller <jim@jtmiller.com>
Message-ID: <1110225524.515146.91570@o13g2000cwo.googlegroups.com>
Source record: 80939

Both halves of the doublet will be rather equally hidden in the woods. The bend would result in the halves of the doublet departing from nominal collinearity by about 5°. The droop on either side of the feedpoint would be the same as any other center supported doublet. The center support is there to relieve the doublet of the need to support the weight of the feedline.

tnx
jtm

3501. Re: What if doublet bends a bit laterally?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 20:01:52 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <422cb41c$1_1@127.0.0.1>
Source record: 80940

Jim Miller wrote:
> Both halves of the doublet will be rather equally hidden in the woods.
> The bend would result in the halves of the doublet departing from
> nominal collinearity by about 5ï¿½. The droop on either side of the
> feedpoint would be the same as any other center supported doublet. The
> center support is there to relieve the doublet of the need to support
> the weight of the feedline.

A 75% drop in radiated signal is approximately one S-unit.
How many S-units difference do you think a 5ï¿½ difference
will make?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

3502. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 20:35:20 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <422cbb5b_1@newsfeed.slurp.net>
Source record: 80941

"Jerry Martes"
> Can you guide me to a web site where that loop
> input impedance is given in R+jX?

I don't know of one off-hand. Maybe Google, or you could download free
EZNEC to experiment with.

If it will do, a quick NEC-2 model of a ~0.1 lambda diameter loop I just did
shows 2.20831E+0, -1.31989E+03. This R is a little lower than the first
number I posted -- which I had looked up in Kraus, 3rd edition.

RF

3503. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 20:36:55 UTC
From: "aunwin@insightbb.com"
Message-ID: <HX2Xd.42778$Ze3.34530@attbi_s51>
Source record: 80942

Yes Richard that is exactly the case.
I have a case where F/B is at
the same frequency as max gain and I have not come across that before
so I asked those well versed in antenna design if this had been discussed
before,
Yes, it is an alternative to a yagi but nowhere as simplistic to build, for
that the yagi is hard to beat, As it happens the feed point impedance of
less than 2:1
at 50 ohms is easily obtained across the 20 meter band , the primary design
It compares to a 60 foot boom yagi and change of feed point can produce
higher impedance
but its beam width is not as narrow , the
elevation angle for max gain (TOA) is 10 degrees which is some what lower
than the norm
. I have been working on this design for some time now and have all the
parts
made for a actual antenna, The winter has been
very harsh in the midwest but with good weather tomorrow I should be able
to put it together and put it up as there is no need to use the prop pitch
rotor
which is hard to install in cold or blustery weather as I get older.
. The turning radius by the way is somewhat less
than a tight two element yagi and is of a design where frontal side lobes
have not
come into play. Because of mechanical difficulties I do not see it replacing
a yagi
but that was not the intent in the first place, I just like to explore and
experiment
and try to work from first principles rather than be tied to well known
paths of the past
As a point of interest Roy I use 300 segments per halfwave length. to double
check
my designs but who knows ,it may still be a case of garbage! If the antenna
is not
broken then I have not tried hard enough and I have broken many antennas in
my time
As a point of interest I would direct you to past postings where I describe
close coupling
to the driven element to attain for an impedance of choice and can be
adapted
for use in any array.You may remember Roy checking out one of my designs on
his page
(13 elements on a 60 or 80 foot boom) ere coupling achieved the 50 oihm
feed

as desired

Regards
Art

.
"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:29879-422CA0EC-300@storefull-3253.bay.webtv.net...
> Art Unwin wrote:
> "But my main question still remains a pointer to a technical article
> that discusses the possibility or impossibility of what I have stated."
>
> I don`t get the question, but it seems to me, Art wants to know if
> anyone has written of a method to make maximum gain correspond with
> maximum front-to-back ratio in a Yagi.
>
> I haven`t seen it. There is a third factor in the compromise, 50-ohm
> feedpoint (or some other convenient impedance).
>
> Kraus gives the Yagi-Uda story in "Antennas" There has been much
> experimentation and the tradeoffs still exist. Don`t close the patent
> office yet. Almost everything can be improved. Art may be implying that
> he thinks he has a way to make a better Yagi. I hope so.
>
> The "ARRL Antenna Book" is a good place to see where the art was at the
> time of publication. The Antenna Book devotes a chapter to the Yagi, No.
> 11 in my 19th edition. The directional patterns show a pair of
> troublesome sidelobes in addition to the mainlobe. It`s the sidelobes
> which are suppressed at the sacrifice of a little gain. Parasitic
> arrays are close-spaced for significant excitation. Close-spacing means
> close-coupling which lowers the drivepoint impedance. It`s a tradeoff
> again because low impedance eventually limits the antenna`s efficiency.
>
> Best regards, Richard Harrison, KB5WZI
>

3504. Re: New URL for W2DU Web Page plus Quadrifilar Helix in Reflections 2

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 20:45:24 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <f0fp21t33tfkmvu0ghaihthlipt0905a02@4ax.com>
Source record: 80943

Sorry to report that as of Sunday Mar 6, several of my reference pages
are no longer found on my web page. I am investigating as to the
reason for their disappearance. It's especially disturbing that the
pages referring to the quadrifilar helix antenna research are among
the missing. I will get the missing files back on the web page as soon
as possible.

Sorry for the inconvenience to those who are looking for the QHA data.

Walt, W2DU

On Thu, 03 Mar 2005 19:43:58 GMT, Walter Maxwell <w2du@iag.net> wrote:

>The new URL for my web page is w2du.com. My new email address is
>walt@w2du.com.
>
>Please use my new web page URL when accessing it. My page will soon
>have new material added, but for now it has only selected chapters
>from Reflections 2, which include the R&D report of my RCA research on
>the quadrifilar helix antenna flying on all TIROS-N NOAA
>polar-orbiting weather spacecraft. The research included antenna
>pattern and impedance measurements I made on more than a thousand
>different electrical and physical configurations of the antenna in the
>late 1970's that produced the one used on the TIROS-N spacecraft. A
>picture of the test model used in the measurements appears in my R&D
>report.
>
>Walt Maxwell, W2DU

3505. Re: How do radio waves work?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-07 23:34:00 UTC
From: dougmc@frenzy.com
Message-ID: <Ix5Xd.54582$SQ4.14010@fe1.texas.rr.com>
Source record: 80944

In article <24890-421E3CF2-276@storefull-3255.bay.webtv.net>,
Richard Harrison <richardharrison@webtv.net> wrote:

| My physics book says:
| "--Gravity waves, which should have many similarities to electromagnetic
| waves even though as far as is known there is no direct connection
| between the twp types of waves."
|
| Also something the book, although I can`t find it right now, says:
| Masses don`t exert gravitational forces on each other based upon where
| they have been but instead upon upon where they are located right now.
| In other words, there is no delay in the transmission of gravitational
| forces. This is different from electromagnetic forces which are
| transmoitter at no faster than the speed of light.
|
| If the velocity of a gravitational wave is infinite, how could frequency
| and wavelemngth have any meaning for it?

I believe that gravity waves are expected to travel at the speed of
light as well. If not, then that would probably violate general
relativity as it would give you a way to transmit information faster
than the speed of light. (Though sending and receiving gravity waves
is not really easy for mere mortals to do.)

(Note that relativity does not say that things cannot go faster than
the speed of light, only that physical objects cannot attain the speed
of light. Tachyons are a theoretical particle that goes faster than
the speed of light, though of course we have not observed any. Except
on Star Trek.)

I imagine one could talk about this for quite some time, but I'll
leave it at this :)

--
Doug McLaren, dougmc@frenzy.com, AD5RH
Can anyone remember when the times were not hard, and money not scarce?

3506. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 01:06:27 UTC
From: "aunwin@insightbb.com"
Message-ID: <nU6Xd.105444$4q6.29771@attbi_s01>
Source record: 80945

Roy
I understand where you are coming from but your points are all based
around a Yagi with standard feeds !. In my past postings over the years
I have pointed out other methods of feeds that not only broaden the
bandwidth
but uses a high impedance, this done by extreme "close" coupling,
in the order of a inch or so upwards to about 12 inches which I also wrote
up
in a patent some years ago just for kicks.
I myself ,choose not to go less than 26 ohms when designing. and tho I can
make them with very high impedance it is not really required as the ham
bands
are quite narrow. Where I really concentrate upon is to move away
from "mutual" coupling (what ever that means) which is commonly described
with yagi antennas, to "close" coupling designs which is an entirely new
world when
dealing with feed impedances, as Richards post on coupling some months ago
described so much better than I have done.

Regards
Art

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:112pb9u2csf5pbb@corp.supernews.com...
> There's yet another tradeoff -- bandwidth, of both the pattern and the
> impedance. Close spacing, in particular, reduces the range of frequencies
> over which the pattern is acceptable ("acceptable" being in itself subject
> to compromise) and over which the SWR is acceptable. But close spaced or
> not, it's much easier to tweak a design to work perfectly at a single
> frequency than make one that will retain some semblance of that perfection
> over a wider range of frequencies.
>
> Roy Lewallen, W7EL
>
> Richard Harrison wrote:
>> Art Unwin wrote:
>> "But my main question still remains a pointer to a technical article
>> that discusses the possibility or impossibility of what I have stated."
>>
>> I don`t get the question, but it seems to me, Art wants to know if
>> anyone has written of a method to make maximum gain correspond with
>> maximum front-to-back ratio in a Yagi.
>> I haven`t seen it. There is a third factor in the compromise, 50-ohm
>> feedpoint (or some other convenient impedance).
>>

snip.
>>
>> Best regards, Richard Harrison, KB5WZI

3507. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 01:12:32 UTC
From: Tom Ring <news0001@taring.org>
Message-ID: <422cfba0$0$38728$39cecf19@news.twtelecom.net>
Source record: 80946

aunwin@insightbb.com wrote:

> bandwidth
> but uses a high impedance, this done by extreme "close" coupling,
> in the order of a inch or so upwards to about 12 inches which I also wrote
> up
> in a patent some years ago just for kicks.

You mean like like the K1FO design? Or something else?

tom
K0TAR

3508. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 01:37:15 UTC
From: "aunwin@insightbb.com"
Message-ID: <fl7Xd.104907$tl3.69815@attbi_s02>
Source record: 80947

I do not know of any designs
by K1FO, can you elaborate?
Art
"Tom Ring" <news0001@taring.org> wrote in message
news:422cfba0$0$38728$39cecf19@news.twtelecom.net...
>
> aunwin@insightbb.com wrote:
>
>> bandwidth
>> but uses a high impedance, this done by extreme "close" coupling,
>> in the order of a inch or so upwards to about 12 inches which I also
>> wrote up
>> in a patent some years ago just for kicks.
>
> You mean like like the K1FO design? Or something else?
>
> tom
> K0TAR

3509. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 01:46:17 UTC
From: Tom Ring <news0001@taring.org>
Message-ID: <422d0389$0$92315$39cecf19@news.twtelecom.net>
Source record: 80948

aunwin@insightbb.com wrote:

> I do not know of any designs
> by K1FO, can you elaborate?
> Art

The number of his antenna designs is quite large, but all the "modern" ones, 1990 (maybe earlier) and later, use a very close coupled first and second director. It is a virtual trademark of his designs. I would suggest googling for K1FO, and look at what's out there.

Or look in the ARRL antenna books.

tom
K0TAR

3510. Re: tower-trees

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 02:27:52 UTC
From: garigue <garigue@comcast.net>
Message-ID: <TNidne8doI9BkbDfRVn-2Q@comcast.com>
Source record: 80949

Hello there Steve et al .....

A number of years ago I was on 40 SSB (a real rarity) calling CQ when a fellow came back from NE PA. This guy had a signal that was probably the strongest phone signal I have ever heard. He was running a 4 element wire yagi that was suspended by 8 oak trees that a distant forefather had planted over 200 yrs ago. The fellow said that he must have known the physical layout of the antenna not only spacing wise but in the direction NE-SW. Neet ..... PS just talked to the neighbor about using her tree for a support which should get my wire up from 25 to 75 feet or so. Film at 11 when I get things together ....now where did I put that string for my bow ??????

God Bless 73 Tom Popovic KI3R Belle Vernon PA

> >I plan to use some of the trees at my QTH as a tower. I have to parallell
> > trees that is apx 50'. At the top they will be abt 15'' thick. They are
> > spaced 20'' which makes it easy to build a ladder so that I can climb
up.
> > I
> > plan to build a metal plate and install a rotor on the top of the
> > parallell
> > trees, so that I can turn my 15' boom lengt 3 el 20m yagi beam. This
tower
> > would be very cost effective.

3511. Re: Good fox kit / schematic?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 02:59:34 UTC
From: tom <cyberhun@shaw.ca>
Message-ID: <qy8Xd.601383$6l.17225@pd7tw2no>
Source record: 80950
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

http://members.aol.com/homingin/

3512. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 03:58:23 UTC
From: Buck <iam@this.site>
Message-ID: <ea8q211ik8fm0cbdo12l2r9sb51hl8vgf2@4ax.com>
Source record: 80951

On Fri, 04 Mar 2005 05:41:29 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>I have just come to realise that if one drew a polygon of element phases in
>a array
>and all elements were 180 degrees to its companion element and excluding the
>driven element, the max gain and max front to back will occur at the SAME
>frequency!
>Until now I was of the understanding that these two max figures could not
>occur at
>the same frequency. Is there anything written about this possibility?
>Regards
>Art
>

Art,

Your description is too vague for someone who doesn't have some form
of reference (maybe this is a continuation of a discussion from
elsewhere?) Anyway, since a polygon is any shape with more than two
sides in which all sides and angles are equal, this leaves a rather
wide variety of shapes. Is this referencing vertical or horizontal
elements? With the 180 degree element comparisons, I assume you are
dealing with an equal number of sides on each polygon, or in case of
verticals, at least an equal number of elements..

Is there any more you can tell us?

--
73 for now
Buck
N4PGW

3513. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 04:54:53 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <xeaXd.57467$EL5.46857@trnddc05>
Source record: 80952

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:nvip2154f2auk2dgfb0jvilhb33365rqkc@4ax.com...
> On Mon, 07 Mar 2005 19:13:14 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
>>
>>"Richard Fry" <rfry@adams.net> wrote in message
>>news:422ca141_4@newsfeed.slurp.net...
>>> "Jerry Martes"
>>>> Do you know the approximate input impedance of
>>>> a 0.1 lambda diameter single turn loop?
>>> _____________
>>>
>>> About 2.5 ohms.
>>>
>>> RF
>>
>> Richard
>>
>> Can you guide me to a web site where that loop input impedance is given
>> in
>>R+jX? I will set up and measure some loop input impedance at 137 MHz
>>within the next few days. But, I'd like to have a better "feel" for what
>>I'm doing before I take time to build the loop and set up the test
>>equipment.
>>
>> Thanks
>> Jerry
>>
>
> Hi Jerry,
>
> The free version of EZNEC should cope with this simple problem. To
> answer your question it reveals:
> Impedance = 4.887 + J 853 ohms
>
> 73's
> Richard Clark, KB7QHC

Thanks Richard I like it when you do all the work and I just sit here
and read off the good data. If I wasnt so lazy I'd go out and build a loop
so I can se how it works,
I'd like to get a loop to match to 100 ohms of +jzero.

Thanks again
Jerry

3514. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 05:25:10 UTC
From: richardharrison@webtv.net
Message-ID: <318-422D3736-80@storefull-3258.bay.webtv.net>
Source record: 80954

Richard Fry wrote:
"This R is a little lower than the first number I posted--which I looked up in Kraus, 3rd edition."

An excellent source for everything about antennas, I think. I chose Arnold B. Bailey who has a special affinity for loops, I think. In "TV and Other Receiving Antennas" on page 403 Bailey says:
"The small loop has a very low resistance (not much over 0.5 ohm for a circumference of 0.25 wavelength) and a very high positive Q indicating inductive reactance. The Q will depend on the thickness of the cross section of the conductor (P factor, as previously used for rod antennas). For 200-Mc balanced circular loops, where L=0.25 wavelength (coil diameter=0.25 wavelength/pi), the following Q`s are representative:
1. For 1-inch diameter rods, QA = 175
2. For 1/4-inch diameter rods, QA = 280
3. For No. 10 wire, QA = 400."

Bandwidth is about equal to 2/QA.

Q is about X/R, or X is about RQ.

The loop radiation resistance of 0.5 ohm is so small that loss resistance likely may affect the actual loop resistance total.

I`ll leave the reactance (RQ) for the user to calculate for whatever frequency and Q may interest him.

Best regards, Richard Harrison, KB5WZI

3515. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 05:29:03 UTC
From: "aunwin@insightbb.com"
Message-ID: <yKaXd.105279$tl3.60656@attbi_s02>
Source record: 80953

"Buck" <iam@this.site> wrote in message
news:ea8q211ik8fm0cbdo12l2r9sb51hl8vgf2@4ax.com...
> On Fri, 04 Mar 2005 05:41:29 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>>I have just come to realise that if one drew a polygon of element phases
>>in
>>a array
>>and all elements were 180 degrees to its companion element and excluding
>>the
>>driven element, the max gain and max front to back will occur at the SAME
>>frequency!
>>Until now I was of the understanding that these two max figures could not
>>occur at
>>the same frequency. Is there anything written about this possibility?
>>Regards
>>Art
>>
>
>
> Art,
>
> Your description is too vague for someone who doesn't have some form
> of reference (maybe this is a continuation of a discussion from
> elsewhere?) Anyway, since a polygon is any shape with more than two
> sides in which all sides and angles are equal,

It does! then I have used the incorrect term.

In a yagi type diagram you can calculate the current and phase of each
elemrnt
but what one is interested in is the summation of the whole array and you
can do this
in the same way as you would do a vector diagram of forces.
With the yagi array you would first start with the reflector and draw to
scale a line
reflecting both phase angle and magnitude. You then add lines in cosecutive
order for all other elements in the array. The end of this 'toe to tail'
some what
erratic line will finish up some distance from the starting point,
but this distance, if drawn, represents the phase and magnitude
of the array as a whole. As a former mechanical engineer
but now nothing ,I was taught the term "polygon of forces" which is a
cumulative
vector array but the shape did not necessarily consist of "equal "sides as

you stated..
But then I am English born and it is known that Americans completely messed
up the Elizabethan era language which a true cockney still adheres to ,
where as
others in the same country have learned to talk in such a way it sounds as
if they
are trying to retain a marble in their mouth.without swallowing it.
Regards
Art

this leaves a rather
> wide variety of shapes. Is this referencing vertical or horizontal
> elements? With the 180 degree element comparisons, I assume you are
> dealing with an equal number of sides on each polygon, or in case of
> verticals, at least an equal number of elements..
>
>
> Is there any more you can tell us?
>
>
> --
> 73 for now
> Buck
> N4PGW

3516. Re: Antenna Encased in PVC

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 05:43:45 UTC
From: "Bob M." <baysideq@hotmail.com>
Message-ID: <lYaXd.188648$K7.110736@news-server.bigpond.net.au>
Source record: 80955

what sort of PVC pipe??? MUST be WHITE communications type
otherwise the carbon in it stuffs the setting
"JE" <Zeke@legs.com> wrote in message
news:4Z3Wd.5928$DW.4847@newssvr17.news.prodigy.com...
> Thanks for all the help, both of you guys!!
>
> I trimmed little "smidges" several times and I'm back in the ballpark with
> the SWR!!
>
> Appreciate all of you help. This is my first time at tackleing something
> like this.
>
> Thanks again,
> Jack
>
>
> "Cecil Moore" <w5dxp@hotmail.com> wrote in message
> news:4228c833_2@127.0.0.1...
>> JE wrote:
>>> Thanks Cecil. Any other kind of material I could use that might be
>>> better?
>>
>> I believe that many commercial antennas are enclosed in
>> PVC. Assuming your PVC is non-conductive, it is simply
>> lowering the velocity factor of your antenna (assuming
>> you haven't turned it into a fractal by stuffing from
>> one end :-). Try trimming it. If you ruin it, build
>> another. Or just build yourself a J-Pole from copper
>> tubing.
>> --
>> 73, Cecil http://www.qsl.net/w5dxp
>>
>>
>> ----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
>> News==----
>> http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000
>> Newsgroups
>> ---= East/West-Coast Server Farms - Total Privacy via Encryption =---
>
>

3517. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 07:31:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <r3lq21hqb7ij0cl26neljohf6527ih3vli@4ax.com>
Source record: 80956

On Tue, 08 Mar 2005 04:54:53 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

> Thanks Richard I like it when you do all the work and I just sit here
>and read off the good data. If I wasnt so lazy I'd go out and build a loop
>so I can se how it works,
> I'd like to get a loop to match to 100 ohms of +jzero.
>
> Thanks again
> Jerry

Hi Jerry,

You are welcome. You could use your slotted line to test the model
too. Then add some parasitics to see what happens....

73's
Richard Clark, KB7QHC

3518. Get Rock Hard Erectiom With .... PANADEX

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 10:38:05 UTC
From: chincerylovely <newjersylove10@hotmail.com>
Message-ID: <1110278285.848065.263770@g14g2000cwa.googlegroups.com>
Source record: 80957

PANADEX - An amazing herbal formulation, strengthens the erection like a length of steel pipe, enables you to have ROCK HARD,THROBBING ERECTIONS that will last ALL NIGHT LONG! You'll be able to achieve ROCK HARD erections ANY TIME you want and last in bed like a porn star!A powerful herbal formulation, used from ancient time by emprerors,lords and kings,for playing sex every day with many ladiesat a time. It removes impotence, when taken alongwith Herbaalex herbal tonic.For details

http://www.herbaalex.com/panadex.htm

3519. Herbaalex - Most Powerful Herbal Sex Tonic In The World

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 10:42:53 UTC
From: chincerylovely <newjersylove10@hotmail.com>
Message-ID: <1110278573.189436.272940@z14g2000cwz.googlegroups.com>
Source record: 80958

Herbaalex most powerful herbal sex tonic in the world,Removes premature ejaculation permanently. It is also a guaranteed treatment for Impotence.It cures erectile dysfunction and improves the prostate health.Herbaalex enhancesthe sex desire in men and women. An amazing formulation of herbs,nothing can compete it's unique formula. No side effects . 100 % money back guarantee, if Herbaalex does not cure your sex problem.

http://www.herbaalex.com/herbaalex.htm

3520. Most Effective Herbal Treatment For Acne Control

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 10:56:50 UTC
From: chincerylovely <newjersylove10@hotmail.com>
Message-ID: <1110279410.300315.256040@l41g2000cwc.googlegroups.com>
Source record: 80959

Clear skin attracts to every one. Remove pimples and blackheads from your face or any part ofbody with Acne-Care tablets.Acne-Care is a guaranteed herbal cure for acne.By using acne-Care Tablets,acne can betreated successfully in virtually every case.If you want clear,blemish-free skin,Acne-Care is a proven effective treatment for acne removal.Acne needs to be treated as soon as possible.When Acne-Care istaken as directed, you will see results in less than Four weeks.With Acne-Care,persistence pays off!

http://www.herbaalex.com/acne.htm

3521. See the miracles !!!! Repairs skin and eliminate eczema

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 11:02:04 UTC
From: chincerylovely <newjersylove10@hotmail.com>
Message-ID: <1110279724.424741.197100@z14g2000cwz.googlegroups.com>
Source record: 80960

Eczemax- There are several different types of eczema,many of which look similar but have very different causes and treatments. The first step in effective treatment of eczema is a correct diagnosis.We are providing herbal treatment for the cure of eczema.All kinds of eczema has been treated successfully.

http://www.herbaalex.com/eczemax.htm

3522. The Guaranteed treatment for Leukorrhea (Leucorreah)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 11:12:41 UTC
From: chincerylovely <newjersylove10@hotmail.com>
Message-ID: <1110280361.827154.44650@o13g2000cwo.googlegroups.com>
Source record: 80961

Leukoren- A herbal tonic for treatment of Leukorreah(liquid flowing from vagina). An effective remedy for many female ailments. It improves general and sexhealth of females. Leukoren can also remove any form of swelling in the uterus. Leukoren is also a nervine and general tonic as it helps in maintaining general vitality in females

http://www.herbaalex.com/leukoren.htm

3523. The Magic Herbal Treatment for Leucoderma

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 11:16:16 UTC
From: chincerylovely <newjersylove10@hotmail.com>
Message-ID: <1110280576.046553.197740@l41g2000cwc.googlegroups.com>
Source record: 80962

Dermarine- A herbal treatment for severe kinds of leucoderma.Herbal Medicine has very encouraging results in leucoderma. Acquired white spots like due to burns or injuries are also treated successfully. The duration and success of treatment depends on extend of the patches and the duration of the illness. Big patches require more days whereas small spots yield faster.

http://www.herbaalex.com/dermarine.htm

3524. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 14:10:54 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <422db2f0_3@newsfeed.slurp.net>
Source record: 80963

"Richard Fry"
> Lacking ~equal h-pol & v-pol gain at the same time, such a loop is not
> circularly polarized -- even though the physical configuration
> of the loop is a circle.

After some thought and NEC studies to confirm, I need to modify my statement above--I'm used to thinking in terms of a broadcast antenna. In many directions this loop does have v-pol and h-pol gain at the same time, although not often equal gains.

For example, a small, balanced, open loop oriented in the horizontal plane has a v-pol response along an elevation cut through the feedpoint and the opposite side of the loop that is zero in the horizontal plane, and max at the zenith and nadir. The h-pol azimuth field goes to zero for those conditions, and peaks at azimuths of +/-90 degrees from that.

Other azimuths and elevations produce various combinations of h-pol and v-pol gain (rarely equal). Still, it would be a stretch to consider this antenna to be circularly polarized, in the classic sense.

RF

3525. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 14:10:54 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <422db317_3@newsfeed.slurp.net>
Source record: 80964

"Richard Fry"
> Lacking ~equal h-pol & v-pol gain at the same time, such a loop is not
> circularly polarized -- even though the physical configuration
> of the loop is a circle.

After some thought and NEC studies to confirm, I need to modify my statement above--I'm used to thinking in terms of a broadcast antenna. In many directions this loop does have v-pol and h-pol gain at the same time, although not often equal gains.

For example, a small, balanced, open loop oriented in the horizontal plane has a v-pol response along an elevation cut through the feedpoint and the opposite side of the loop that is zero in the horizontal plane, and max at the zenith and nadir. The h-pol azimuth field goes to zero for those conditions, and peaks at azimuths of +/-90 degrees from that.

Other azimuths and elevations produce various combinations of h-pol and v-pol gain (rarely equal). Still, it would be a stretch to consider this antenna to be circularly polarized, in the classic sense.

RF

3526. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 15:13:55 UTC
From: Buck <iam@this.site>
Message-ID: <pqfr215gdb764h1losbb4eesmr4ems0n6u@4ax.com>
Source record: 80965

On Tue, 08 Mar 2005 05:29:03 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>
>"Buck" <iam@this.site> wrote in message
>news:ea8q211ik8fm0cbdo12l2r9sb51hl8vgf2@4ax.com...
>> On Fri, 04 Mar 2005 05:41:29 GMT, "aunwin@insightbb.com"
>> <aunwin@insightbb.com@insightbb.com> wrote:
>>
>>>I have just come to realise that if one drew a polygon of element phases
>>>in
>>>a array
>>>and all elements were 180 degrees to its companion element and excluding
>>>the
>>>driven element, the max gain and max front to back will occur at the SAME
>>>frequency!
>>>Until now I was of the understanding that these two max figures could not
>>>occur at
>>>the same frequency. Is there anything written about this possibility?
>>>Regards
>>>Art
>>>
>>
>>
>> Art,
>>
>> Your description is too vague for someone who doesn't have some form
>> of reference (maybe this is a continuation of a discussion from
>> elsewhere?) Anyway, since a polygon is any shape with more than two
>> sides in which all sides and angles are equal,
>
>
>It does! then I have used the incorrect term.
>
>In a yagi type diagram you can calculate the current and phase of each
>elemrnt
>but what one is interested in is the summation of the whole array and you
>can do this
>in the same way as you would do a vector diagram of forces.
>With the yagi array you would first start with the reflector and draw to
>scale a line
>reflecting both phase angle and magnitude. You then add lines in cosecutive
>order for all other elements in the array. The end of this 'toe to tail'
>some what

> erratic line will finish up some distance from the starting point,
> but this distance, if drawn, represents the phase and magnitude
> of the array as a whole. As a former mechanical engineer

I am not ... You may be using a term familiar to your trade and I am
unfamiliar with. I would be a layman in respect ... that could be
the misunderstanding. I was trying to envision the antenna you were
describing... can you imagine what I was seeing in my mind?

:)

> but now nothing ,I was taught the term "polygon of forces" which is a
>cumulative
>vector array but the shape did not necessarily consist of "equal "sides as
>you stated..
> But then I am English born and it is known that Americans completely messed
>up the Elizabethan era language which a true cockney still adheres to ,
>where as
>others in the same country have learned to talk in such a way it sounds as
>if they
>are trying to retain a marble in their mouth.without swallowing it.

Actually, I like the UK accents. As I believe my misunderstanding has
nothing to do with the queen's English, but rather techno-speak for
your trade, I will pack up my octagon shaped array of dipole antennas
and gracefully move on to another topic.
Good luck and I'll catch you in another thread.

Buck

>Regards
>Art
>

--
73 for now
Buck
N4PGW

3527. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 15:46:24 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <kNjXd.114439$Th1.17047@bgtnsc04-news.ops.worldnet.att.net>
Source record: 80966

Buck,

I agree with you. I too cannot figure out what Art is trying to say.
However, your response containing the definition of a polygon is
incorrect. There is no requirement for equal sides or angles.

73,
Gene
W4SZ

Buck wrote:

> Art,
>
> Your description is too vague for someone who doesn't have some form
> of reference (maybe this is a continuation of a discussion from
> elsewhere?) Anyway, since a polygon is any shape with more than two
> sides in which all sides and angles are equal, this leaves a rather
> wide variety of shapes.

3528. magic treatment for snake oil sales

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 17:10:15 UTC
From: TimPerry <timperry@noaspamadelphia.net>
Message-ID: <rZydnY-_RN7mQbDfRVn-hA@adelphia.com>
Source record: 80967

step one: activate "block sender" feature

step two: consult the great pumpkin for advice.

if the great pumpkin directs you to Lucy Van Pelt don't forget your nickle.

3529. Ham Radio Forums

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 17:55:53 UTC
From: Eric <k4sci@hamradioforums.com>
Message-ID: <1110304553.582711.124230@g14g2000cwa.googlegroups.com>
Source record: 80968

Come visit Ham Radio Forums! http://www.hamradioforums.com

Forums: Read and Post messages covering all aspects of Ham Radio.

Articles: User submitted articles covering anything Ham related.

Shout: Post quick messages.

Classifieds: Buy, sell, or auction your Ham gear with our Photo Classifieds!

Gallery: Every registered user gets 10 megs of server space to upload pictures.

Chat: Fully integrated Chat Rooms, user created.

And much more! Easy to use and completely FREE! Registration is quick and easy!

http://www.hamradioforums.com

3530. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 19:13:22 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <jrtr21dtk7fj2lev5gluu8i9i50rs9bq28@4ax.com>
Source record: 80969

On Tue, 08 Mar 2005 15:46:24 GMT, Gene Fuller <W4SZzzzzzz@att.net>
wrote:

>Buck,
>
>I agree with you. I too cannot figure out what Art is trying to say.
>However, your response containing the definition of a polygon is
>incorrect. There is no requirement for equal sides or angles.
>
>73,
>Gene
>W4SZ

Right. Webster says a plane polygon is a closed figure bounded by
straight lines. No mention of number, length or angles, although it
seems to me that you best have at least three sides, although Art
might have a new polyglot method that uses only two. [g]

>
>Buck wrote:
>
>> Art,
>>
>> Your description is too vague for someone who doesn't have some form
>> of reference (maybe this is a continuation of a discussion from
>> elsewhere?) Anyway, since a polygon is any shape with more than two
>> sides in which all sides and angles are equal, this leaves a rather
>> wide variety of shapes.

3531. Hamradio/DXcluster forum

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 19:38:19 UTC
From: g0ylm@gb7mbc.net
Message-ID: <baacc10.0503081138.45d3f7fe@posting.google.com>
Source record: 80970

New forum for all radio amateurs hosted at http://www.gb7mbc.net/forum/
Come and have a look and enjoy the chat
73 Linda

3532. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 20:13:32 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <MHnXd.88645$uc.64724@trnddc04>
Source record: 80971

"Richard Fry" <rfry@adams.net> wrote in message
news:422db317_3@newsfeed.slurp.net...
> "Richard Fry"
>> Lacking ~equal h-pol & v-pol gain at the same time, such a loop is not
>> circularly polarized -- even though the physical configuration
>> of the loop is a circle.
> _____
>
> After some thought and NEC studies to confirm, I need to modify my
> statement above--I'm used to thinking in terms of a broadcast antenna. In
> many directions this loop does have v-pol and h-pol gain at the same time,
> although not often equal gains.
>
> For example, a small, balanced, open loop oriented in the horizontal plane
> has a v-pol response along an elevation cut through the feedpoint and the
> opposite side of the loop that is zero in the horizontal plane, and max at
> the zenith and nadir. The h-pol azimuth field goes to zero for those
> conditions, and peaks at azimuths of +/-90 degrees from that.
>
> Other azimuths and elevations produce various combinations of h-pol and
> v-pol gain (rarely equal). Still, it would be a stretch to consider this
> antenna to be circularly polarized, in the classic sense.
>
> RF

Richard

Are you implying that a loop (single turn) is ever anything other than
linearly polarized?

Jerry

3533. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 20:58:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <112s4f37vait78a@corp.supernews.com>
Source record: 80872

A polygon which has equal sides and angles is a special case of polygon,
known as a "regular polygon".

Roy Lewallen, W7EL

Wes Stewart wrote:
> On Tue, 08 Mar 2005 15:46:24 GMT, Gene Fuller <W4SZzzzzzz@att.net>
> wrote:
>
>
>>Buck,
>>
>>I agree with you. I too cannot figure out what Art is trying to say.
>>However, your response containing the definition of a polygon is
>>incorrect. There is no requirement for equal sides or angles.
>>
>>73,
>>Gene
>>W4SZ
>
>
> Right. Webster says a plane polygon is a closed figure bounded by
> straight lines. No mention of number, length or angles, although it
> seems to me that you best have at least three sides, although Art
> might have a new polyglot method that uses only two. [g]
>
>
>>Buck wrote:
>>
>>
>>>Art,
>>>
>>>Your description is too vague for someone who doesn't have some form
>>>of reference (maybe this is a continuation of a discussion from
>>>elsewhere?) Anyway, since a polygon is any shape with more than two
>>>sides in which all sides and angles are equal, this leaves a rather
>>>wide variety of shapes.
>
>

3534. PMR external antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 21:16:07 UTC
From: George <6979636004@mycosmos.gr>
Message-ID: <d0l4me$30om$1@ulysses.noc.ntua.gr>
Source record: 80873

I have a handheld Alan 443 PMR (446MHz) and it has a very good range of about 5Km in open space. However I'd like to increase this range by adding an external antenna to it. Do you have any ideas on how to modify this radio?

George

3535. Antenna Modelling software.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 21:42:49 UTC
From: Svein Henriksen <la3pu@online.no>
Message-ID: <Q%oXd.1190$ai7.24392@news2.e.nsc.no>
Source record: 80874

Hi everyone,

I am looking for software that will allow me to model a cone antenna and
adjacent structures at 10.5 GHZ. Preferably shareware.
Can anyone suggest a suitable program?

73 de
LA3PU
Svein

3536. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 22:43:03 UTC
From: Buck <iam@this.site>
Message-ID: <7jas21trgt1gnodub5k0e21bnpgo0l0a5s@4ax.com>
Source record: 80875

On Tue, 08 Mar 2005 12:58:06 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>A polygon which has equal sides and angles is a special case of polygon,
>known as a "regular polygon".

I stand corrected....

>
>Roy Lewallen, W7EL
>

--
73 for now
Buck
N4PGW

3537. Re: MFJ 1798 Vertcal

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 22:52:05 UTC
From: Jim <jresser@tds.net>
Message-ID: <422e2933$1_2@newspeer2.tds.net>
Source record: 80876

Jerseyj wrote:
> Wonder If anyone has any experience with this vertical...the specs says
> it works without radials,I'm just wonderng how well.
>
> Jerry
Have owned and used an Vectronics 895 which identical to the MFJ 1796
which in turn is the 40 meter through 2 meter antenna from MFJ.

It needs no radials since it is essentially a shortened,
vertically-mounted dipole with a sort of funky looking porcupine-like
device on each end to load it.

When we were thinking about selling the house a 10 years or so ago I
took my roof top tower and yagi down. When we decided not to sell I
wanted to get on the air with something and put up the Vectronics on a
pole supported at the house eaves. It stood like that for about five
years. No problem with wind damage during that time.

My opinions.
1. It is adequate though awkward to tune the antenna for HF well. You
have to adjust the length of the porcupine quills, so to speak. (My
solution -- tune as close as is reasonable and then use an antenna tuner).
2. Performance is typical of a vertical that is okak keeping in mind
the old adage that a vertical is an antenna that radiates equally poorly
in all directions.
3. The 6 and 6 meter antenna pieces are threaded aluminum rods that are
tuned by screwing them into steel nuts. Aluminum on steel binds and no
lube that I found let me adjust them adequately.

Anyway, took the Vectonics now and have the yagi tribander back up, plus
a G5RV.

Jim, WD9FRF

3538. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 23:00:25 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <422e2edb_3@newsfeed.slurp.net>
Source record: 80877

"Jerry Martes"
> Are you implying that a loop (single turn) is ever anything
> other than linearly polarized?

An antenna polarized in one plane also can be coupled to antennas in other polarization planes, depending on the geometry between the two. I'll send you some NEC plots to illustrate.

RF

3539. Re: AM Radio reception

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-08 23:07:09 UTC
From: Jim <jresser@tds.net>
Message-ID: <422e2cbb$1_3@newspeer2.tds.net>
Source record: 80878

Joe McSweeney wrote:
> This may not be the best pace to post this, but I figured it would be a good
> place to start. I live in Maine and am trying to get a Massachusetts AM
> station can anyone recommend a good AM radio or better alternatives to the
> regular AM antenna that comes with my AM radio from Radioshack? If there
> are other newsgroups to check please let me know.
>
>
Jon, your antenna and radio might not be the problem. Depending upon
where you are in ME and where the transmitter may be in MA the problem
might simply be propagation. Signals in the AM broadcast band,
especially those from relatively low powered stations simply don't
travel as far as the signals in the shortwave bands. Duriing daytime
hours most of the signal is dissipated in the ionosphere. At night as
the ionization fades the signals can potentially skip and travel farther
so your best chances are at night. However, some AM stations reduce
there power, go off the air or change their radiation pattern at dusk to
avoid putting too strong a signal into the area of other stations
operating on the same frequency.

Jim, WD9FRF

3540. Re: Antenna Modelling software.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-09 01:29:56 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <k502g2-4b8.ln1@p400bob.lse.com.au>
Source record: 80879

4nec2?

http://www.si-list.org/swindex2.html

Cheers Bob VK2YQA

Svein Henriksen wrote:
> Hi everyone,
>
> I am looking for software that will allow me to model a cone antenna and
> adjacent structures at 10.5 GHZ. Preferably shareware.
> Can anyone suggest a suitable program?
>
> 73 de
> LA3PU
> Svein
>
>

3541. Opinion about MFJ's loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-09 02:54:16 UTC
From: brane <brane@cox.net>
Message-ID: <qztXd.1341$uk7.1035@fed1read01>
Source record: 80880

I would like to know if anyone had any experience with MFJ's Super High Q Loop Antenna, model MFJ-1786? I live in a restricted housing community and was wondering if this is a recommended antenna for installing in an attic to run HF from 80 M to 10 M with around 100 Watts.

Or, is there another wideband (80 M to 10 M) HF attic antenna recommended? I have an square attic space of 15' X 15' by 7' high.

Thanks,

Tony S.

3542. Re: Opinion about MFJ's loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-09 03:32:31 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <j7uXd.7322$603.3462@newsread2.news.atl.earthlink.net>
Source record: 80881

How about a 15x15 loop fed with an auto tuner?

"brane" <brane@cox.net> wrote in message
news:qztXd.1341$uk7.1035@fed1read01...
> I would like to know if anyone had any experience with MFJ's Super High
> Q Loop Antenna, model MFJ-1786? I live in a restricted housing community
> and was wondering if this is a recommended antenna for installing in an
> attic to run HF from 80 M to 10 M with around 100 Watts.
>
> Or, is there another wideband (80 M to 10 M) HF attic antenna recommended?
> I have an square attic space of 15' X 15' by 7' high.
>
> Thanks,
>
> Tony S.
>

3543. Re: rf channel

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-09 08:33:14 UTC
From: Jason <cheanglong@gmail.com>
Message-ID: <1110357194.953395.289430@z14g2000cwz.googlegroups.com>
Source record: 80882

any other group you can suggest?
thanks
Jason

3544. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-09 15:57:04 UTC
From: "aunwin@insightbb.com"
Message-ID: <k1FXd.109090$tl3.58979@attbi_s02>
Source record: 80883

I need to add a clarifier to this post.
If the phases and and magnitudes of the paired elements
are exactly the same, then radiation to the rear is zero.
In the real world this is difficult if not impossible to do.
It certainly cannot be done with a yagi unless possibly,
when elements are contorted to ensure pure resistance
feed at the appropiate frequency
However, what is possible with a alternate design is to
have maximum front to back at max gain when the max
gain is constant over a range of frequencies such that
the max front to back which is usually a peak,
can appear at a point where the gain is still at a
maximum.

Regards
Art KB9MZ

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:dySVd.30807$r55.174@attbi_s52...
>I have just come to realise that if one drew a polygon of element phases in
>a array
> and all elements were 180 degrees to its companion element and excluding
> the
> driven element, the max gain and max front to back will occur at the SAME
> frequency!
> Until now I was of the understanding that these two max figures could not
> occur at
> the same frequency. Is there anything written about this possibility?
> Regards
> Art
>

3545. * * * * * * * All Bloggers Go Here * * * * * * *

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-09 17:04:55 UTC
From: Ron400053@yahoo.com
Message-ID: <1110387895.893129.162180@o13g2000cwo.googlegroups.com>
Source record: 80884

http://www.are-u-sure.blogspot.com <- - - all bloggers go here

3546. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-09 18:21:23 UTC
From: nm5k@wt.net
Message-ID: <1110392483.961206.125200@o13g2000cwo.googlegroups.com>
Source record: 80885

Gene Fuller wrote:
> Buck,
>
> I agree with you. I too cannot figure out what Art is trying to say.

Don't feel like the lone ranger...I've been following this
thread for a week, and I still don't have a clue what he
is trying to describe.
>
> 73,
> Gene
> W4SZ
>
> Buck wrote:
>
> > Art,
> >
> > Your description is too vague for someone who doesn't have some
form
> > of reference (maybe this is a continuation of a discussion from
> > elsewhere?)

What he said....

3547. * * * * * * * All Bloggers Go Here * * * * * * *

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-09 18:48:21 UTC
From: Ron400053@yahoo.com
Message-ID: <1110394101.207123.236760@f14g2000cwb.googlegroups.com>
Source record: 80886

http://www.are-u-sure.blogspot.com <- - - all bloggers go here

3548. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-09 18:48:36 UTC
From: dplatt@radagast.org
Message-ID: <112uh84l9m4ck9f@corp.supernews.com>
Source record: 80887

In article <k1FXd.109090$tl3.58979@attbi_s02>,
aunwin@insightbb.com <aunwin@insightbb.com@insightbb.com> wrote:

>I need to add a clarifier to this post.
>If the phases and and magnitudes of the paired elements
>are exactly the same, then radiation to the rear is zero.
>In the real world this is difficult if not impossible to do.
> It certainly cannot be done with a yagi unless possibly,
>when elements are contorted to ensure pure resistance
>feed at the appropiate frequency

You might want to take a look at systems which use two or more directly-driven radiators (rather than a driven radiator and a parasitic element), with a chosen physical offset and phase offset between them.

This is a classic way to get a 180-degree-only pattern. It's often used with vertical antennas. I took a quick glance at Arnold Bailey's "TV and other receiving antennas" text (written in 1950) and he shows a similar sort of antenna using two horizontal half-wave dipoles, connected together via a transmission line and fed at the center of the rear dipole. Very clean 180-degree pattern.

This sort of arrangement might be a good starting point for your "move all of the energy from the rear lobes into the forward half" quest.

You might be able to combine this sort of dual-driven-radiator unidirectional beamer with additional parasisic elements, to create more forward gain. A bunch of directors out in in the front would be the obvious choice for a first experiment

There's a gotcha to this, though... the 180-degree pattern from a pair of phased radiators depends on the radiators being driven with equal currents, which (in this simple arrangement) requires that they have equal feedpoint impedances. Stick a bunch of parasitic directors out in front, and the feedpoint impedance of the forward radiator is going to change (drop, most likely) and affect the current relationship between the two radiators, and thus mess up the pattern.

I can think of a couple of possible ways to compensate for this:

- Matching network at the forward radiator (maybe shorten it a bit and use a hairpin inductor match)?

- Tapered transmission-line section between the two radiators?

- Try installing some parasitic elements behind the rear driven element... possibly in a corner-reflector arrangement? This might tweak the rear element's feedpoint Z enough to make it easier to match the two, might also help suppress any rear lobes which develop as a result of the mismatch.

I have my doubts as to whether all of this work will pay off with enough of an increase in forward gain, F/B ratio, cleanliness of pattern, reduction in lobes, broadening of bandwidth, etc. to be worth the effort over a classic Yagi, but I'm certainly willing to be proven wrong.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

3549. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-09 18:55:24 UTC
From: "aunwin@insightbb.com"
Message-ID: <wEHXd.49133$Ze3.12519@attbi_s51>
Source record: 80888

Buck
If your background is not in science then it is natural that you would
have difficulty with what I stated. If your background was in science
then this stuff would be studied in 101 i.e from first principles.
With a firm understanding of scalar quantities you are then fully armed
to deal with antenna "curl" and other interesting facets of antennas.
It would appear to me that many of this group do not have a science
background but have got by in life because of a good memory and where
knoweledge of first principles is not a requirement.
Ofcourse age can take that advantage away which appears to have happened
with past engineers of this group.....amazing!

Regards
Art

"Buck" <iam@this.site> wrote in message
news:pqfr215gdb764h1losbb4eesmr4ems0n6u@4ax.com...
> On Tue, 08 Mar 2005 05:29:03 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>>
>>"Buck" <iam@this.site> wrote in message
>>news:ea8q211ik8fm0cbdo12l2r9sb51hl8vgf2@4ax.com...
>>> On Fri, 04 Mar 2005 05:41:29 GMT, "aunwin@insightbb.com"
>>> <aunwin@insightbb.com@insightbb.com> wrote:
>>>
>>>>I have just come to realise that if one drew a polygon of element phases
>>>>in
>>>>a array
>>>>and all elements were 180 degrees to its companion element and excluding
>>>>the
>>>>driven element, the max gain and max front to back will occur at the
>>>>SAME
>>>>frequency!
>>>>Until now I was of the understanding that these two max figures could
>>>>not
>>>>occur at
>>>>the same frequency. Is there anything written about this possibility?
>>>>Regards
>>>>Art
>>>>
>>>
>>>
>>> Art,
>>>

>>> Your description is too vague for someone who doesn't have some form
>>> of reference (maybe this is a continuation of a discussion from
>>> elsewhere?) Anyway, since a polygon is any shape with more than two
>>> sides in which all sides and angles are equal,
>>
>>
>>It does! then I have used the incorrect term.
>>
>>In a yagi type diagram you can calculate the current and phase of each
>>elemrnt
>>but what one is interested in is the summation of the whole array and you
>>can do this
>>in the same way as you would do a vector diagram of forces.
>>With the yagi array you would first start with the reflector and draw to
>>scale a line
>>reflecting both phase angle and magnitude. You then add lines in
>>cosecutive
>>order for all other elements in the array. The end of this 'toe to tail'
>>some what
>> erratic line will finish up some distance from the starting point,
>> but this distance, if drawn, represents the phase and magnitude
>> of the array as a whole. As a former mechanical engineer
>
> I am not ... You may be using a term familiar to your trade and I am
> unfamiliar with. I would be a layman in respect ... that could be
> the misunderstanding. I was trying to envision the antenna you were
> describing... can you imagine what I was seeing in my mind?
>
> :)
>
>
>> but now nothing ,I was taught the term "polygon of forces" which is a
>>cumulative
>>vector array but the shape did not necessarily consist of "equal "sides as
>>you stated..
>> But then I am English born and it is known that Americans completely
>> messed
>>up the Elizabethan era language which a true cockney still adheres to ,
>>where as
>>others in the same country have learned to talk in such a way it sounds as
>>if they
>>are trying to retain a marble in their mouth.without swallowing it.
>
> Actually, I like the UK accents. As I believe my misunderstanding has
> nothing to do with the queen's English, but rather techno-speak for
> your trade, I will pack up my octagon shaped array of dipole antennas
> and gracefully move on to another topic.
> Good luck and I'll catch you in another thread.
>
> Buck

>
>
>>Regards
>>Art
>>
>
> --
> 73 for now
> Buck
> N4PGW

3550. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-09 20:25:45 UTC
From: "aunwin@insightbb.com"
Message-ID: <dZIXd.109953$tl3.94007@attbi_s02>
Source record: 80889

Good point ! But I have already checked this out even
wit
"Dave Platt" <dplatt@radagast.org> wrote in message
news:112uh84l9m4ck9f@corp.supernews.com...
> In article <k1FXd.109090$tl3.58979@attbi_s02>,
> aunwin@insightbb.com <aunwin@insightbb.com@insightbb.com> wrote:
>
>>I need to add a clarifier to this post.
>>If the phases and and magnitudes of the paired elements
>>are exactly the same, then radiation to the rear is zero.
>>In the real world this is difficult if not impossible to do.
>> It certainly cannot be done with a yagi unless possibly,
>>when elements are contorted to ensure pure resistance
>>feed at the appropiate frequency
>
> You might want to take a look at systems which use two or more
> directly-driven radiators (rather than a driven radiator and a
> parasitic element), with a chosen physical offset and phase
> offset between them.e phase

Good point! I tried this with a radiator that was of opposite phase
but the origanal feed method still came out best. That method has
not been tested for other bands
>
> This is a classic way to get a 180-degree-only pattern. It's often
> used with vertical antennas. I took a quick glance at Arnold Bailey's
> "TV and other receiving antennas" text (written in 1950) and he shows
> a similar sort of antenna using two horizontal half-wave dipoles,
> connected together via a transmission line and fed at the center of
> the rear dipole. Very clean 180-degree pattern.
>
> This sort of arrangement might be a good starting point for your "move
> all of the energy from the rear lobes into the forward half" quest.
>
> You might be able to combine this sort of dual-driven-radiator
> unidirectional beamer with additional parasisic elements, to create
> more forward gain. A bunch of directors out in in the front would be
> the obvious choice for a first experiment

But that defeats the issue where boom length can be erradicatred as an
issue.

>
> There's a gotcha to this, though... the 180-degree pattern from a pair
> of phased radiators depends on the radiators being driven with equal

> currents, which (in this simple arrangement) requires that they have
> equal feedpoint impedances. Stick a bunch of parasitic directors out
> in front, and the feedpoint impedance of the forward radiator is going
> to change (drop, most likely) and affect the current relationship
> between the two radiators, and thus mess up the pattern.
>
> I can think of a couple of possible ways to compensate for this:
>
> - Matching network at the forward radiator (maybe shorten it a bit and
> use a hairpin inductor match)?

I always require a near 50 ohm feed that does not require matching.

>
> - Tapered transmission-line section between the two radiators?
>
> - Try installing some parasitic elements behind the rear driven
> element... possibly in a corner-reflector arrangement? This might
> tweak the rear element's feedpoint Z enough to make it easier to
> match the two, might also help suppress any rear lobes which
> develop as a result of the mismatch.

A corner reflector does not have true reflectors as all elements
are of the same length and equaly spaced, they also carry low
but similar current flow.
>
> I have my doubts as to whether all of this work will pay off with
> enough of an increase in forward gain, F/B ratio, cleanliness of
> pattern, reduction in lobes, broadening of bandwidth, etc. to be worth
> the effort over a classic Yagi, but I'm certainly willing to be proven
wrong.
This cannot beat the simplicity of a yagi.

Good for you Dave, you have an open mind despite the massive
studies over the years. But there is no way of convincing the masses
who demand expensive trials and measurements which if conclusive ,changes
the mode of attack to the method of testing, This is usually the method
taken
by even educated engineers who with huge experience in the field refuse to
believe
they could have passed over something.
As for this antenna it is purely to satisfy me.
Regards
Art
.
>
> --
> Dave Platt <dplatt@radagast.org> AE6EO
> Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

3551. Re: Opinion about MFJ's loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-09 20:32:18 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <422F5D5F.6B36FFF8@shaw.ca>
Source record: 80890

John Franklin wrote:
>
> How about a 15x15 loop fed with an auto tuner?
>
> "brane" <brane@cox.net> wrote in message
> news:qztXd.1341$uk7.1035@fed1read01...
> > I would like to know if anyone had any experience with MFJ's Super High
> > Q Loop Antenna, model MFJ-1786? I live in a restricted housing community
> > and was wondering if this is a recommended antenna for installing in an
> > attic to run HF from 80 M to 10 M with around 100 Watts.
> >
It won't run 80m however the 15 x 15 loop fed with an autotuner sounds
like a good bet.

Irv VE6BP

--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/index.html
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/index.htm
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/index.htm
---
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

3552. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-09 21:17:35 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <422f68db$1_2@127.0.0.1>
Source record: 80891

aunwin@insightbb.com wrote:
> If the phases and and magnitudes of the paired elements
> are exactly the same, then radiation to the rear is zero.

If you rotate the elements by 90 degrees, can you make the
radiation toward the ground zero?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
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3553. DCF77 radio clock module

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-09 23:21:43 UTC
From: Stuart <stuart@stu.org.uk>
Message-ID: <399eo3F6090roU1@individual.net>
Source record: 80892

I have a DCF77 radio clock module. I want to improve the reception from Frankfurt (im in the UK). It has a small ferrite rod, which I can get a signal on (77.5khz), but it tends to drop out during the day. I don't know much about antenna design at these frequencys sort of hanging wires across the garden.

I have a larger, thicker ferrite rod laying about. It's over twice the length. Is this likely to work much better? How do I use it? Can I just wind the same number of turns around the rod, as on the smaller one, or is it more complicated than that?

Stuart.

3554. * * * * * * * All Bloggers Go Here * * * * * * *

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-09 23:31:07 UTC
From: Ron038001@yahoo.com
Message-ID: <1110411067.615546.4150@g14g2000cwa.googlegroups.com>
Source record: 80893

http://www.are-u-sure.blogspot.com <- - - all bloggers go here

3555. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 00:46:22 UTC
From: "aunwin@insightbb.com"
Message-ID: <yNMXd.49662$Ze3.44353@attbi_s51>
Source record: 80894

Interesting question Cecil, and I suspect the answer is yes
if you are refering to the array pointing upwards.
If you are referring to turning the array sideways i.e vertical
polarisation then I doubt
rear radiation could be zero because the earth has more influence over
vertical
polarisation compared to horizontal at one wave length high.
For instance pairs of elements could not have equality.
You can ofcourse accomplish such if the array was reflective as with a dish
but not with normal coupling and resonances where the focussing aproach
is absent.
Best regards
Art

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:422f68db$1_2@127.0.0.1...
> aunwin@insightbb.com wrote:
>> If the phases and and magnitudes of the paired elements
>> are exactly the same, then radiation to the rear is zero.
>
> If you rotate the elements by 90 degrees, can you make the
> radiation toward the ground zero?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> ----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
> News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000
> Newsgroups
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3556. Re: More antenna philosophy

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 01:43:46 UTC
From: amdx <amdx@worldnet.att.net>
Message-ID: <mDNXd.358079$w62.295589@bgtnsc05-news.ops.worldnet.att.net>
Source record: 80895

"Joe S." <nobody@nowhere.net> wrote in message
news:d0dp4u02h3m@news3.newsguy.com...
> Pine trees grow like weeds here. A 70-foot pine tree is likely 20 or so
> years old. And, the problem is not just the hurricanes, it's the
> near-hurricanes. Every one of these trees has limbs that were ripped off
> and several of them have tops that were blown out over the past 20 years
or
> so.

> Most of these are tall and straight enough to produce >lumber so the guy
> who is clearing the lot is not charging anything as he will >sell the
logs, which will more than cover his cost to >clear.

This reminds of a relative (whose first language is not english) was
negotiating the price to get the pine trees remove from a large lot, the
contractor said $5000.00
my relative shook his head and the contractor said "well
I'll give you $6000 but no more"
My relative got smart fast and figured out he was selling the lumber not
paying to have the trees removed!
Mike

3557. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 02:17:04 UTC
From: richardharrison@webtv.net
Message-ID: <23183-422FAE20-123@storefull-3252.bay.webtv.net>
Source record: 80896

Dave Platt wrote:
"This is a classic way (2-element quarter-cycle phased array) to get 180 degree-only pattern. It`s often used with vertical antennas. I took a look at Arnold Bailey`s :TV and other receiving antennas" text (written in 1950) and he shows a similar sort of antenna using two horizontal half-wave dipoles, connected together via a transmission line (open-wire) and fed at the center of the rear dipole. Very clean 180 degree-only pattern."

Yes. The directional patterns on pages 477 and 478 are excellent.

This antenna also appears in Bailey`s catalog of antennas on page 521 as "Half-Wave Antenna and Connected Reflector". Its resistance at center frequency is 50 ohms where its gain is 4 dBd. Bandwidth is 60% for 3 dB down.

I wonder why everybody isn`t using this antenna?

Best regards, Richard Harrison, KB5WZI

3558. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 03:13:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <amdv21dosrc835cdsa1bekl5t2ktpn5hmu@4ax.com>
Source record: 80898

On Wed, 9 Mar 2005 20:17:04 -0600, richardharrison@webtv.net (Richard Harrison) wrote:

>This antenna also appears in Bailey`s catalog of antennas on page 521 as
>"Half-Wave Antenna and Connected Reflector". Its resistance at center
>frequency is 50 ohms where its gain is 4 dBd. Bandwidth is 60% for 3 dB
>down.
>
>I wonder why everybody isn`t using this antenna?

Hi Richard,

This design (with references to the 1930s) from Bailey (given a full chapter treatment) leads to its kin in Krauss' W8JK Antenna (which probably answers your question, Richard).

73's
Richard Clark, KB7QHC

3559. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 03:13:29 UTC
From: "aunwin@insightbb.com"
Message-ID: <tXOXd.110988$tl3.5344@attbi_s02>
Source record: 80897

This sounds like a switchable three element array that I once used
for CB (As an alien I wasn't allowed a amateur license)
I copied the design from a commercial antenna and with a switch box
was able to point it in any one of three directions. The coax between them
was a 1/4 wavelength I believe but the physical distance was much less than
that.
I believe I lost it when it iced up and broke the topsides of the vertical
dipoles..
Regards
Art

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:23183-422FAE20-123@storefull-3252.bay.webtv.net...
> Dave Platt wrote:
> "This is a classic way (2-element quarter-cycle phased array) to get 180
> degree-only pattern. It`s often used with vertical antennas. I took a
> look at Arnold Bailey`s :TV and other receiving antennas" text (written
> in 1950) and he shows a similar sort of antenna using two horizontal
> half-wave dipoles, connected together via a transmission line
> (open-wire) and fed at the center of the rear dipole. Very clean 180
> degree-only pattern."
>
> Yes. The directional patterns on pages 477 and 478 are excellent.
>
> This antenna also appears in Bailey`s catalog of antennas on page 521 as
> "Half-Wave Antenna and Connected Reflector". Its resistance at center
> frequency is 50 ohms where its gain is 4 dBd. Bandwidth is 60% for 3 dB
> down.
>
> I wonder why everybody isn`t using this antenna?
>
> Best regards, Richard Harrison, KB5WZI
>

3560. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 05:18:49 UTC
From: nm5k@wt.net
Message-ID: <1110431929.868116.268660@g14g2000cwa.googlegroups.com>
Source record: 80899

aunwin@insightbb.com wrote:
> Buck
> If your background is not in science then it is natural that you
would
> have difficulty with what I stated. If your background was in science
> then this stuff would be studied in 101 i.e from first principles.

Uhhh... In my case, science had nothing to do with it.
It was my lack of mindreading skills. From your description,
there was no way I could even come close to visualizing what
you had in mind. I never even got close to the science part...
Can you be a bit more vague in your descriptions *if* possible?
Maybe that would help to overcome my problem...:/
I don't have "coast2coastAM" quality mindreading skills...
Nada for remote viewing, etc, also...
I have heard HAARP though, and I stayed in a holiday inn xpress
last Dec, in Hot Springs Ar...
They are now discussing simple close spaced phased arrays, but
how this works in with polygons, equal sided or not, max gain
with max f/b, etc, beats the heck out of me...
Like the old fart with all the dogs in "Moonstruck",
I'm confused...
But, carry onward...The fog ain't half dense yet...

MK

3561. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 05:29:11 UTC
From: nm5k@wt.net
Message-ID: <1110432551.227975.104650@z14g2000cwz.googlegroups.com>
Source record: 80900

I wonder why everybody isn`t using this antenna? ....

Because a rotatable yagi is usually better in
most cases. But people do run those...Probably
more set them up to be switchable, or even steerable,
instead of just one direction. I ran phased dipoles
on 40m, and they worked quite well. I switched
direction by changing feedline lengths. Some
use the "l/c" phaser boxes...But I can throw up
my A4 real quick, and do about 7 dbd?? or so, in any
direction. Kinda makes the phased dipoles a mute
point, except for maybe the lower bands.
If you connect with a harness, which I didn't do,
you need to transpose the feed for the 2nd antenna.
IE: reverse the feedline...That ladder line will
have a single twist if I remember correctly.

MK

3562. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 05:46:06 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <ajnv21lsqg9g33ime6gh9crjimrl2oojpg@4ax.com>
Source record: 80901

On 9 Mar 2005 21:18:49 -0800, nm5k@wt.net wrote:

>
>aunwin@insightbb.com wrote:
>> Buck
>> If your background is not in science then it is natural that you
>would
>> have difficulty with what I stated. If your background was in science
>> then this stuff would be studied in 101 i.e from first principles.
>
>Uhhh... In my case, science had nothing to do with it.
>It was my lack of mindreading skills. From your description,
>there was no way I could even come close to visualizing what
>you had in mind. I never even got close to the science part...
>Can you be a bit more vague in your descriptions *if* possible?
>Maybe that would help to overcome my problem...:/
>I don't have "coast2coastAM" quality mindreading skills...
>Nada for remote viewing, etc, also...
>I have heard HAARP though, and I stayed in a holiday inn xpress
>last Dec, in Hot Springs Ar...

We stayed in a campground in Hot Springs last summer and later went
through Roswell, NM, but it's not helping me either. [grin]

Wes

3563. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 16:23:26 UTC
From: "aunwin@insightbb.com"
Message-ID: <2w_Xd.52445$Ze3.8223@attbi_s51>
Source record: 80909

O.K..O..K Seems like everybody has forgotton the basics of the polygon of forces
and other uses of vector so I will go over the basics.
At the age of 14 yearsI entered the School of Engineering and Navigation where they hashed things from first principles, Since I had little schooling during those war years it gave me an accelerated course on what I had missed during those schoolless years which meant a lot of homework and I had to work like hell.
From the name of the school it was evident that I would get a quick introduction
on vectors for forces and navigation
. This went as follows:
When you swim across a swimming pool then you can swim point to point.
If you swim across a river and tried to swim point to point you finish up on the
other side but down, stream thus to get to the original point of the endeavor you
must swim upstream. If you are a ship or a plane it is obvious that you must have enought fuel
to get from point to point so this becomes very important.
Thus going back to the river swim you can draw a vector or line
that follows the path you took first to cross the river. Since you have units such as time and distance
you can draw that line in scalar form. Then you add on to the tail end of the line the journey upstream
again in scalar form which will be something less than a 90 degree angle.
If you then look back at the point that you started from it becomes obvious that when you swim across stream
the angle you must follow is the angle which is shown from the beginning of the triangle to
the point that you finished up. Next time you are on a plane look downwards and pick up the flight pattern
of small private planes and you will see that their flight path is different from the angle projected by the fuselage
All this is in accordance with Newton's law that 'every action has an equal and opposite reaction.'
Now look below at my original post to what I said and you will see that I applied a scalar drawing that consisted
of many scalae directions in the same way a sailing ship would do if it had to keep changing
direction to get to shore. The first vector drawn for an element with known phase and current was drawn
which happened to be a vertical line of known length. The next line was then added at the end

to reflect the current and phase of the next element chosen and then onto
the next element chosen.
But this element presented a phase and current that was equal and opposite
to the one previously drawn
which meant that I was back to the tail end of my first vector chosen ! Thes
two elements are termed destructive
In fact this happened several times
where vectors cancelled each other so we are just left with a singe vector
in our scalar drawing .This
meant to get back to the point of origin and remembering Newton's law
previously alluded to the scalar
drawing it represents a vector that is equal to the starting vector drawn,
THE SAME PHASE and same
CURRENT. Thus the polygon reflects an array where the phase is constant but
the currents are ADDITIVE
This represents the radiation pattern of a figure eight EXCEPT all the
radiation is now to one
side of the feed point and comprising of a single and larger circle.
All of this reflects exactly what I stated below except I assumed that the
pologon phase drawing was
already known to all, for which I apologise.
With NEC I constructed a model that closely followed this format though
the real world did not
make elements exactly equal but when I rehashed in my mind the basic
priciples the polygon aproach verified
that this aproach does give extraordinary front to back/rear figures that
gave rise to mistrust of the
softwear being used where you may remember that I commented on a model that
I made and where
the response was that the f/b was to high a point that had troubled me for
many a month.
Sorry for the long winded response which reflects what I have gone thru with
my postings which
apparently projected me as a total fool that gave rise to dirisive
comments.
Now I ask again, is there any written work that pertains to max gain and f
to b/rear being on the same frequency?
Best regards to all, no hard feelings
Art KB9MZ.....XG

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:dySVd.30807$r55.174@attbi_s52...
>I have just come to realise that if one drew a polygon of element phases in
>a array
> and all elements were 180 degrees to its companion element and excluding
> the
> driven element, the max gain and max front to back will occur at the SAME
> frequency!
> Until now I was of the understanding that these two max figures could not
> occur at

> the same frequency. Is there anything written about this possibility?
> Regards
> Art
>

3564. appropriate cable slack

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 17:10:32 UTC
From: Dan Jacobson <jidanni@jidanni.org>
Message-ID: <8764zzh1fb.fsf@jidanni.org>
Source record: 80902

One wishes to leave slack in one's outdoor cables in case we
reposition things one day, or a typhoon.

We hear it is a big no-no to concentrate this slack all into a loop
several turns thick, creating an inductance (except for the one loop
right below one's 2-meter GP antenna.)

OK, we will distribute this slack evenly along the 80 meter run of
RG-213, nice if a tree gets blown over on it.

But too much slack looks goofy snaking along the nylon support cord.
How much slack is right? And in what formation shall we distribute it?

3565. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 17:24:15 UTC
From: clvrmnky <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <3p%Xd.93534$vO1.582496@nnrp1.uunet.ca>
Source record: 80910

On 02/03/2005 6:25 PM, Richard Clark wrote:
> On Wed, 02 Mar 2005 13:04:50 -0500, clvrmnky
> <clvrmnky-uunet@coldmail.com.invalid> wrote:
[...]
>>I've seen a neat artificial ground/antenna tuner from MFJ (I think)
>>which seems to offer a lot of bang for the buck. It even has multiple
>>inputs for high-Z single wires. Would this be useful for SW?
>
> Certainly, but you would achieve just as much with a simple tuner
> (cheap one without the transmitter meters). In fact, this tuner is
> generally very necessary to keep local AM stations from desensitizing
> your receiver. This is a common plight suffered by many who would
> otherwise think they were doing pretty well, but just need more
> antenna to get those signals others are reporting.
>
I've been looking more seriously at the balun/tuner/ground offerings out there. Seems to be a fair amount of contention out there about whether antenna tuners work for SW.

If I can lessen the abuse my otherwise sensitive front-end is taking from the wire, then maybe it's worth a try. That is, I'm hoping/guessing that such a device will help my radio not hear a strong signal 10-15kHz on either side of the mark, swamping out stuff I might otherwise hear near these stations.

In this regard, homebrew is good because it allows me to experiment for cheap. Even the cheapest MFJ equipment is a bit steep shipped to my door in Canada.

>
>>Finally, I'm probably just going to wind my own balun out of a ferrite
>>core. I just can't seem to find the details on how to wind the copper.
>> Do I wind the primary first around the whole core, and then the
>>secondary on top of it?
>
> What you are describing is a conventional power transformer - NOT the
> same thing as a Transmission Line Transformer. What you should really
> concentrate on is what is called a Transmission Line Choke (perfectly
> accomplished using a 1:1 Current BalUn/UnUn).
>
Hmmm. I understand that a balun is really a type of matching transformer, and that the specific nomenclature used is really just to distinguish the various use, application and materials of the transformer.

All the designs for homebrew longwire X:1 baluns I've seen are step-down transformers using specific types of ferrite material. Of course, typical use often has one side of the primary and secondary going to a good RF ground (for balanced application, anyway), which I do not have.

My thinking is that since I'm going to be experimenting with different wire antennas this summer, why not try a few different matching techniques as well?

The lack of good RF ground is going to be a challenge, and may preclude any of this. I've got lots of wire, however, so I'm willing to give a weekends up to try different things.

-- cm

3566. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 17:31:56 UTC
From: clvrmnky <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <gw%Xd.93535$vO1.582525@nnrp1.uunet.ca>
Source record: 80912

On 02/03/2005 8:57 PM, Roy Lewallen wrote:
> Try this simple test.
>
> Tune your receiver to a part of the dial where there's no station.
> Disconnect the antenna from your receiver. If the noise level drops,
> impedance matching won't help your signal/noise ratio, it'll just make
> everything louder. You can accomplish the same thing by turning up the
> volume control.
>
Pulling the wire just attenuates the noise. So, a more balanced match will not help with selectivity or overworked front-ends?

If this is the case, and a balun is most useful for transmitters trying to manage SWR, then I guess it doesn't matter.

I'm still hoping that keeping all of the antenna outside may help with household EMI. I sort of though that since I'm bothering to have a transmission line, I may as well hack together a matching circuit for efficiency.

3567. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 17:37:21 UTC
From: clvrmnky <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <lB%Xd.93536$vO1.582649@nnrp1.uunet.ca>
Source record: 80905

On 10/03/2005 12:31 PM, clvrmnky wrote:
> On 02/03/2005 8:57 PM, Roy Lewallen wrote:
>
>> Try this simple test.
>>
>> Tune your receiver to a part of the dial where there's no station.
>> Disconnect the antenna from your receiver. If the noise level drops,
>> impedance matching won't help your signal/noise ratio, it'll just make
>> everything louder. You can accomplish the same thing by turning up the
>> volume control.
>>
> Pulling the wire just attenuates the noise. So, a more balanced match
> will not help with selectivity or overworked front-ends?
>
> If this is the case, and a balun is most useful for transmitters trying
> to manage SWR, then I guess it doesn't matter.
>
... in which case my only real choice is to shorten the antenna, or
attenuate the signal coming to my front-end a little ...

Hmmm. More to think about.

3568. Tower Resonance Breaker?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 17:40:23 UTC
From: KA9S-3_Jeff <ka9s3@comcast.net>
Message-ID: <seGdnVhivLoXG63fRVn-rA@comcast.com>
Source record: 80914

I have a very small yard and a 70ft tower with a beam on top. I want to put up transmitting antennas for 80m and 160m. For the space I have, some form of vertical seems the best. I do not want to shunt feed the tower as a vertical because the feed lines run a long way to the tower from the house along a messenger cable that is 10ft above the ground (no buried coax). The feed lines would become part of the radiating system and would put a lot of RF into my shack.

I would like to string a wire quarter wave 80m vertical alongside the tower but I know it will heavily couple to the tower. I would also like to string a 160m inverted-L alongside the tower. This would likely couple into the tower too.

I have seen resonance breaking "traps" described in ON4UN's book. He calls them "resonant linear traps" shown on page 9-27 section 2.2.11. He forms a rectangular single turn coil in parallel with a variable capacitor using the tower as one side of the rectangular coil.

Does this work? Do you have to use the entire length of the tower to form the "trap"? Could I just use a 4ft segment of the tower half way up with the electrical effect of breaking the tower up into two shorter pieces?

I have also seen what is called a "resonance breaker" described in the ARRL Radio Frequency Interference book. It is similar to the one described above except it is a two turn coil made of insulated wire. The coil is twisted open to form a figure eight and then has the variable capacitor added. The advantage of this configuration is that no electrical contact is needed between the conductor you wish to break "resonance" in. The "trap" magnetically couples with the conductor to impart the high impedance.

Does anyone have experience with these things? Can I use a GDO to set the resonance of the "trap"?

Jeff - KA9S

3569. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 18:04:51 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42308e1a$1_1@127.0.0.1>
Source record: 80904

clvrmnky wrote:
> The lack of good RF ground is going to be a challenge, and may preclude
> any of this.

If you use a balanced antenna system, you don't need
an RF ground for the receive function.
--
73, Cecil, W5DXP

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

3570. Re: Tower Resonance Breaker?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 18:08:40 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42308eff$1_1@127.0.0.1>
Source record: 80911

KA9S-3_Jeff wrote:
> Can I use a GDO to set the resonance of the "trap"?

Just be sure that the trap is in free space and
you are verifying the frequency of the GDO with
a good communications receiver.
--
73, Cecil, W5DXP

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3571. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 18:22:36 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <Mf0Yd.43497$uc.34067@trnddc01>
Source record: 80907

Art

If your question is "is there any written work that pertains to how gain
and sidelobes are related", the answer is Yes. I dont know where back
issues of the IRE Proceedings can be found. But, the Proceedings of the
Professional Group on Antennas will have so much information on current
distribution on a planer array that you may not have enough time left to
read it all.
The current distribution across an antenna aperature has been studdied
very seriously.

I am not qualified to discuss phased arrays. I am convinced that max gain
will not be acheived with the same current distribution as for minimum side
lobes. I realize that you write only "back lobes". But, thats a side lobe
at that special angle
I am rather simple minded when it comes to phased arrays. I use Referance
Data For Radio Engineers as a referance book. It has alot of information on
phased arrays. I suspect all the information I have has already been
concidered by you.

Jerry

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:2w_Xd.52445$Ze3.8223@attbi_s51...
> O.K..O..K Seems like everybody has forgotton the basics of the polygon of
> forces
> and other uses of vector so I will go over the basics.
> At the age of 14 yearsI entered the School of Engineering and Navigation
> where they hashed things from first principles, Since I had little
> schooling
> during those war years it gave me an accelerated course on what I had
> missed
> during those schoolless years which meant a lot of homework and I had to
> work like hell.
> From the name of the school it was evident that I would get a quick
> introduction
> on vectors for forces and navigation
> . This went as follows:
> When you swim across a swimming pool then you can swim point to point.
> If you swim across a river and tried to swim point to point you finish up
> on the
> other side but down, stream thus to get to the original point of the
> endeavor you
> must swim upstream. If you are a ship or a plane it is obvious that you
> must have enought fuel

> to get from point to point so this becomes very important.
> Thus going back to the river swim you can draw a vector or line
> that follows the path you took first to cross the river. Since you have
> units such as time and distance
> you can draw that line in scalar form. Then you add on to the tail end of
> the line the journey upstream
> again in scalar form which will be something less than a 90 degree angle.
> If you then look back at the point that you started from it becomes
> obvious that when you swim across stream
> the angle you must follow is the angle which is shown from the beginning
> of the triangle to
> the point that you finished up. Next time you are on a plane look
> downwards and pick up the flight pattern
> of small private planes and you will see that their flight path is
> different from the angle projected by the fuselage
> All this is in accordance with Newton's law that 'every action has an
> equal and opposite reaction.'
> Now look below at my original post to what I said and you will see that I
> applied a scalar drawing that consisted
> of many scalae directions in the same way a sailing ship would do if it
> had to keep changing
> direction to get to shore. The first vector drawn for an element with
> known phase and current was drawn
> which happened to be a vertical line of known length. The next line was
> then added at the end
> to reflect the current and phase of the next element chosen and then onto
> the next element chosen.
> But this element presented a phase and current that was equal and opposite
> to the one previously drawn
> which meant that I was back to the tail end of my first vector chosen !
> Thes two elements are termed destructive
> In fact this happened several times
> where vectors cancelled each other so we are just left with a singe vector
> in our scalar drawing .This
> meant to get back to the point of origin and remembering Newton's law
> previously alluded to the scalar
> drawing it represents a vector that is equal to the starting vector drawn,
> THE SAME PHASE and same
> CURRENT. Thus the polygon reflects an array where the phase is constant
> but the currents are ADDITIVE
> This represents the radiation pattern of a figure eight EXCEPT all the
> radiation is now to one
> side of the feed point and comprising of a single and larger circle.
> All of this reflects exactly what I stated below except I assumed that the
> pologon phase drawing was
> already known to all, for which I apologise.
> With NEC I constructed a model that closely followed this format though
> the real world did not
> make elements exactly equal but when I rehashed in my mind the basic
> priciples the polygon aproach verified

> that this aproach does give extraordinary front to back/rear figures that
> gave rise to mistrust of the
> softwear being used where you may remember that I commented on a model
> that I made and where
> the response was that the f/b was to high a point that had troubled me for
> many a month.
> Sorry for the long winded response which reflects what I have gone thru
> with my postings which
> apparently projected me as a total fool that gave rise to dirisive
> comments.
> Now I ask again, is there any written work that pertains to max gain and f
> to b/rear being on the same frequency?
> Best regards to all, no hard feelings
> Art KB9MZ.................XG
>
>
>
>
> "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in
> message news:dySVd.30807$r55.174@attbi_s52...
>>I have just come to realise that if one drew a polygon of element phases
>>in a array
>> and all elements were 180 degrees to its companion element and excluding
>> the
>> driven element, the max gain and max front to back will occur at the SAME
>> frequency!
>> Until now I was of the understanding that these two max figures could not
>> occur at
>> the same frequency. Is there anything written about this possibility?
>> Regards
>> Art
>>
>
>

3572. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 18:33:45 UTC
From: "aunwin@insightbb.com"
Message-ID: <dq0Yd.113954$tl3.29391@attbi_s02>
Source record: 80913

Thank you for your polite response. Hopefully the written description of my
thought processes will satisfy a few tho not probably all
Regards
Art
"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:dySVd.30807$r55.174@attbi_s52...
>I have just come to realise that if one drew a polygon of element phases in
>a array
> and all elements were 180 degrees to its companion element and excluding
> the
> driven element, the max gain and max front to back will occur at the SAME
> frequency!
> Until now I was of the understanding that these two max figures could not
> occur at
> the same frequency. Is there anything written about this possibility?
> Regards
> Art
>

3573. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 18:44:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <id4131tt7g1dr9bhv9pvs69cffumtuojup@4ax.com>
Source record: 80906

On Thu, 10 Mar 2005 12:24:15 -0500, clvrmnky
<clvrmnky-uunet@coldmail.com.invalid> wrote:
>I've been looking more seriously at the balun/tuner/ground offerings out
>there. Seems to be a fair amount of contention out there about whether
>antenna tuners work for SW.

Hi OM,

I am sure that is the gospel in rec.radio.shortwave. There is little
there that qualifies as dependable information - except what station
was being heard (and then, this information is obviously iffy).

>If I can lessen the abuse my otherwise sensitive front-end is taking
>from the wire, then maybe it's worth a try. That is, I'm
>hoping/guessing that such a device will help my radio not hear a strong
>signal 10-15kHz on either side of the mark, swamping out stuff I might
>otherwise hear near these stations.

No, no tuner is going to have that much Q unless you get a very small
loop to go with it. Then, you are better off tuning the loop instead.
All-in-all you need to twist a knob somewhere. There are several
merits of using tuners with longwires. The chief among them is that a
tuner will depress the strenght of local AM stations that will desense
your receiver (even if you are not even tuned anywhere near that AM
station's frequency - such is its power and the weakness of receiver
front ends).

>In this regard, homebrew is good because it allows me to experiment for
>cheap.

By all means, do it.

>Hmmm. I understand that a balun is really a type of matching
>transformer, and that the specific nomenclature used is really just to
>distinguish the various use, application and materials of the transformer.

This is all true, but bears very little on your needs.

>All the designs for homebrew longwire X:1 baluns I've seen are step-down
>transformers using specific types of ferrite material.

Those are conventional transformers, not chokes, not BalUns (or
UnUns).

>Of course,
>typical use often has one side of the primary and secondary going to a
>good RF ground (for balanced application, anyway), which I do not have.

May as well divorce yourself from those explanations. A tuner will do the job of transforming AND filter out the crap. A tuner is a variable transformer. If you have a single wire coming in to the tuner, add a hank of wire to the tuner's ground connection [hank = 20' ï¿½6dB].

>My thinking is that since I'm going to be experimenting with different >wire antennas this summer, why not try a few different matching >techniques as well?

Matching at the antenna, or matching at the receiver? Unless you have long arms, or many antennas for each band, it is simpler to match at the receiver.

>The lack of good RF ground is going to be a challenge, and may preclude >any of this. I've got lots of wire, however, so I'm willing to give a >weekends up to try different things.

Returning to the need for a BalUn, properly a choke, for your application. It is useful for reducing house noise from getting mixed with your signal. Conventional transformers won't do that (unless you add a choke at their output on the signal downstream).

73's
Richard Clark, KB7QHC

3574. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 18:52:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11315qoo6ip3o86@corp.supernews.com>
Source record: 80908

clvrmnky wrote:
> On 10/03/2005 12:31 PM, clvrmnky wrote:
>
>> On 02/03/2005 8:57 PM, Roy Lewallen wrote:
>>
>>> Try this simple test.
>>>
>>> Tune your receiver to a part of the dial where there's no station.
>>> Disconnect the antenna from your receiver. If the noise level drops,
>>> impedance matching won't help your signal/noise ratio, it'll just
>>> make everything louder. You can accomplish the same thing by turning
>>> up the volume control.
>>>
>> Pulling the wire just attenuates the noise. So, a more balanced match
>> will not help with selectivity or overworked front-ends?
>>
>> If this is the case, and a balun is most useful for transmitters
>> trying to manage SWR, then I guess it doesn't matter.
>>
> ... in which case my only real choice is to shorten the antenna, or
> attenuate the signal coming to my front-end a little ...
>
> Hmmm. More to think about.

You're on the right track, but more information might help.

Your antenna is picking up signal and noise. When you disconnect your antenna, the antenna's signal and noise are removed, leaving only the receiver's internal noise. The fact that the noise dropped means that the noise being coming into the receiver from the antenna is larger than the internal receiver noise. This is nearly always the case at HF and nearly never the case at VHF and higher. As long as the noise from the antenna dominates over the receiver noise, then improving the impedance match, which is what the original question and answer were about, will only make both the signal and noise (both coming from the antenna) bigger. This is exactly what you get when you increase the volume, and doesn't help the signal to noise ratio one bit. It therefore doesn't help you hear signals.

There are other ways to help the signal to noise ratio, though. If a signficant amount of the noise is originating locally, improving feedline balance with a balun might help. Horizontal polarization will often be less sensitive than vertical to moderately local noise sources, because vertically polarized waves can propagate by surface waves while horizontally polarized waves can't. Feedline balance also improves

rejection of vertically polarized waves when the antenna is horizontal. This is because it prevents pickup from the feedline itself, which is often partially, at least, vertical.

Increased antenna directivity will help if the signal and noise are coming from different directions. But this requires a mechanically or electrically rotatable antenna unless you're only interested in listening in certain directions. Short wave listeners sometimes use a small rotatable loop, which has sharp nulls which can be pointed toward a single dominant noise source.

You mention an "overworked" front end. If your front end is getting overloaded from strong signals, which usually manifests itself as cross-modulation -- "ghost" signals created from existing signals at different frequencies -- either a passive preselector or an attenuator is needed. The former is better only if the loud signals are on frequencies reasonably removed from the frequency where you're listening. Adding attenuation is fine, until you add so much that the receiver noise begins dominating. You can use the antenna-disconnection test to check for that condition. Another way to attenuate the signal is to *degrade* the impedance match. That's right, if overload is the problem, you'll do better with a lousier match.

You also mention selectivity. A preselector can take care of attenuating strong, out-of-band signals. But nothing you can practically do outside the receiver will help you separate two signals which are close together. That requires internal modification to the receiver.

Forget about SWR. It's not of any use in improving your ability to hear signals at HF where the noise from the antenna dominates.

Roy Lewallen, W7EL

3575. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 19:00:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11316b4jt71fm01@corp.supernews.com>
Source record: 80903

clvrmnky wrote:
>>. . .

> Hmmm. I understand that a balun is really a type of matching
> transformer, and that the specific nomenclature used is really just to
> distinguish the various use, application and materials of the transformer.
>

No, that's not correct. Balun is a contraction of "balanced-unbalanced".
A balun is sometimes combined with a transformer or made to transform
impedance, and sometimes it isn't. Its function is to balance the
currents on the two feedline conductors (either coax or parallel wire
line) to prevent radiation from the line when transmitting and pickup
from the line when receiving. The impedance transformation is a separate
function for a different purpose.

> All the designs for homebrew longwire X:1 baluns I've seen are step-down
> transformers using specific types of ferrite material. Of course,
> typical use often has one side of the primary and secondary going to a
> good RF ground (for balanced application, anyway), which I do not have.

A typical 1:1 "current" or "choke" balun, which does what I described
above, does not require any external "ground" or other connection. If
fact, such a connection provides a path for imbalance current and can
actually degrade balance. There are a number of ways of providing this
function, with and without ferrite cores.
>
> My thinking is that since I'm going to be experimenting with different
> wire antennas this summer, why not try a few different matching
> techniques as well?

There's no reason not to experiment. Improving the match won't help your
signal-to-noise ratio. After your experiments show that this is so, you
can go back and learn why not.

>
> The lack of good RF ground is going to be a challenge, and may preclude
> any of this. I've got lots of wire, however, so I'm willing to give a
> weekends up to try different things.

There's no need for an RF ground if you use a well-balanced antenna.

Roy Lewallen, W7EL

3576. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 19:05:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <11316jfr0tjurd1@corp.supernews.com>
Source record: 80919

Sorry, Art, but the reason I don't appreciate your ideas isn't because I don't understand vectors or analysis from first principles or because I have some sort of prejudice against something in your background. It's simply that you're unable to communicate your ideas in a way I can understand them and, for all your many postings, I've yet to see any data that show you've done something extraordinary. I can only speak for myself, but suspect that some others might be in the same boat.

Roy Lewallen, W7EL

aunwin@insightbb.com wrote:
> O.K..O..K Seems like everybody has forgotton the basics of the polygon of
> forces
> and other uses of vector so I will go over the basics.
> At the age of 14 yearsI entered the School of Engineering and Navigation
> where they hashed things from first principles, Since I had little schooling . . .

3577. Re: Tower Resonance Breaker?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 19:18:18 UTC
From: tclay@qmc.ph.msstate.edu
Message-ID: <87k6ofpax1.fsf@qmc.ph.msstate.edu>
Source record: 80915

>I have a very small yard and a 70ft tower with a beam on top. I want to put
>up transmitting antennas for 80m and 160m. For the space I have, some form
>of vertical seems the best. I do not want to shunt feed the tower as a
>vertical because the feed lines run a long way to the tower from the house
>along a messenger cable that is 10ft above the ground (no buried coax). The
>feed lines would become part of the radiating system and would put a lot of
>RF into my shack.

Shunt feeding the tower is probably the simplest option.
Why not coil the feedlines into chokes when they leave the tower, or
put stacks of ferrite beads on them to keep RF off them?

Torsten
N4OGW

3578. Re: appropriate cable slack

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 19:48:52 UTC
From: Buck <iam@this.site>
Message-ID: <4s81319rov74hjlo0kbteemsgdmufr16se@4ax.com>
Source record: 80916

On Fri, 11 Mar 2005 01:10:32 +0800, Dan Jacobson <jidanni@jidanni.org>
wrote:

>One wishes to leave slack in one's outdoor cables in case we
>reposition things one day, or a typhoon.
>
>We hear it is a big no-no to concentrate this slack all into a loop
>several turns thick, creating an inductance (except for the one loop
>right below one's 2-meter GP antenna.)
>
>OK, we will distribute this slack evenly along the 80 meter run of
>RG-213, nice if a tree gets blown over on it.
>
>But too much slack looks goofy snaking along the nylon support cord.
>How much slack is right? And in what formation shall we distribute it?

I would think that the best thing you can do is evaluate your
possibilities. Look over your site and figure out your risks and how
the coax may be affected if a wind blows or a tree sways or a limb
falls. I don't believe that coiled coax will hurt your signal, but it
will be twisted and/or kinked if a limb falls on it or it is otherwise
stretched out due to a disaster.

One thing I learned the hard way is to create a break-point in the
line where if something grabs the coax and keeps going with it, it
releases from the radio it is attached to. In my case, I have a board
through which the coax runs but the radio can't pass through. IF the
wire is pulled from the back, it will break loose from the connector
before taking my rig with it.

Good luck.

Buck
N4PGW

--
73 for now
Buck
N4PGW

3579. Re: Tower Resonance Breaker?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 19:52:53 UTC
From: Buck <iam@this.site>
Message-ID: <289131lphts6bfdc974nka8i9peuev13tp@4ax.com>
Source record: 80918

On 10 Mar 2005 13:18:18 -0600, tclay@qmc.ph.msstate.edu wrote:

>
>>I have a very small yard and a 70ft tower with a beam on top. I want to put
>>up transmitting antennas for 80m and 160m. For the space I have, some form
>>of vertical seems the best. I do not want to shunt feed the tower as a
>>vertical because the feed lines run a long way to the tower from the house
>>along a messenger cable that is 10ft above the ground (no buried coax). The
>>feed lines would become part of the radiating system and would put a lot of
>>RF into my shack.
>
>Shunt feeding the tower is probably the simplest option.
>Why not coil the feedlines into chokes when they leave the tower, or
>put stacks of ferrite beads on them to keep RF off them?
>
>Torsten
>N4OGW

Or, use an UNUN.

I am not familiar with the specific antenna you are describing, but in
the ARRL Antenna book, it describes an antenna where the coax is taken
up the tower where the shield is grounded to the tower and the other
half of the 'dipole' is a wire strung out to where ever.

It's just an option.

--
73 for now
Buck
N4PGW

3580. Re: appropriate cable slack

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 20:10:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <a8a131lm5a76sj847o1gatiodehs2dq501@4ax.com>
Source record: 80917

On Thu, 10 Mar 2005 14:48:52 -0500, Buck <iam@this.site> wrote:

>One thing I learned the hard way is to create a break-point in the
>line where if something grabs the coax and keeps going with it, it
>releases from the radio it is attached to.

Hi Buck,

Reminds me of my Navy days when Ensigns would attempt to walk 6 feet
with a mike that had a 5 foot cable. We attached a chain from the
mike to the bulkhead that was 4 foot long.

Answer for appropriate cable slack: 1 foot.

73's
Richard Clark, KB7QHC

3581. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 20:30:15 UTC
From: "aunwin@insightbb.com"
Message-ID: <r72Yd.52735$Ze3.19530@attbi_s51>
Source record: 80920

Well we shall see Roy, but I find it hard to believe that you
with your antenna knoweledge plus being an engineer do
not understand vectors. I can only believe that American
education skirts this issue but then all of my engineering books
including those by known antenna engineering gurus dwell
upon it as well as authors in subjects such as classical
electromechanical fields.
Frankly, I see you as an expert in the field with long experience
and as such feel that all is known about antennas and you
cannot contemplate the idea that this is not so and you of all
people missed the importance of what I stated. This is very much
like the editing of a movie when it is found that the most interesting parts
finished up on the cutting room floor as it was deemed insignificant.
If what I state is confirmed then I will present it to the Radcom people
since QST is now firmly in the hands of experts that believe all is known
and has lost touch with the experimentor to which many of the ham
fraternity still belong.
I am aware that to some I am a poor communicator, but I went out of
my way to clearly inform people on the subject of vectors and
carefully tied the subject back to my original post such that those
with a non science background can follow step by step the trend of
thought of my original posting.
Regards
Art

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:11316jfr0tjurd1@corp.supernews.com...
> Sorry, Art, but the reason I don't appreciate your ideas isn't because I
> don't understand vectors or analysis from first principles or because I
> have some sort of prejudice against something in your background. It's
> simply that you're unable to communicate your ideas in a way I can
> understand them and, for all your many postings, I've yet to see any data
> that show you've done something extraordinary. I can only speak for
> myself, but suspect that some others might be in the same boat.
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> Roy Lewallen, W7EL
>
> aunwin@insightbb.com wrote:
>> O.K..O..K Seems like everybody has forgotton the basics of the polygon of
>> forces
>> and other uses of vector so I will go over the basics.
>> At the age of 14 yearsI entered the School of Engineering and Navigation
>> where they hashed things from first principles, Since I had little
>> schooling . . .

3582. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 20:55:38 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <qac13158hpga4rpringo7g7nnqinaqj0c6@4ax.com>
Source record: 80921

On Thu, 10 Mar 2005 20:30:15 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>Well we shall see Roy, but I find it hard to believe that you
> with your antenna knoweledge plus being an engineer do
> not understand vectors.

This in response to Roy's post that states in part:

"...but the reason I don't appreciate your ideas isn't because I don't
understand vectors."

[snip]

>I am aware that to some I am a poor communicator,

Here is the problem, simply stated.

> but I went out of
> my way to clearly inform people on the subject of vectors and
>carefully tied the subject back to my original post such that those
> with a non science background can follow step by step the trend of
>thought of my original posting.

We don't need a long convoluted pseudo treatise on vectors, give us
some raw meat that simply states what it is that you're trying to/are
doing.

And, I have to ask since it is the subject, why is necessary or
important to have max gain and F/B at the same frequency?

3583. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 21:15:16 UTC
From: clvrmnky <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <EN2Yd.93571$vO1.582778@nnrp1.uunet.ca>
Source record: 80822

On 10/03/2005 1:04 PM, Cecil Moore wrote:
> clvrmnky wrote:
>
>> The lack of good RF ground is going to be a challenge, and may
>> preclude any of this.
>
>
> If you use a balanced antenna system, you don't need
> an RF ground for the receive function.

Hmmm. I can probably make a decent-sized folded dipole out on the patio. It will have to turn a corner, but I can probably get a fair-sized loop out there.

3584. * ATTENTION ALL BLOGGERS *

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 22:18:16 UTC
From: BLOGGER2005a@yahoo.com
Message-ID: <1110493096.790799.253080@g14g2000cwa.googlegroups.com>
Source record: 80823

http://www.are-u-sure.blogspot.com << go here

3585. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 22:56:37 UTC
From: "aunwin@insightbb.com"
Message-ID: <Bg4Yd.114567$tl3.91301@attbi_s02>
Source record: 80825

Oh come on Wes look at your last posting where you poked fun at the idea of a polygon phasor array. And look at the other postings where it was obvious that many were not familiar with the same and needed more direction. Look at Roy,
he admitted he knows nothing about the subject
which when he next argues with the like of Cecil and others I will now have to think twice instead of accepting his typical
riposte that he supplies. But I give Roy credit for being honest in the face of personal embarassment regarding his lack of knoweledge
You say it was not necesary to provide a long convoluted pseudo treatise on vectors but many asked for it and you made a joke of the idea,
Regarding front to rear occuring at the same frequency. An operator wants as much gain as possible when communicating
so he does not need to resort to more power than needed. For best communication it is nice to block of interference to the rear and thus he needs best front to rear at the frequency of communication even tho it is of interest that he had better rejection at a lower frequency. The fact of the matter is that it is not the frequency being used, he has to live with a lesser value of rejection, your opinion may well be different.

Now you also remarked that you do not want explanations, just the meat. I gave what you call a "treatise" that explained the theoretical underpinnings of what I have stated. It would be unwise at this point to declare success without not only having a NEC model to confirm it but also a 20 meter antenna and not say a 144 meg equivalent. Today we had snow, wind and rain so I could not complete the job.If by chance the antenna gives a third aproval i.e.Nec model then polygon discussion plus the antenna then I will forward it to RADCOM for peer review. It is at that time you can vent your displeasure that you rejected my offer to share the actual mathematical and physical findings. If you were looking for a way to undermine what I had stated then my " treatise" now arms you with the knoweledge to disprove what I have stated as it is one factor that convinces me of my origonal findings. If you need more information regarding vectors I will be happy to aid you in your quest
Regards
Art...KB9MZ....XG

"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:qac13158hpga4rpringo7g7nnqinaqj0c6@4ax.com...
> On Thu, 10 Mar 2005 20:30:15 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>>Well we shall see Roy, but I find it hard to believe that you
>> with your antenna knoweledge plus being an engineer do
>> not understand vectors.

>
> This in response to Roy's post that states in part:
>
> "...but the reason I don't appreciate your ideas isn't because I don't
> understand vectors."
>
> [snip]
>
>
>>I am aware that to some I am a poor communicator,
>
> Here is the problem, simply stated.
>
>
>> but I went out of
>> my way to clearly inform people on the subject of vectors and
>>carefully tied the subject back to my original post such that those
>> with a non science background can follow step by step the trend of
>>thought of my original posting.
>
> We don't need a long convoluted pseudo treatise on vectors, give us
> some raw meat that simply states what it is that you're trying to/are
> doing.
>
> And, I have to ask since it is the subject, why is necessary or
> important to have max gain and F/B at the same frequency?

3586. Double Bazooka question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 22:59:23 UTC
From: someone@somedomain.com.invalid
Message-ID: <fj4Yd.16884$h51.10538@fe07.lga>
Source record: 80824

CC&R's at my current QTH requires me to use an antenna that is not visible.
My choices are to either use an attic installed antenna or be off the air. I prefer the former.
So, I plan to install a 20 meter double bazooka in the attic, and such a small antenna will allow me to use an inverted V configuration, even up there. I used bazooka's 30+ years ago
with success on 80 and 40 so my prejudices are running that way.
Question:
Does anyone out there have experience or thoughts about feeding multiple
double bazooka's with a single coax line?

Dave, N6PZ

3587. Re: Double Bazooka question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 23:26:57 UTC
From: jgboyles@aol.com
Message-ID: <1110497217.372053.308560@l41g2000cwc.googlegroups.com>
Source record: 80826

<some...@somedomain.com.invalid> wrote:
> CC&R's at my current QTH requires me to use an antenna that is not visible.
> My choices are to either use an attic installed antenna or be off the air. I prefer the former.
> So, I plan to install a 20 meter double bazooka in the attic, and such a small antenna
> will allow me to use an inverted V configuration, even up there. I used bazooka's 30+ years ago
> with success on 80 and 40 so my prejudices are running that way.
> Question:
> Does anyone out there have experience or thoughts about feeding multiple
> double bazooka's with a single coax line?
>
> Dave, N6PZ

Hi Dave, The Double Bazooka's claim to fame was full coverage of the band of interest with a good match. With a simple wire dipole, you can not do this on 80m or 40m. Suggest you read W2DU's "Reflections II" to see why a Bazooka has a broader bandwidth. A Bazooka is not as efficient as a wire dipole on 80m and 40m, but it has bandwidth. Since you are interested in 20m up, a simple wire dipole will do everything a bazooka will, and is not nearly as difficult to construct. Especially if you are feeding multiple antennas with a single coax.
Gary N4AST

3588. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 23:34:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1131mcf47nem49b@corp.supernews.com>
Source record: 80827

aunwin@insightbb.com wrote:
> Oh come on Wes look at your last posting where you poked fun at the idea of
> a polygon phasor array. And look at the other postings where it was obvious
> that many were not familiar with the same and needed more direction. Look at
> Roy,
> he admitted he knows nothing about the subject. . .

What subject is that? Phased arrays? Phasors? Vectors? Polygons? I made no admission of the kind! Can you quote what I said and when I said it?

I learned about vectors in high school physics class, and phasors on my own while in high school over 40 years ago now. Both were, of course, nearly daily fare throughout my college EE curriculum, and frequently used during my career as an electronics design engineer. As for phased arrays, have you ever looked at Chapter 8 of the ARRL Antenna Book (of the last 15 years or so), or my article in Vol. 2 of the ARRL Antenna Compendium (1989), "The Simplest Phased Array Feed System -- That Works"? The techniques I describe in both those publications do, incidentally, work as claimed, and have been shown to do so many times.

Or do you mean I know nothing about the subject of voodoo science? If so, I'm guilty as charged.

Roy Lewallen, W7EL

3589. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 23:47:03 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4230dd65$1_2@127.0.0.1>
Source record: 80828

aunwin@insightbb.com wrote:
> Look at Roy, he admitted he knows nothing about the subject
> which when he next argues with the like of Cecil and others I will now have
> to think twice instead of accepting his typical riposte that he supplies.

In the immortal words of the warden from "Cool Hand Luke",
"Whut we haave heah is ahh faiyuah tuh cahmmunicate." I don't
think it's anything personal. We-all just don't speak the same
language. Ah think Ah'm gonna amble over yonder directly.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

3590. Re: Double Bazooka question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 23:50:49 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4230de47$1_1@127.0.0.1>
Source record: 80829

someone@somedomain.com.invalid wrote:
> Does anyone out there have experience or thoughts about feeding multiple
> double bazooka's with a single coax line?

A dipole at least 3/8WL on the lowest frequency of operation
and fed with ladder-line to a tuner will do what you want.
Just keep the ladder-line a few inches away from metal.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

3591. * ATTENTION ALL BLOGGERS *

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-10 23:59:43 UTC
From: BLOGGER2005a@yahoo.com
Message-ID: <1110499183.615322.38100@g14g2000cwa.googlegroups.com>
Source record: 80830

http://www.are-u-sure.blogspot.com << go here

3592. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 00:13:53 UTC
From: "aunwin@insightbb.com"
Message-ID: <5p5Yd.114985$4q6.47585@attbi_s01>
Source record: 80831

Lewallen" <w7el@eznec.com> wrote in message
news:1131mcf47nem49b@corp.supernews.com...
> aunwin@insightbb.com wrote:
>> Oh come on Wes look at your last posting where you poked fun at the idea
>> of a polygon phasor array. And look at the other postings where it was
>> obvious that many were not familiar with the same and needed more
>> direction. Look at Roy,
>> he admitted he knows nothing about the subject. . .
>
> What subject is that? Phased arrays? Phasors? Vectors? Polygons? I made no
> admission of the kind! Can you quote what I said and when I said it?

Roy you have no further to look than this thread and it appeared un der your
name

>
> I learned about vectors in high school physics class, and phasors on my
> own while in high school over 40 years ago now. Both were, of course,
> nearly daily fare throughout my college EE curriculum, and frequently used
> during my career as an electronics design engineer. As for phased arrays,
> have you ever looked at Chapter 8 of the ARRL Antenna Book (of the last 15
> years or so), or my article in Vol. 2 of the ARRL Antenna Compendium
> (1989), "The Simplest Phased Array Feed System -- That Works"? The
> techniques I describe in both those publications do, incidentally, work as
> claimed, and have been shown to do so many times.

Yes I am aware of that and I expressed amazement at your lack of knoweledge
as expressed in this thread. At the same time I see you are referring to
stuff
that you wrote when you were younger and things change as you get older.
A case in point is the ELZEC program which frankly does not match up with
todays technology or competitive programs yet maintains a high price
presumably based on your past achievements.
But when you express your knoweledge as you did this week
and showed complete lack of knoweledge regarding the subject at hand then
it may well be a sign of the times as it were and you resorted to attack,
not the
underpinnings of what I stated but me as an individual. If you were a
profesional
you would have attacked the polygon example given at the onset of this
thread
but then you expressed lack of knoweledge of the subject and I commended
you for that but the passing of time places no mercy on any of us mortals
as
we age despite our personally perceived station in life.

>
> Or do you mean I know nothing about the subject of voodoo science? If so,
> I'm guilty as charged.

If the subject of vector arrays is voodoo then I agree you are guilty as
charged

Its a real shame that you are taking this attitude but if all you want is a
piece of me
then I am not going to go away

Regards
Art......KB9MZ......XG

>
> Roy Lewallen, W7EL

3593. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 00:47:02 UTC
From: "aunwin@insightbb.com"
Message-ID: <aU5Yd.53158$Ze3.20187@attbi_s51>
Source record: 80832

Yes I have those reference books but I do not have access to IRE procedings.
My quest was not an easy one and I reflected long as to why the NEC model
did not reflect an absolute zero Front to back. On reflection I realised
that a straight
element in an array is not necessarily the most efficient radiator. Then you
have the position
that a deformed radiator must have a definite coupling on other elements as
shown by Moxon
to have a resistive impedance, he used the bending of elements to pursue
this.
And there are other things to be concerned about such as element diameter
change as we move
away from the center as well as the element structure that is tubular and
not solid which would portray
a different aproach with respect to skin resistance. One thing I did look at
was the difference in F/B
when I went for maximum gain and the change that occured when I went for
maximum F/B and I was
surprised to see the F/R increase at a large rate and reach its maximum of
more than
50 percent improvement (actually 100 % improvement for the low TOA)at the
loss of less than
one half db loss in gain because the range of maximum gain was reduced. In
retrospect this is not
surprising as the frontal lobe became larger in diameter at a lesser
percentage rate of what was
taken from the rear

Hopefully the weather will change soon so I can see exactly what is
happening with a full scale
array
Regards
Art

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:Mf0Yd.43497$uc.34067@trnddc01...
>
> Art
>
> If your question is "is there any written work that pertains to how gain
> and sidelobes are related", the answer is Yes. I dont know where back
> issues of the IRE Proceedings can be found. But, the Proceedings of the
> Professional Group on Antennas will have so much information on current
> distribution on a planer array that you may not have enough time left to
> read it all.

> The current distribution across an antenna aperature has been studdied
> very seriously.
>
> I am not qualified to discuss phased arrays. I am convinced that max
> gain will not be acheived with the same current distribution as for
> minimum side lobes. I realize that you write only "back lobes". But,
> thats a side lobe at that special angle
> I am rather simple minded when it comes to phased arrays. I use
> Referance Data For Radio Engineers as a referance book. It has alot of
> information on phased arrays. I suspect all the information I have has
> already been concidered by you.
>
> Jerry
>
>
> "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in
> message news:2w_Xd.52445$Ze3.8223@attbi_s51...
>> O.K..O..K Seems like everybody has forgotton the basics of the polygon of
>> forces
>> and other uses of vector so I will go over the basics.
>> At the age of 14 yearsI entered the School of Engineering and Navigation
>> where they hashed things from first principles, Since I had little
>> schooling
>> during those war years it gave me an accelerated course on what I had
>> missed
>> during those schoolless years which meant a lot of homework and I had to
>> work like hell.
>> From the name of the school it was evident that I would get a quick
>> introduction
>> on vectors for forces and navigation
>> . This went as follows:
>> When you swim across a swimming pool then you can swim point to point.
>> If you swim across a river and tried to swim point to point you finish up
>> on the
>> other side but down, stream thus to get to the original point of the
>> endeavor you
>> must swim upstream. If you are a ship or a plane it is obvious that you
>> must have enought fuel
>> to get from point to point so this becomes very important.
>> Thus going back to the river swim you can draw a vector or line
>> that follows the path you took first to cross the river. Since you have
>> units such as time and distance
>> you can draw that line in scalar form. Then you add on to the tail end of
>> the line the journey upstream
>> again in scalar form which will be something less than a 90 degree angle.
>> If you then look back at the point that you started from it becomes
>> obvious that when you swim across stream
>> the angle you must follow is the angle which is shown from the beginning
>> of the triangle to
>> the point that you finished up. Next time you are on a plane look

>> downwards and pick up the flight pattern
>> of small private planes and you will see that their flight path is
>> different from the angle projected by the fuselage
>> All this is in accordance with Newton's law that 'every action has an
>> equal and opposite reaction.'
>> Now look below at my original post to what I said and you will see that I
>> applied a scalar drawing that consisted
>> of many scalae directions in the same way a sailing ship would do if it
>> had to keep changing
>> direction to get to shore. The first vector drawn for an element with
>> known phase and current was drawn
>> which happened to be a vertical line of known length. The next line was
>> then added at the end
>> to reflect the current and phase of the next element chosen and then onto
>> the next element chosen.
>> But this element presented a phase and current that was equal and
>> opposite to the one previously drawn
>> which meant that I was back to the tail end of my first vector chosen !
>> Thes two elements are termed destructive
>> In fact this happened several times
>> where vectors cancelled each other so we are just left with a singe
>> vector in our scalar drawing .This
>> meant to get back to the point of origin and remembering Newton's law
>> previously alluded to the scalar
>> drawing it represents a vector that is equal to the starting vector
>> drawn, THE SAME PHASE and same
>> CURRENT. Thus the polygon reflects an array where the phase is constant
>> but the currents are ADDITIVE
>> This represents the radiation pattern of a figure eight EXCEPT all the
>> radiation is now to one
>> side of the feed point and comprising of a single and larger circle.
>> All of this reflects exactly what I stated below except I assumed that
>> the pologon phase drawing was
>> already known to all, for which I apologise.
>> With NEC I constructed a model that closely followed this format though
>> the real world did not
>> make elements exactly equal but when I rehashed in my mind the basic
>> priciples the polygon aproach verified
>> that this aproach does give extraordinary front to back/rear figures that
>> gave rise to mistrust of the
>> softwear being used where you may remember that I commented on a model
>> that I made and where
>> the response was that the f/b was to high a point that had troubled me
>> for many a month.
>> Sorry for the long winded response which reflects what I have gone thru
>> with my postings which
>> apparently projected me as a total fool that gave rise to dirisive
>> comments.
>> Now I ask again, is there any written work that pertains to max gain and
>> f to b/rear being on the same frequency?

>> Best regards to all, no hard feelings
>> Art KB9MZ.....XG
>>
>>
>>
>>
>> "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in
>> message news:dySVd.30807$r55.174@attbi_s52...
>>>I have just come to realise that if one drew a polygon of element phases
>>>in a array
>>> and all elements were 180 degrees to its companion element and excluding
>>> the
>>> driven element, the max gain and max front to back will occur at the
>>> SAME frequency!
>>> Until now I was of the understanding that these two max figures could
>>> not occur at
>>> the same frequency. Is there anything written about this possibility?
>>> Regards
>>> Art
>>>
>>
>>
>
>

3594. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 01:05:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cgq131ddkttk32hab8kbef7gi3ft8ks1e2@4ax.com>
Source record: 80833

>On Mon, 07 Mar 2005 01:02:18 GMT, "aunwin@insightbb.com"
><aunwin@insightbb.com@insightbb.com> wrote:
>>It would appear that I have come across something new.

"Kraus forgive them,
For they know not where they've polygon wrong"

73's
Richard Clark, KB7QHC

3595. Re: Double Bazooka question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 01:09:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6rr131lgje9bgqgir34of60k0k3a7edecf@4ax.com>
Source record: 80834

On Thu, 10 Mar 2005 22:59:23 GMT, <someone@somedomain.com.invalid>
wrote:
>Does anyone out there have experience or thoughts about feeding multiple
>double bazooka's with a single coax line?

Hi Dave,

A simple Fan Dipole will do as much, and more efficiently. Should be
a slam dunk to construct in the attic if you have room for "bazookas."

73's
Richard Clark, KB7QHC

3596. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 01:16:25 UTC
From: dplatt@radagast.org
Message-ID: <1131sb9anbb8p12@corp.supernews.com>
Source record: 80835

In article <5p5Yd.114985$4q6.47585@attbi_s01>,
aunwin@insightbb.com <aunwin@insightbb.com@insightbb.com> wrote:

>Roy you have no further to look than this thread and it appeared un der your
>name

Art, I read what he said:

"Sorry, Art, but the reason I don't appreciate your ideas isn't
because I don't understand vectors or analysis from first principles or
because I have some sort of prejudice against something in your background.
It's simply that you're unable to communicate your ideas in a way I can
understand them..."

If you believe that Roy is saying that he doesn't understand vectors,
you're completely misunderstanding what he wrote. You mis-parsed his
(admittedly complex) sentence structure.

He is saying that:

[1] He does understand vectors and analysis from first principles,
[2] He has no prejudice against your background,

but that

[3] You aren't able to communicate your ideas in a way he finds
understandable, and
[4] His failure to appreciate your ideas results from point [3].

Your belief that Roy admitted not understanding vectors or analysis is
purely a result of your mis-reading what he wrote. He didn't say
that. You've acknowledged that you're not a good communicator...
well, I'm afraid you failed to understand Roy's communication
accurately.

Roy isn't alone in his inability to understand what you're trying to
express. I read back through your original question about phase and
magnitude resultants from radiators arranged in a polygon, and quite
honestly there just wasn't enough information in what you posted for
anyone to gain a clear and unambiguous understanding of just what you
were talking about. You wanted to know whether anyone had
investigated or studied such arrangements or systems... but you didn't
specify what *kind* of polygon (regular, irregular, chaotic, fractal,
etc.), what sort of drive or feed arrangments you were assuming to
create the currents to create the signals in the proper magnitudes and
phases, etc.

In short, your query could have been about almost *any* sort of
multi-element antenna, because you didn't give enough information
to enable any reader to figure out what sort of antennas you were
referring to and which you were ignoring.

We can't read your mind. If you cannot express yourself clearly, and
misunderstand what people write in response, then there's just no way
for anyone to help you with your ideas.

As others have pointed out, there are many *decades* of studies,
papers, designs, etc. having to do with multiple radiators in specific
phase/magnitude arrangments. The use of actively-driven phased
dipole or monopole arrays dates back at least to the 1930s, I believe.

It's easy to calculate the resultants for multiple-radiator phased
arrays of various sorts. The hard part is getting each element to
radiate the magnitude and phase you want, in the proper relationships,
with an active feed arrangment that's practical to implement and which
has the other characteristics you desire (e.g. broadbanded behavior).
I gather that there are some simple-seeming problems in power division
and phase splitting for which no good, general solutions are known
even today. Things get even tougher if you want to depend on
parasitic excitement of some of the elements.

Simply adding up phase vectors isn't hard... but it doesn't equate to
designing an actual working antenna. It's sort of like the old joke
about a physicist's cookbook: "First, assume the availability of a
spherical chicken of uniform density." The recipe is easy once you
have the chicken... :-)

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3597. Re: Double Bazooka question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 01:16:47 UTC
From: Dan Richardson <dwr@mailinator.com>
Message-ID: <nas13157tb5aa13hp0gpttjo4hd0ss9cqd@4ax.com>
Source record: 80836

On Thu, 10 Mar 2005 22:59:23 GMT, <someone@somedomain.com.invalid>
wrote:

>CC&R's at my current QTH requires me to use an antenna that is not visible.
>My choices are to either use an attic installed antenna or be off the air. I prefer the
former.
>So, I plan to install a 20 meter double bazooka in the attic, and such a small antenna
>will allow me to use an inverted V configuration, even up there. I used bazooka's 30+
years ago
>with success on 80 and 40 so my prejudices are running that way.
>Question:
>Does anyone out there have experience or thoughts about feeding multiple
>double bazooka's with a single coax line?
>
>Dave, N6PZ
>

Dave,

Before you spend all that time, effort and $$$ I suggest you read
this:

http://www.w2du.com/Reflections2Chapter18DoubleBazooka.pdf

Danny,
K6MHE

3598. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 01:26:48 UTC
From: nm5k@wt.net
Message-ID: <1110504408.407270.206110@g14g2000cwa.googlegroups.com>
Source record: 80837

Richard Clark wrote:
> >On Mon, 07 Mar 2005 01:02:18 GMT, "aunwin@insightbb.com"
> ><aunwin@insightbb.com@insightbb.com> wrote:
> >>It would appear that I have come across something new.
>
> "Kraus forgive them,
> For they know not where they've polygon wrong"

You said it...This is hilarious...Better than the comedy
channel.. Poor ole Art just doesn't get it...At all...
It wouldn't matter what we said, if it does not align with
his thinking, we are all ignorant, or we are trying to
crucify him to a rohn 45 tower...It doesn't matter that
the problem has nothing to do with polygons, phased arrays,
or anything else under the sun. The problem is he wants to
keep his "device" a secret, so he can claim it a new
invention. So he's afraid to give any details at all.
In doing this, he fails to realize no one has a clue to what
he is trying to describe 92% of the time...Myself, I think
this is just another round the world attempt to justify the
validity of that Rube Goldburg looking antenna he has been
trying to plug since whenever....Years it would seem...
MK

3599. What is "Blogging"

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 01:46:26 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <SL6Yd.762$qf2.634@newsread2.news.atl.earthlink.net>
Source record: 80838

I am serious, guess I don't get out much what is "Blogging" ?

3600. Re: What is "Blogging"

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 01:53:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <k5u131hf5aajidfao78cln1cm8a6e4sbd5@4ax.com>
Source record: 80839

On Fri, 11 Mar 2005 01:46:26 GMT, "John Franklin"
<jpfrank@peoplepc.com> wrote:

> I am serious, guess I don't get out much what is "Blogging" ?

Hi John,

I would guess not. It has been in the news recently where the
Bloggers outed a gay prostitute that has been invited into the white
house press briefings by the administration to toss the prez
powderpuff questions.

The term Blog is a contraction of two words:
Web Log
which is an open journal kept on the WWW and updated with any "news"
that the Blogger finds interesting or typically under-reported. They
were responsible for outing Dan Rather's thin evidence about W's poor
attendance record during 'Nam. You may notice that Dan has been
demoted.

73's
Richard Clark, KB7QHC

3601. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 02:12:02 UTC
From: Jim Kelley <jwkelley@nospam.edu>
Message-ID: <d0qupj$232$1@news.service.uci.edu>
Source record: 80840

aunwin@insightbb.com wrote:

> Yes I am aware of that and I expressed amazement at your lack of knoweledge
> as expressed in this thread. At the same time I see you are referring to
> stuff
> that you wrote when you were younger and things change as you get older.
> A case in point is the ELZEC program which frankly does not match up with
> todays technology or competitive programs yet maintains a high price
> presumably based on your past achievements.
> But when you express your knoweledge as you did this week
> and showed complete lack of knoweledge regarding the subject at hand then
> it may well be a sign of the times as it were and you resorted to attack,
> not the
> underpinnings of what I stated but me as an individual. If you were a
> profesional
> you would have attacked the polygon example given at the onset of this
> thread
> but then you expressed lack of knoweledge of the subject and I commended
> you for that but the passing of time places no mercy on any of us mortals
> as
> we age despite our personally perceived station in life.

What you described would be at best be described in contemporary
venacular as a polyline. As has been explained, a polygon is a closed
shape. A polyline could form a polygon in the special case where the
phase angles sum to 360 and the line segments are of proper length and
in a particular order. I think most of us here know that Roy of all
people has no trouble at all with such a concept. I also have been
following the thread, and what you didn't describe is how any of that
relates to the antenna question you asked. Hence the mix-up.

73, ac6xg

3602. Re: What is "Blogging"

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 02:17:12 UTC
From: Jim Kelley <jwkelley@nospam.edu>
Message-ID: <d0qv3a$24i$1@news.service.uci.edu>
Source record: 80841

John Franklin wrote:

> I am serious, guess I don't get out much what is "Blogging" ?

Somebody thought that wasting time needed a fancier name. :-)
Blog comes from Web Log. Dumb, huh?

ac6xg

3603. easy money in 30 days

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 02:27:30 UTC
From: trip <jotto105@wi.rr.com>
Message-ID: <1110508050.188705.189960@z14g2000cwz.googlegroups.com>
Source record: 80842

MAKING MONEY I found this on a bulletin board and decided to try it. A little while back, I was browsing through newsgroups and came across an

article similar to this that said you could make thousands of dollars within weeks with only an initial investment of $6.00! So I thought, "Yeah right, this must be a scam", but like most of us, I was curious, so I kept reading. Anyway, it said that you send $1.00 to each of the 6

names and address stated in the article. You then place your own name and address in the bottom of the list at #6, and post the article in at

least 200 newsgroups. (There are thousands) No catch, that was it. So after thinking it over, and talking to a few people first, I thought about trying it. I figured: "what have I got to lose except 6 stamps and $6.00, right?" Then I invested the measly $6.00. WellGUESS WHAT!!... Within 7 days, I started getting money in the mail! I was shocked! I figured it would end soon, but the money just kept coming in. In my first week, I made about $25.00. By the end of the second week I had made a total of over $1,000.00! In the third week I had over

$10,000.00 and it's still growing. This is now my fourth week and I have made a total of just over $42,000.00 and it's still coming in rapidly. It's certainly worth $6.00, and 6 stamps, I have spent more than that on the!! Let me tell you how this works and most importantly,

why it works.... Also, make sure you print a copy of this article NOW, so you can get the information off of it as you need it. I promise you that if you follow the directions exactly, that you will start making more money than you thought possible by doing something so easy! Suggestion: Read this entire message carefully! (print it out or download it.) Follow the simple directions and watch the money come in!

It's easy. It's legal. And, your investment is only $6.00 (Plus postage) IMPORTANT: This is not a scam; it is not indecent; it is not illegal; and it is virtually no risk - it really works!!!! If all of the following instructions are adhered to, you will receive extraordinary dividends. PLEASE NOTE: Please follow these directions EXACTLY, and $50,000 or more can be yours in 20 to 60 days. This program remains successful because of the honesty and integrity of the participants. Please continue its success by carefully adhering to the instructions. You will now become part of the Mail Order business. In this business your product is not solid and tangible, it's a service. You are in the business of developing Mailing Lists. Many large corporations are happy to pay big bucks for quality lists. However, the

money made from the mailing lists is secondary to the income which is made from people like you and me asking to be included in that list. Here are the 4 easy steps to success: STEP 1: Get 6 separate pieces of paper and write the following on each piece of paper "PLEASE PUT ME ON YOUR MAILING LIST." Now get 6 US $1.00 bills and place ONE inside EACH of the 6 pieces of paper so the bill will not be seen through the envelope (to prevent thievery). Next, place one paper in each of the 6 envelopes and seal them. You should now have 6 sealed envelopes, each with a piece of paper stating the above phrase, your name and address, and a $1.00 bill. What you are doing is creating a service. THIS IS ABSOLUTELY LEGAL! You are requesting a legitimate service and you are paying for it! Like most of us I was a little skeptical and a little worried about the legal aspects of it all. So I checked it out with the

U.S. Post Office (1-800-725-2161) and they confirmed that it is indeed legal! Mail the 6 envelopes to the following addresses: #1)Dan Warner 2812
W. 1st. St. Duluth, MN 55806 #2) Karen Green 50 Gillinder Street Rockhampton Qld Australia 4700 #3) Ryan Lake 41130 Congerbay Dr Harrison Twp, MI 48045 #4) Zac Inchley unit 82/ 128 Benowa rd Southport

Qld Australia 4215 #5) Carl Baker 2267 N. Kedzie 1st floor Chicago, Illinois 60647 #6) Jason Otto 600 s. 1st st. Waterford, WI 53185
STEP 2: Now take the #1 name off the list that you see
above, move the other names up (6 becomes 5, 5 becomes 4, etc.) and add

YOUR Name as number 6 on the list. STEP 3: Change anything you need to,

but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups. (I think there are close to 24,000 groups) All you need is 200, but remember, the more

you post, the more money you make! This is perfectly legal! If you have

any doubts, refer to Title 18 Sec. 1302 & 1341 of the Postal laws. Keep

a copy of these steps for yourself and, whenever you need money, you can use it again, and again. NOTE: You may want to retain every name and address sent to you, either on a computer or hard copy and keep the

notes people send you. This VERIFIES that you are truly providing a service. (Also, it might be a good idea to wrap the $1 bill in dark paper to reduce the risk of mail theft.) So, as each post is downloaded

and the directions carefully followed, six members will be reimbursed for their participation as a List Developer with one dollar each. Your name will move up the list geometrically so that when your name reaches

the #1 position you will be receiving thousands of dollars in CASH!!! What an opportunity for only $6.00 ($1.00 for each of the first six people listed above) Send it now, add your own name to the list and you're in business! ---DIRECTIONS ----- FOR HOW TO POST TO NEWSGROUPS---------- Step 1) You do not need to re-type this entire letter to do your own posting. Simply put your cursor at the beginning

of this letter and drag your cursor to the bottom of this document, and

select 'copy' from the edit menu. This will copy the entire letter into

the computer's memory. Step 2) Open a blank 'notepad' file and place your cursor at the top of the blank page. From the 'edit' menu select 'paste'. This will paste a copy of the letter into notepad so that you can add your name to the list. Step 3) Save your new notepad file as a .txt file. If you want to do your postings in different settings, you'll always have this file to go back to. Step 4) Use Netscape or Internet explorer and try searching for various newsgroups (on-line forums, message boards, chat sites, discussions.) Step 5) Visit these message boards and post this article as a new message by highlighting the text of this letter and selecting paste from the edit menu. Fill in

the Subject, this will be the header that everyone sees as they scroll through the list of postings in a particular group, click the post message button. You're done with your first one!
Congratulations...THAT'S IT! All you have to do is jump to different newsgroups and post away, after you get the hang of it, it will take about 30 seconds for each newsgroup! **REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200** That's it! You will begin receiving money from around the world within days! You may eventually want to rent a P.O.Box due to

the large amount of mail you will receive. If you wish to stay anonymous, you can invent a name to use, as long as the postman will deliver it. **JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT. ** Now the WHY part: Out of 200 postings, say I receive only 5 replies (a verylow example). So then I made $5.00 with my name at #6 on the letter. Now, each of the 5 persons who just sent me $1.00 make the MINIMUM 200 postings, each with my name at #5 and only 5 persons respond to each of

the original 5, that is another $25.00 for me, now those 25 each make 200 MINIMUM posts with my name at #4 and only 5 replies each, I will bring in an additional $125.00! Now, those 125 persons turn around and post the MINIMUM 200 with my name at #3 and only receive 5 replies each, I will make an additional $626.00! OK, now here is the fun part, each of those 625 persons post a MINIMUM 200 letters with my name at #2

and they each only receive 5 replies, that just made me $3,125.00!!! Those 3,125 persons will all deliver this message to 200 newsgroups with my name at #1 and if still 5 persons per 200 newsgroups react I will receive $15,625,00! With an original investment of only $6.00! AMAZING! When your name is no longer on the list, you just take the latest posting in the newsgroups, and send out another $6.00 to names on the list, putting your name at number 6 again. And start posting again. The thing to remember is: do you realize that thousands of people all over the world are joining the internet and reading these articles everyday?, JUST LIKE YOU are now!! So, can you afford $6.00 and see if it really works?? I think so... People have said, "what if the plan is played out and no one sends you the money? So what! What

are the chances of that happening when there are tons of new honest users and new honest people who are joining the internet and newsgroups

everyday and are willing to give it a try? Estimates are at 20,000 to 50,000 new users, every day, with thousands of those joining the actual

internet. Remember, play FAIRLY and HONESTLY PLEASE REMEMBER that this program remains successful because of the honesty and integrity of the participants and by their carefully adhering to the directions. Look at

it this way. If you are of integrity, the program will continue and the

money that so many others have received will come your way

3604. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 03:45:47 UTC
From: "aunwin@insightbb.com"
Message-ID: <Lv8Yd.115147$tl3.40640@attbi_s02>
Source record: 80843

O.K. Jim you have my respect so I will go over things again.
I commented that I always thought that it was impossible to have
max gain at the same frequency that one obtained max F/B F/R.
Presumably you read that.

I then stated a theoretical situation where elements worked in pairs but
equal and opposite except
the driven element
You read that I assume
So to draw a "polygon" of the array element phases and current we start with
the driven element,
a vertical line of scalar length and then move on to add a scaler length and
phase to the end of the
director "length.
Hopefully you are still with me

But remember I stated that all other elements were equal and opposite in a
twosome form
to another element, thus even tho we we have gone thru the normal routine we
still arrive at the end
of the driven element scalar line.
Hopefully you are still with me

So to close the scalar diagram we have a line that represents an element
that is in phase
with the director i.e additive. This diagram does not show that the element
pairs are doing
nothing and therefore of no use, those elements still radiate but they
oppose each other
with the final result that to close the diagram an element is required that
has the same
phase and magnitude as the fed element
Still with me I hope

With a single dipole over ground we get a figure 8 radiation pattern
but we have just shown how an array can be theoreticaly formed that
results in a unidirectional form where one part of the figure 8 pattern
has been cancelled and at the same time we have two radiation patterns
on the same side of the feed point in additive fashion in the form of a
perfect circle which is larger than either of the circles formed in the
figure 8
pattern.

Yes a lot of steps in this thought process but stick with me

Looking at the final large circle we can say that the demise of the rear pattern
equates with maximum gain and where the lobe width has become larger
instead of the normal narrowing effect that we get with a Yagi
Still with me?

We can also see that using such an array can avoid the manufacture of side lobes
whether they are frontal or otherwise as our "Polygon" is symetrical where one
made for a yagi is not such that errant reflective rays are created.

To wrap things up: the thread was created because I had created such an array
using NEC with 300 segments per half wave which produced awesome front to
rear figures which some readers questioned the feasability. I also questioned the results
of the model for many months ,UNTIL I came up with the cited analogy
The model matched the analogy tho the pairs of elements were not exactly equal
but very close and the resulting pattern matched the analogy in that it became
LARGER. With two strikes in agreement I then sort for a final crunch mode and that was
to make what is a mechanical difficult array to build as well as expensive for something
that still had lingering questions. The winter has been harsh but with a little time spent
each day during the last six months I now need one half day of good weather without wind
to place this new fangled array at the tower top and without the need of the heavy rotor
(prop pitch) which was needed for its equivalent long boom yagi.(I do this without help
and I am not as strong as I used to be now that I am past 70)
I don't understand the derisve comments regarding my beliefs and the ensueing
experimentation and building except there is a prevailing thought in the U.S.
that it is impossible to discover anything new as every thing possible was already
known, but else where in the world the average ham still experiments to pursue
new knoweledge.
The world is really seen as out of step with the U.S. in more that one way and this
thread portrays just one more thing to add to the list.
Regards
Art..... KB9MZ,,,,,, XG

\
I then illustrated where such an array could be drawn polygon fashion

You read that I assume
"Jim Kelley" <jwkelley@nospam.edu> wrote in message
news:d0qupj$232$1@news.service.uci.edu...
>
>
> aunwin@insightbb.com wrote:
>
>> Yes I am aware of that and I expressed amazement at your lack of
>> knoweledge
>> as expressed in this thread. At the same time I see you are referring to
>> stuff
>> that you wrote when you were younger and things change as you get older.
>> A case in point is the ELZEC program which frankly does not match up with
>> todays technology or competitive programs yet maintains a high price
>> presumably based on your past achievements.
>> But when you express your knoweledge as you did this week
>> and showed complete lack of knoweledge regarding the subject at hand then
>> it may well be a sign of the times as it were and you resorted to attack,
>> not the
>> underpinnings of what I stated but me as an individual. If you were a
>> profesional
>> you would have attacked the polygon example given at the onset of this
>> thread
>> but then you expressed lack of knoweledge of the subject and I commended
>> you for that but the passing of time places no mercy on any of us
>> mortals as
>> we age despite our personally perceived station in life.
>
> What you described would be at best be described in contemporary venacular
> as a polyline. As has been explained, a polygon is a closed shape. A
> polyline could form a polygon in the special case where the phase angles
> sum to 360 and the line segments are of proper length and in a particular
> order. I think most of us here know that Roy of all people has no trouble
> at all with such a concept. I also have been following the thread, and
> what you didn't describe is how any of that relates to the antenna
> question you asked. Hence the mix-up.
>
> 73, ac6xg
>

3605. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 04:25:36 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <st42315si94j4c37r7d1ka87006fg0qj95@4ax.com>
Source record: 80844

On Thu, 10 Mar 2005 22:56:37 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>Oh come on Wes look at your last posting where you poked fun at the idea of
>a polygon phasor array. And look at the other postings where it was obvious
>that many were not familiar with the same and needed more direction. Look at
>Roy,
>he admitted he knows nothing about the subject

He did no such thing. Not only are you having difficulty expressing
yourself, you have similar difficulty understanding what others are
trying to tell you. I'm not trying to be cruel or harsh, but that's
just the way it is.

>which when he next argues with the like of Cecil and others I will now have
>to think twice instead of accepting his typical
>riposte that he supplies. But I give Roy credit for being honest in the face
>of personal embarassment regarding his lack of knoweledge
>You say it was not necesary to provide a long convoluted pseudo treatise on
>vectors but many asked for it and you made a joke of the idea,
>Regarding front to rear occuring at the same frequency. An operator wants as
>much gain as possible when communicating
>so he does not need to resort to more power than needed. For best
>communication it is nice to block of interference to the rear and thus he
>needs best front to rear at the frequency of communication even tho it is of
>interest that he had better rejection at a lower frequency. The fact of the
>matter is that it is not the frequency being used, he has to live with a
>lesser value of rejection, your opinion may well be different.

So if I understand you correctly (a *really* dubious proposition) I
would have much better success with my 20 meter antenna if I embraced
your philosophy. My current antenna is of my design, a three-element
monoband Yagi-Uda parasitic array. You can see it in the picture on
qrz.com. It is an honest to goodness actual antenna. I have 310
countries confirmed on 20 meters most of them (The hard ones) worked
with this antenna. All at the "too-low" height (according to you) of
45' above ground. I would be delighted to send you an EZNEC,
Multinec, or NEC file that describes the antenna. The model accounts
for boom to mast connection, element taper, etc. (per Leeson,
"Physical Design of Yagi Antennas."), includes the stub matching feed
system and appears to accurately describe the antenna to the best of
my limited capability to measure it.

Over the band of interest, 14.0 to 14.25 MHz., the modeled free-space
FB exceeds 20 dB and the gain varies from ~ 7.9 to 8.15 dBi. The FB
peaks at ~ 14.12 MHz and the gain is maximum at 8.15 dBi at 14.25 MHz.

Pray tell, what operational advantage am I giving up because the gain
at 14.12 MHz (the FB peak) is *only* about 8.0 dBi instead of 8.15
dBi?

>
>Now you also remarked that you do not want explanations, just the meat. I
>gave what you call a "treatise" that explained the theoretical
>underpinnings of what I have stated. It would be unwise at this point to
>declare success without not only having a NEC model to confirm it but also a
>20 meter antenna and not say a 144 meg equivalent. Today we had snow, wind
>and rain so I could not complete the job.If by chance the antenna gives a
>third aproval i.e.Nec model then polygon discussion plus the antenna then I
>will forward it to RADCOM for peer review. It is at that time you can vent
>your displeasure that you rejected my offer to share the actual mathematical
>and physical findings. If you were looking for a way to undermine what I had
>stated then my " treatise" now arms you with the knoweledge to disprove what
>I have stated as it is one factor that convinces me of my origonal findings.
>If you need more information regarding vectors I will be happy to aid you in
>your quest

No, I don't needed any more of your help with vectors. I wish you
every success with your RADCOM paper.

3606. Make money fast

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 05:18:12 UTC
From: robara0326@hotmail.com
Message-ID: <1110518292.561076.220450@l41g2000cwc.googlegroups.com>
Source record: 80845

MAKE $6,000 TO $30,000 IN JUST A FEW WEEKS!!!
LEARN HOW TO TURN $6 INTO $6000OR EVEN $60000!!
TURN SIX DOLLARS INTO $6000 EASY AND HONESTLY!!!
READING THIS MESSAGE WILL CHANGE YOUR LIFE FOREVER

: I found this on a bulletin board and decided to try it. A little
: while back, I was browsing through newsgroups, just like you are now,

: and came across an article similar to this that said you could make
: thousands of dollars within weeks with only an initial investment of
: $6.00! So I thought, "Yeah right, this must be a scam", but
: like most of us, I was curious, so I kept reading. Anyway, it said
: that you send $1.00 to each of the 6 names and address stated in the
: article. You then place your own name and address in the bottom of
: the list at #6, and post the article in at least 200 newsgroups.
: (There are thousands) No catch, that was it. So after thinking it
: over, and talking to a few people first, I thought about trying it. I

: figured: "what have I got to lose except 6 stamps and $6.00,
: right?" Then I invested the measly $6.00. Well GUESS WHAT!?...
: within 7 days, I started getting money in the mail! I was shocked! I
: figured it would end soon, but the money just kept coming in. In my
: first week, I made about $25.00. By the end of the second week I had
: made a total of over $1,000.00! In the third week I had over
: $10,000.00 and it's still growing. This is now my fourth week and I
: have made a total of just over $42,000.00 and it's still coming in
: rapidly. It's certainly worth $6.00, and 6 stamps, I have spent more
: than that on the lottery!! Let me tell you how this works and most
: importantly, WHY it works... Also, make sure you print a copy of this

: article NOW, so you can get the information off of it as you need it.

: I promise you that if you follow the directions exactly, that you
: will start making more money than you thought possible by doing
: something so easy!

: Suggestion: Read this entire message carefully! (print it out or
: download it.) Follow the simple directions and watch the money come
: in!

: It's easy. It's legal. And, your investment is only $6.00 (Plus
: postage)

: IMPORTANT: This is not a rip-off; it is not indecent; it is not
: ; and it is 99% no risk - it really works!

: If all of the following instructions are adhered to, you will receive

: extraordinary dividends.

: PLEASE NOTE:
: Please follow these directions EXACTLY, and $50,000 or more can be
: yours in 20 to 60 days. This program remains successful because of
: the honesty and integrity of the participants. Please continue its
: success by carefully adhering to the instructions.

: You will now become part of the Mail Order business. In this business

: your product is not solid and tangible, it's a service. You are in
: the business of developing Mailing Lists. Many large corporations are

: happy to pay big bucks for quality lists. However, the money made
: from the mailing lists is secondary to the income which is made from
: people like you and me asking to be included in that list.

: Here are the 4 easy steps to success:

: STEP 1: Get 6 separate pieces of paper and write the following on
: each piece of paper "PLEASE PUT ME ON YOUR MAILING LIST." Now
: get 6 US $1.00 bills and place ONE inside EACH of the 6 pieces of
: paper so the bill will not be seen through the envelope (to prevent
: thievery). Next, place one paper in each of the 6 envelopes and seal
: them. You should now have 6 sealed envelopes, each with a piece of
: paper stating the above phrase, your name and address, and a $1.00
: bill. What you are doing is creating a service. THIS IS ABSOLUTELY
: LEGAL! You are requesting a legitimate service and you are paying for

: it! Like most of us I was a little skeptical and a little worried
: about the legal aspects of it all. So I checked it out with the U.S.
: Post Office (1-800-725-2161) and they confirmed that it is indeed
: legal. Mail the 6 envelopes to the following addresses:
:
: #1) Jeremy Patrick
: P O Box 570632
: Houston, TX 77257
:
: #2) Palak Patel
: 719 Oak Mill Ct
: Addison, IL 60101
:
: #3) Simon Willis
: 4933 Royal Ct. N.
: West Palm Beach, Fl 33415
:
: #4) Alex Martinez
: 2700 Iowa Ave. #9
: Riverside, CA 92507
:
: #5) William Stewart
: 39 Highland Ave.
: Sicklerville, NJ 08081

:
: #6) Roberto Aramburu
: 5933-1 Longstreet Dr.
: Ft Riley, KS 66442
:
: STEP 2: Now take the #1 name off the list that you see above, move
: the other names up 1 place (#2 becomes #1, #3 becomes #2, etc...) and
add YOUR
: name and address as number 6 on the list.
: STEP 3: Change anything you need to, but try to keep this article as
: close to original as possible. Now, post your amended article to at
: least 200 newsgroups. (I think there are close to 24,000 groups) All
: you need is 200, but remember, the more you post, the more money you
: make! You won't get very much unless you post like crazy. :)

: This is perfectly legal! If you have any doubts, refer to Title 18
: Sec. 1302 & 1341 of the Postal lottery laws.
: Keep a copy of these steps for yourself and, whenever you need money,

: you can use it again, and again.

: PLEASE REMEMBER that this program remains successful because of the
: honesty and integrity of the participants and by their carefully
: adhering to the directions. Look at it this way. If you are of
: integrity, the program will continue and the money that so many
: others have received will come your way.

: NOTE: You may want to retain every name and address sent to you,
: either on a computer or hard copy and keep the notes people send you.

: This VERIFIES that you are truly providing a service. (Also, it might

: be a good idea to wrap the $1 bill in dark paper to reduce the risk
: of mail theft.)

: So, as each post is downloaded and the directions carefully followed,

: six members will be reimbursed for their participation as a List
: Developer with one dollar each. Your name will move up the list
: geometrically so that when your name reaches the #1 position you will

: be receiving thousands of dollars in CASH!!! What an opportunity for
: only $6.00 ($1.00 for each of the first six people listed above) Send

: it now, add your own name to the list and you're in business!
---DIRECTIONS ----- FOR HOW TO POST TO NEWSGROUPS------------

: Step 1) You do not need to re-type this entire letter to do your own
: posting. Simply put your cursor at the beginning of this letter and
: drag your cursor to the bottom of this note, and select 'copy'
: from the edit menu. This will copy the entire letter into the
: computer's memory.
: Step 2) Open a blank 'notepad' file and place your cursor at the top
: of the blank page. From the 'edit' menu select 'paste'. This will

: paste a copy of the letter into notepad so that you can add your name

: to the list. Step 3) Save your new notepad file as a .txt file. If
: you want to do your postings in different settings, you'll always
: have this file to go back to.
: Step 4) Use Netscape or Internet explorer and try searching for
: various newsgroups (on-line forums, message boards, chat sites,
: discussions.)
: Step 5) Visit these message boards and post this article as a new
: message by highlighting the text of this letter and selecting paste
: from the edit menu. Fill in the Subject, this will be the header that

: everyone sees as they scroll through the list of postings in a
: particular group, click the post message on. You're done with
: your first one! Congratulations...THAT'S IT! All you have to do is
: jump to different newsgroups and post away, after you get the hang of

: it, it will take about 30 seconds for each newsgroup! **REMEMBER, THE

: MORE NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL MAKE! BUT YOU
: HAVE TO POST A MINIMUM OF 200** That's it! You will begin receiving
: money from around the world within days! You may eventually want to
: rent a P.O.Box due to the large amount of mail you will receive. If
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: the postman will deliver it. **JUST MAKE SURE ALL THE ADDRESSES ARE
: CORRECT.**

: Now,
: each of the 5 persons who just sent me $1.00 make the MINIMUM 200
: postings, each with my name at #5 and only 5 persons respond to each
: of the original 5, that is another $25.00 for me, now those 25 each
: make 200 MINIMUM posts with my name at #4 and only 5 replies each, I
: will bring in an additional $125.00! Now, those 125 persons turn
: around and post the MINIMUM 200 with my name at #3 and only receive 5

: replies each, I will make an additional $625.00! OK, now here is the
: fun part, each of those 625 persons post a MINIMUM 200 letters with
: my name at #2 and they each only receive 5 replies, that just made me

: $3,125.00!!! Those 3,125 persons will all deliver this message to 200

: newsgroups with my name at #1 and if still 5 persons per 200
: newsgroups react I will receive $15,625,00! With an original
: investment of only $6.00! AMAZING! When your name is no longer on the

: list, you just take the latest posting in the newsgroups, and send
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: again. And start posting again. The thing to remember is: do you
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: so... People have said, "what if the plan is played out and no

: one sends you the money? So what! What are the chances of that
: happening when there are tons of new honest users and new honest
: people who are joining the internet and newsgroups everyday and are
: willing to give it a try? Estimates are at 20,000 to 50,000 new
: users, every day, with thousands of those joining the actual
: internet. Remember, play FAIRLY and HONESTLY and this will really:
CHANGE YOUR LIFE!!!
MAKE SURE YOU SEND THE MONEY TO THE SIX ADDRESSES LISTED TO GET
STARTED!!!##

3607. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 05:44:43 UTC
From: "aunwin@insightbb.com"
Message-ID: <ffaYd.54497$r55.29308@attbi_s52>
Source record: 80846

Wes you are off on a tangent again. Go back the the initial posting on this thread.
It says nothing about your poor antenna or even my antenna as I do not have one.
It refers to gain and front to rear at the same frequency It does not refer to an actual physical antenna. None of your postings refer in any sense
can be seen as a technical response that directly refutes the accuracy of what I stated.
In your responces I see nothing but snide remarkes or deviation from the posed subject
by introducing your personal antenna exploits with your own particular antenna
which I say is at an incorrect height. There is nothing in the initiating post that
refers to an actual antenna or even ones that are at an incorrect height.
The true facts behind that initial posting that I had a NEC derived model with extra ordinary back to front figures which made other people suspicious
including me when I posted that info on another thread.
. I was looking for answers to my findings.
This post consisted solely of presenting a theoretical analysis that reflected
the possibility of max gain and max front to rear could appear at the same frequency.
Nobody even tried to challenge the analogy becauuse everybody believes all is known about antennas so there was no point in even to attempt to understand the given analogy. Instead snide remarks were made and diversionary tactics
in changing the subject to actual antennas such as yours.
The subject and question of this thread was made in the hope that technically the analogy
made was incorrect and thus allows me personally to discount the accurracy of my
modelling or on the other hand state they can find no fault with my analogy.
What did I get ? Knee jerk reaction and mirth at the possibility that something new
had possibly been found when all had taken the position that it is safe to debunk
because every thing is known. Not one person itemised a particular line that
gave them particular problems electing to pursue different issues that they have.
and not to respond to the initial request such as you bring up your own

personal
anternna. And remember, in an effort to circumvent this "roast" aproach
I offered to share everything I had with you but you preferred to continue
with
The "roast " aproach. Your antenna and your personal achievements are the
same
as what Roy did when he introduced his past achievements which again does
nothing
to vote pro or con to my theoretical analogy in a technical way.
Don't you realise that other silent viewers around the world are wondering
why the
few are having difficulty with the question. I sure hope that there are
many hams reading
how the so called gurus are dismissing everything other say. Is this the new
way America
feels about those outside of these borders?
Regards
Art....KB9MZ.......XG

"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:st42315si94j4c37r7d1ka87006fg0qj95@4ax.com...
> On Thu, 10 Mar 2005 22:56:37 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>>Oh come on Wes look at your last posting where you poked fun at the idea
>>of
>>a polygon phasor array. And look at the other postings where it was
>>obvious
>>that many were not familiar with the same and needed more direction. Look
>>at
>>Roy,
>>he admitted he knows nothing about the subject
>
> He did no such thing. Not only are you having difficulty expressing
> yourself, you have similar difficulty understanding what others are
> trying to tell you. I'm not trying to be cruel or harsh, but that's
> just the way it is.
>
>
>>which when he next argues with the like of Cecil and others I will now
>>have
>>to think twice instead of accepting his typical
>>riposte that he supplies. But I give Roy credit for being honest in the
>>face
>>of personal embarassment regarding his lack of knoweledge
>>You say it was not necesary to provide a long convoluted pseudo treatise
>>on
>>vectors but many asked for it and you made a joke of the idea,
>>Regarding front to rear occuring at the same frequency. An operator wants
>>as

>>much gain as possible when communicating
>>so he does not need to resort to more power than needed. For best
>>communication it is nice to block of interference to the rear and thus he
>>needs best front to rear at the frequency of communication even tho it is
>>of
>>interest that he had better rejection at a lower frequency. The fact of
>>the
>>matter is that it is not the frequency being used, he has to live with a
>>lesser value of rejection, your opinion may well be different.
>
> So if I understand you correctly (a *really* dubious proposition) I
> would have much better success with my 20 meter antenna if I embraced
> your philosophy. My current antenna is of my design, a three-element
> monoband Yagi-Uda parasitic array. You can see it in the picture on
> qrz.com. It is an honest to goodness actual antenna. I have 310
> countries confirmed on 20 meters most of them (The hard ones) worked
> with this antenna. All at the "too-low" height (according to you) of
> 45' above ground. I would be delighted to send you an EZNEC,
> Multinec, or NEC file that describes the antenna. The model accounts
> for boom to mast connection, element taper, etc. (per Leeson,
> "Physical Design of Yagi Antennas."), includes the stub matching feed
> system and appears to accurately describe the antenna to the best of
> my limited capability to measure it.
>
> Over the band of interest, 14.0 to 14.25 MHz., the modeled free-space
> FB exceeds 20 dB and the gain varies from ~ 7.9 to 8.15 dBi. The FB
> peaks at ~ 14.12 MHz and the gain is maximum at 8.15 dBi at 14.25 MHz.
> Pray tell, what operational advantage am I giving up because the gain
> at 14.12 MHz (the FB peak) is *only* about 8.0 dBi instead of 8.15
> dBi?
>
>>
>>Now you also remarked that you do not want explanations, just the meat. I
>>gave what you call a "treatise" that explained the theoretical
>>underpinnings of what I have stated. It would be unwise at this point to
>>declare success without not only having a NEC model to confirm it but also
>>a
>>20 meter antenna and not say a 144 meg equivalent. Today we had snow, wind
>>and rain so I could not complete the job.If by chance the antenna gives a
>>third aproval i.e.Nec model then polygon discussion plus the antenna then
>>I
>>will forward it to RADCOM for peer review. It is at that time you can vent
>>your displeasure that you rejected my offer to share the actual
>>mathematical
>>and physical findings. If you were looking for a way to undermine what I
>>had
>>stated then my " treatise" now arms you with the knoweledge to disprove
>>what
>>I have stated as it is one factor that convinces me of my origonal
>>findings.

>>If you need more information regarding vectors I will be happy to aid you
>>in
>>your quest
>
> No, I don't needed any more of your help with vectors. I wish you
> every success with your RADCOM paper.
>

3608. Help- loadpole.bas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 08:24:57 UTC
From: Howard Eisenhauer <howarde@REMOVECAPShfx.eastlink.ca>
Message-ID: <fdj231hmnin7f2sr5sb1rq98mirr4umo8j@4ax.com>
Source record: 80847

I'm trying to decode the math in loadpole.bas (for designing loaded
dipoles) & while some of the formulas are obvious, as a charter member
of the Mathematicaly Declined, I'm getting lost on on most of them
:(.

Heres the section of interest-

```
>+------------------------------ LOADPOLE.BAS -----------------------------ï¿½+-+

>ï¿½2860 LOCATE 10, 30: PRINT " Doing Arithmetic "
>ï¿½2870 LOCATE 12, 30: PRINT " " _
>ï¿½2880 'Arithmetic _
>ï¿½2890 MA# = (10 ^ 6) / (34 * PI# * F) _
>ï¿½2900 MB# = (LOG(((24 * (K / F)) - B) / (D)) - 1) _
>ï¿½2910 MC# = (K / F) - B _
>ï¿½2920 MD# = (((1 - ((F * B) / (K))) ^ 2) - 1) _
>ï¿½2930 ME# = (MB# * MD#) / MC# _
>ï¿½2940 MF# = (LOG((1 / D) * 24 * ((A / 2) - B))) - 1 _
>ï¿½2950 MG# = ((((F * A) / 2) - (F * B)) / K) ^ 2 - 1 _
>ï¿½2960 MH# = ((A / 2) - B) _
>ï¿½2970 MI# = (MF# * MG#) / MH# _
>ï¿½2980 XL# = MA# * (ME# - MI#) _
>ï¿½2990 LUH# = XL# / (2 * PI# * F) _
>ï¿½3000 RETURN: ' End of subroutine _
```

Where:

A= dipole lenght (ft)
B= distance from feed point to the loading coil (ft)
D=conductor diameter (in)
F=Freq (mhz)
K=234 (1/4 w/l ???)
Pi=3.14159 yaddayaddayadda
LUH= load coil inductance
XL= load coil reactance

LUH is easy e'nuff.
MC looks like it's the length of the end sections, but so does MH
MA is looking eerily familiar but that "34" is throwing me off, same
for those "24"s in MB & MD.
Maybe its 'cause its 4 in the morning right now but XL is looking more
& more like Black Magic

I might be able to thrash my way through this after a while but this
is more of a "destination" than a "journey" project, so-

Anyone of the Mathamaticly Inclined here feel like trying to explain to me line by line whats going on here? Feel free to be as pedantic as you want :).

Thanks,

H.

3609. Access rec.radio.amateur.antenna via the web

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 14:11:22 UTC
From: F.Y.I.
Message-ID: <5n933153hkuq02okrqp0ljq5freaoatnqb@4ax.com>
Source record: 80848

This is a monthly reminder that you can easily access
rec.radio.amateur.antenna via the web at
http://www.ugroups.com/Hobbies/viewforum.php?f=1 without a newsreader.
This message from www.ugroups.com is intended for those who might be interested in free web based access to the newsgroups. Please add to your kill file to avoid future inconvenience.

3610. Re: Access rec.radio.amateur.antenna via the web

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 14:44:52 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d0sat3guu1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 80849

Please add to your kill file to avoid future inconvenience.

==========

Why do you put me to the inconvenience of going to the kill file and all the rest of the messing about? Clear off, you pest!

3611. Radio Ham Arrested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 16:14:09 UTC
From: Anon <Incognito@crumph.com>
Message-ID: <ltjYd.52666$xt.24274@fed1read07>
Source record: 80850

Perhaps this explains why so many NG and chat room users employ an alias

Anon by necessity

">Someone wrote
> "Radio ham arrested over harassment on Internet
>
> GAZETTE & HERALD: RADIO ham [named in the link below] has been
> arrested in connection with the harassment of an Internet chat room
> user. "
>
> http://tinyurl.com/4catk
>

3612. Re: What is "Blogging"

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 17:00:24 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <I8kYd.1161$qf2.475@newsread2.news.atl.earthlink.net>
Source record: 80851

Thanks, guess I resist all these new acronyms.

"Jim Kelley" <jwkelley@nospam.edu> wrote in message
news:d0qv3a$24i$1@news.service.uci.edu...
>
>
> John Franklin wrote:
>
>> I am serious, guess I don't get out much what is "Blogging" ?
>
> Somebody thought that wasting time needed a fancier name. :-)
> Blog comes from Web Log. Dumb, huh?
>
> ac6xg
>

3613. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 17:10:10 UTC
From: richardharrison@webtv.net
Message-ID: <18292-4231D0F2-344@storefull-3254.bay.webtv.net>
Source record: 80852

Art Unwin wrote:
"I have just come to realise that if one drew a polygon of element phases in an array and all elements were 180 degrees to its companion element and excluding the driven elemment, the max gain and max front to back will occur at the same frequency!"

Would an antenna made entirely of pairs of identical out of phase elements be a good antenna?

A "polygon of element phases" must refer to the resultant current in each element and their combined effect at a point (P) for example in the far field. Art must have resolved and composed vectors or phasors at some time. The resultant of any number of vectors can all add to zero or to some other number and direction. A zero sum often happens in physics when systems are in equiblirium. Newton said that any action results in an equal and opposite reaction. Application of a new force often causes no loss in equilibrium, just a corresponding added reaction.

The reflected wave from an antenna may change in magnitude in proportion to an incidebt wave yet be nearly exactly equal in magnitude and 180-degrees out of phase with the incident wave, if the reflection is perfect.

A polygon is a closed plane bounded by straight sides. It can represenht forces.

Art asked if there were anything written about complete front to back cancellation in two radiators carrying oppositely directed signals if I understood the question. Indeed Kraus of W8JK fame has a lot to say about the possibility.

Kraus writes about an "Array of Two Driven 1/2-wavelength El;ements. General Case with Equal Currents of Any Phase Relation." in his 1950 edition of "Antennas".

It includes on page 294, field patterns for physical spacings and feed phasings. For example, at a spacing of 1/8-wavelength and a phasing of 135-degrees, there is complete cancellation in one direction while there is maximum radiation in the opposite direction.
That`s the good news. Now the bad.

On page 297 Kraus says:
"However, in the flat-top (an advantage placing all elements at maximum height) antenna such losses may have considerable effect on the gain (as the feedpoint resistance is very low). Therefore, the question of losses and of radiating efficiency will be treated in this section in connection with a discussion of arrays of two closely spaced,

out-of-phase elements. The term "closely-spaced" will be taken to mean that the elements are spaced 1/4 wavelength or less."

Then, Kraus shows another fly in the ointment on page 300:

"Hence the Q for 1/8 wavelength spacing is about four times the Q for 1/4 wavelength spacing. Very large Q indicates a large amount of stored energy near the antenna in proportion to the energy radiated per cycle. This also means that the antenna acts like a sharply tuned circuit."

So much for bandwidth!

Best regards, Richard Harrison, KB5WZI

3614. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 18:09:01 UTC
From: "aunwin@insightbb.com"
Message-ID: <19lYd.119587$4q6.84317@attbi_s01>
Source record: 80853

Richard
So the principle is good tho in Kraus case he used two feeds instead of one.
Doing it his way with just 2 elements makes it very sensirive to frequency
which obviously not a good thing as you point out.
Your post does have my interest as I would like to see what gain he arrived
at by placig all radiation to the front.
In my case the gain just fell short of 16dbi I will look it up in the
antenna books, thanks for pointing that one out
Best regards
Art KB9MZ......XG
"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:18292-4231D0F2-344@storefull-3254.bay.webtv.net...
> Art Unwin wrote:
> "I have just come to realise that if one drew a polygon of element
> phases in an array and all elements were 180 degrees to its companion
> element and excluding the driven elemment, the max gain and max front to
> back will occur at the same frequency!"
>
> Would an antenna made entirely of pairs of identical out of phase
> elements be a good antenna?
>
> A "polygon of element phases" must refer to the resultant current in
> each element and their combined effect at a point (P) for example in
> the far field. Art must have resolved and composed vectors or phasors at
> some time. The resultant of any number of vectors can all add to zero or
> to some other number and direction. A zero sum often happens in physics
> when systems are in equiblirium. Newton said that any action results in
> an equal and opposite reaction. Application of a new force often causes
> no loss in equilibrium, just a corresponding added reaction.
>
> The reflected wave from an antenna may change in magnitude in proportion
> to an incidebt wave yet be nearly exactly equal in magnitude and
> 180-degrees out of phase with the incident wave, if the reflection is
> perfect.
>
> A polygon is a closed plane bounded by straight sides. It can represenht
> forces.
>
> Art asked if there were anything written about complete front to back
> cancellation in two radiators carrying oppositely directed signals if I
> understood the question. Indeed Kraus of W8JK fame has a lot to say
> about the possibility.
>
> Kraus writes about an "Array of Two Driven 1/2-wavelength El;ements.

> General Case with Equal Currents of Any Phase Relation." in his 1950
> edition of "Antennas".
>
> It includes on page 294, field patterns for physical spacings and feed
> phasings. For example, at a spacing of 1/8-wavelength and a phasing of
> 135-degrees, there is complete cancellation in one direction while there
> is maximum radiation in the opposite direction.
> That`s the good news. Now the bad.
>
> On page 297 Kraus says:
> "However, in the flat-top (an advantage placing all elements at maximum
> height) antenna such losses may have considerable effect on the gain (as
> the feedpoint resistance is very low). Therefore, the question of losses
> and of radiating efficiency will be treated in this section in
> connection with a discussion of arrays of two closely spaced,
> out-of-phase elements. The term "closely-spaced" will be taken to mean
> that the elements are spaced 1/4 wavelength or less."
>
> Then, Kraus shows another fly in the ointment on page 300:
>
> "Hence the Q for 1/8 wavelength spacing is about four times the Q for
> 1/4 wavelength spacing. Very large Q indicates a large amount of stored
> energy near the antenna in proportion to the energy radiated per cycle.
> This also means that the antenna acts like a sharply tuned circuit."
>
> So much for bandwidth!
>
>
>
> Best regards, Richard Harrison, KB5WZI
>

3615. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 18:36:42 UTC
From: "aunwin@insightbb.com"
Message-ID: <_ylYd.55334$Ze3.44040@attbi_s51>
Source record: 80854

Richard
I looked thru The ARRL antenna book and I cannot find
any antenna let alone the two element phased array
that showed ZERO radiation to the rear of the feed point.
Is it possible you are pointing to F/B for minimum radiation
where I am refering to zero front to rear:
Regards
Art

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:18292-4231D0F2-344@storefull-3254.bay.webtv.net...
> Art Unwin wrote:
> "I have just come to realise that if one drew a polygon of element
> phases in an array and all elements were 180 degrees to its companion
> element and excluding the driven elemment, the max gain and max front to
> back will occur at the same frequency!"
>
> Would an antenna made entirely of pairs of identical out of phase
> elements be a good antenna?
>
> A "polygon of element phases" must refer to the resultant current in
> each element and their combined effect at a point (P) for example in
> the far field. Art must have resolved and composed vectors or phasors at
> some time. The resultant of any number of vectors can all add to zero or
> to some other number and direction. A zero sum often happens in physics
> when systems are in equiblirium. Newton said that any action results in
> an equal and opposite reaction. Application of a new force often causes
> no loss in equilibrium, just a corresponding added reaction.
>
> The reflected wave from an antenna may change in magnitude in proportion
> to an incidebt wave yet be nearly exactly equal in magnitude and
> 180-degrees out of phase with the incident wave, if the reflection is
> perfect.
>
> A polygon is a closed plane bounded by straight sides. It can represenht
> forces.
>
> Art asked if there were anything written about complete front to back
> cancellation in two radiators carrying oppositely directed signals if I
> understood the question. Indeed Kraus of W8JK fame has a lot to say
> about the possibility.
>
> Kraus writes about an "Array of Two Driven 1/2-wavelength El;ements.
> General Case with Equal Currents of Any Phase Relation." in his 1950

> edition of "Antennas".
>
> It includes on page 294, field patterns for physical spacings and feed
> phasings. For example, at a spacing of 1/8-wavelength and a phasing of
> 135-degrees, there is complete cancellation in one direction while there
> is maximum radiation in the opposite direction.
> That`s the good news. Now the bad.
>
> On page 297 Kraus says:
> "However, in the flat-top (an advantage placing all elements at maximum
> height) antenna such losses may have considerable effect on the gain (as
> the feedpoint resistance is very low). Therefore, the question of losses
> and of radiating efficiency will be treated in this section in
> connection with a discussion of arrays of two closely spaced,
> out-of-phase elements. The term "closely-spaced" will be taken to mean
> that the elements are spaced 1/4 wavelength or less."
>
> Then, Kraus shows another fly in the ointment on page 300:
>
> "Hence the Q for 1/8 wavelength spacing is about four times the Q for
> 1/4 wavelength spacing. Very large Q indicates a large amount of stored
> energy near the antenna in proportion to the energy radiated per cycle.
> This also means that the antenna acts like a sharply tuned circuit."
>
> So much for bandwidth!
>
>
>
> Best regards, Richard Harrison, KB5WZI
>

3616. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 19:03:47 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4231ec82$1_2@127.0.0.1>
Source record: 80855

aunwin@insightbb.com wrote:
> Richard
> I looked thru The ARRL antenna book and I cannot find
> any antenna let alone the two element phased array
> that showed ZERO radiation to the rear of the feed point.

In my ARRL Antenna Book, 15th edition, page 8-6: Two phased
verticals with 1/8WL spacing and phased at 135 degrees shows
a perfect cardioid with zero radiation in a direction 180
degrees from the direction of maximum gain, i.e. directly
to the rear.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

3617. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 20:06:41 UTC
From: "aunwin@insightbb.com"
Message-ID: <lTmYd.119924$tl3.55323@attbi_s02>
Source record: 80856

Yes Cecil, a cardioid pattern ,which cannot produce zero radiation at the
rear 180 degrees of the feed point.
Remember we started of with a figure 8 or two balloon pattern so for total
reversal of radiation the front lobe
must finish up as a perfect circle . Said another way, the two ballons are
merged thus making a larger single balloon
Best Regards
Art

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:4231ec82$1_2@127.0.0.1...
> aunwin@insightbb.com wrote:
>> Richard
>> I looked thru The ARRL antenna book and I cannot find
>> any antenna let alone the two element phased array
>> that showed ZERO radiation to the rear of the feed point.
>
> In my ARRL Antenna Book, 15th edition, page 8-6: Two phased
> verticals with 1/8WL spacing and phased at 135 degrees shows
> a perfect cardioid with zero radiation in a direction 180
> degrees from the direction of maximum gain, i.e. directly
> to the rear.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
> ----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
> News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+
> Newsgroups
> ----= East and West-Coast Server Farms - Total Privacy via Encryption
> =----

3618. Links to Magnetic Loop Antennas, New Digital Voice Modem.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 20:15:38 UTC
From: electronics_tech <electronix_tech@yahoo.com>
Message-ID: <39ecjdF60tm78U1@individual.net>
Source record: 80857

Hello all,
Here are some interesting links to some Ham's websites about Magnetic
Loop Antennas and the new AOR Digital Voice Modem.
Enjoy.
73 de VE3JGE

3619. Here are the links:Magnetic Loop Antenna, AOR Digital Voice Modem.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 20:20:40 UTC
From: electronics_tech <electronix_tech@yahoo.com>
Message-ID: <39ecsqF5th1qbU1@individual.net>
Source record: 80858

Duh. Sorry guys. I must be half asleep. Here are the links.

http://www.standpipe.com/w2bri/index.htm Magnetic Loop Antennas

http://www.aorusa.com/ard9800.html New Digital Voice Modem!

http://www.standpipe.com/w2bri/fastmodem/review.htm Interesting Voice Modem Site

73 de VE3JGE

3620. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 20:31:27 UTC
From: richardharrison@webtv.net
Message-ID: <19807-4232001F-484@storefull-3251.bay.webtv.net>
Source record: 80859

Art, KB9MZ wrote:
"---I would like to see the gain he arrives at---."

Kraus gives the W8JK close-spaced beam (spacing:1/8-wavelength) a gain of 5.8 dBi on page 552 in his 2002 3rd edition of "Antennas". A dipole in free-space has a gain of 2.14 dB over an isotropic, so the W8JK has a gain of 3.66 dBd. This makes the W8JLK comparable in gain to other 2-element beams in Arnold B. Bailey`s "TV and Other Receiving Antennas" catalog.

Best regards, Richard Harrison, KB5WZI

3621. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 21:47:19 UTC
From: richardharrison@webtv.net
Message-ID: <12609-423211E7-493@storefull-3255.bay.webtv.net>
Source record: 80860

Art, KB9MZ wrote:
"I looked through the ARRL book and I cannot find any antenna let alone the two element phased array that showed zero radiation to the rear of the feed point."

I was quoting the patterns in Kraus` 1950 edition of "Antennas" on page 294.

However, there is a measured by D.C. Cleckner of Ohio State University pattern of a 3-element Yagi-Uda with more than 7 dB gain and almost zero radiation in the direction of 180-degrees from the maximum. It is on page 246. This has 0.1-wavelength spacing between elements.

Best regards, Richard Harrison, KB5WZI

3622. Re: What is "Blogging"

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 22:07:50 UTC
From: clvrmnky <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <WEoYd.93684$vO1.583155@nnrp1.uunet.ca>
Source record: 80861

On 10/03/2005 9:17 PM, Jim Kelley wrote:
>
>
> John Franklin wrote:
>
>> I am serious, guess I don't get out much what is "Blogging" ?
>
>
> Somebody thought that wasting time needed a fancier name. :-)
> Blog comes from Web Log. Dumb, huh?
>
Hmmm. Some might say the same about "rag chewing." :)

3623. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 22:43:34 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <qapYd.126062$Th1.35330@bgtnsc04-news.ops.worldnet.att.net>
Source record: 80862

Art,

Why not?

The cardioid pattern from a two-element array was reported back as least as far as 1937, by the famous George H. Brown. In the ideal case (free space, no losses, etc.) the radiation directly to the rear is precisely zero.

If you add various real world effects then the back lobe is not precisely zero, and this is shown in the ARRL Antenna Book referenced by Cecil.

A detailed description of all of this is in Kraus' Antennas, 2nd Ed., in Chapter 11. He uses equations, and he does not mention coordination of balloon patterns, so perhaps you have another new invention.

73,
Gene
W4SZ

aunwin@insightbb.com wrote:
> Yes Cecil, a cardioid pattern ,which cannot produce zero radiation at the
> rear 180 degrees of the feed point.
> Remember we started of with a figure 8 or two balloon pattern so for total
> reversal of radiation the front lobe
> must finish up as a perfect circle . Said another way, the two ballons are
> merged thus making a larger single balloon
> Best Regards
> Art
>
>
>
> "Cecil Moore" <w5dxp@hotmail.com> wrote in message
> news:4231ec82$1_2@127.0.0.1...
>
>>aunwin@insightbb.com wrote:
>>
>>>Richard
>>>I looked thru The ARRL antenna book and I cannot find
>>>any antenna let alone the two element phased array
>>>that showed ZERO radiation to the rear of the feed point.
>>
>>In my ARRL Antenna Book, 15th edition, page 8-6: Two phased
>>verticals with 1/8WL spacing and phased at 135 degrees shows
>>a perfect cardioid with zero radiation in a direction 180

>>degrees from the direction of maximum gain, i.e. directly
>>to the rear.
>>--
>>73, Cecil http://www.qsl.net/w5dxp
>>
>>-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
>>News==----
>>http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+
>>Newsgroups
>>-----= East and West-Coast Server Farms - Total Privacy via Encryption
>>=----
>
>
>

3624. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-11 23:05:28 UTC
From: "aunwin@insightbb.com"
Message-ID: <YupYd.120288$4q6.119764@attbi_s01>
Source record: 80863

A cardioid pattern has radiation in the 180 degree portion behind the feed
point

Regards
Art

"Gene Fuller" <W4SZzzzzzz@att.net> wrote in message
news:qapYd.126062$Th1.35330@bgtnsc04-news.ops.worldnet.att.net...
> Art,
>
> Why not?
>
> The cardioid pattern from a two-element array was reported back as least
> as far as 1937, by the famous George H. Brown. In the ideal case (free
> space, no losses, etc.) the radiation directly to the rear is precisely
> zero.
>
> If you add various real world effects then the back lobe is not precisely
> zero, and this is shown in the ARRL Antenna Book referenced by Cecil.
>
> A detailed description of all of this is in Kraus' Antennas, 2nd Ed., in
> Chapter 11. He uses equations, and he does not mention coordination of
> balloon patterns, so perhaps you have another new invention.
>
> 73,
> Gene
> W4SZ
>
>
>
> aunwin@insightbb.com wrote:
>> Yes Cecil, a cardioid pattern ,which cannot produce zero radiation at the
>> rear 180 degrees of the feed point.
>> Remember we started of with a figure 8 or two balloon pattern so for
>> total reversal of radiation the front lobe
>> must finish up as a perfect circle . Said another way, the two ballons
>> are merged thus making a larger single balloon
>> Best Regards
>> Art
>>
>>
>>
>> "Cecil Moore" <w5dxp@hotmail.com> wrote in message
>> news:4231ec82$1_2@127.0.0.1...
>>

>>>aunwin@insightbb.com wrote:
>>>
>>>>Richard
>>>>I looked thru The ARRL antenna book and I cannot find
>>>>any antenna let alone the two element phased array
>>>>that showed ZERO radiation to the rear of the feed point.
>>>
>>>In my ARRL Antenna Book, 15th edition, page 8-6: Two phased
>>>verticals with 1/8WL spacing and phased at 135 degrees shows
>>>a perfect cardioid with zero radiation in a direction 180
>>>degrees from the direction of maximum gain, i.e. directly
>>>to the rear.
>>>--
>>>73, Cecil http://www.qsl.net/w5dxp
>>>
>>>----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
>>>News==----
>>>http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+
>>>Newsgroups
>>>----= East and West-Coast Server Farms - Total Privacy via Encryption
>>>=----
>>
>>

3625. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 00:08:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <j9a431l5t0qvf2b6pvlfa6oknmn6eqerhv@4ax.com>
Source record: 80864

On Fri, 11 Mar 2005 23:05:28 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>A cardioid pattern has radiation in the 180 degree portion behind the feed
>point
first described by Johann Castillon made a Fellow of the Royal Society
of London in 1753:
r = 2a(1 + cos(theta))
where theta = 180 such that:
r = 2a(1 + cos(180))
r = 2a(1 + -1)
r = 0

Hi Art,

Understandably, the term you are so unfamiliar with, insofar as no
rearward radiation (not the same as no radiation to 180 degrees) is
Lambertian. As may be expected, the term is derived from the work of
mathematician Johann Heinrich Lambert (1728-1777).

It is a distribution curve derived from reflections off of a "diffuse
surface" (note, not the same thing as reflections off of a specular
antenna element):
(xï¿½+yï¿½+zï¿½)ï¿½ = z

At 300 years+ both are pretty old works that each easily qualify
within the purview of "first principles" if one is serious about
radiation.

73's
Richard Clark, KB7QHC

3626. Windom/OCF antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 00:25:23 UTC
From: DaveC <wntu4@yahoo.com>
Message-ID: <1110587123.806091.204440@g14g2000cwa.googlegroups.com>
Source record: 80865

Hi Group,
I am planning to place a wire multiband, 50ohm coax feed, based on plans found on Buxcom. His is for 80m and up, I dont have that kind of room so used his formula to generate a 40m and up. My question is about matching the impedence. His 80m uses a 4:1 and assumes placement higher than 20 feet.
I cant get the whole thing over 20 feet, but I can get part of it over 20. The antenna will start off on my roof peak (13 feet tall) then angle out at about 40 deg to a tree.
I cant model this so I have to ask, can I still use the 4:1 or will I need something else?
Thanks for any guidance!!

3627. Re: Windom/OCF antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 00:32:47 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <PMqYd.1361$qW.693@newsread3.news.atl.earthlink.net>
Source record: 80866

"DaveC" <wntu4@yahoo.com> wrote in message
news:1110587123.806091.204440@g14g2000cwa.googlegroups.com...
> Hi Group,
> I am planning to place a wire multiband, 50ohm coax feed, based on
> plans found on Buxcom. His is for 80m and up, I dont have that kind of
> room so used his formula to generate a 40m and up. My question is about
> matching the impedence. His 80m uses a 4:1 and assumes placement higher
> than 20 feet.
> I cant get the whole thing over 20 feet, but I can get part of it over
> 20. The antenna will start off on my roof peak (13 feet tall) then
> angle out at about 40 deg to a tree.
> I cant model this so I have to ask, can I still use the 4:1 or will I
> need something else?
> Thanks for any guidance!!
>

A 6:1 balun is usually beter for an OCF antenna. They are harder to make
and come by. That is one reason a 4:1 is often used.

3628. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 00:38:31 UTC
From: "aunwin@insightbb.com"
Message-ID: <bSqYd.57857$Ze3.17269@attbi_s51>
Source record: 80867

The formula for z which you gave would give me nightmares.
Are you absolutely sure that what you have written is correct?
Perhaps first principles was overstated n my posting

Art

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:j9a431l5t0qvf2b6pvlfa6oknmn6eqerhv@4ax.com...
> On Fri, 11 Mar 2005 23:05:28 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>>A cardioid pattern has radiation in the 180 degree portion behind the feed
>>point
> first described by Johann Castillon made a Fellow of the Royal Society
> of London in 1753:
> r = 2a(1 + cos(theta))
> where theta = 180 such that:
> r = 2a(1 + cos(180))
> r = 2a(1 + -1)
> r = 0
>
> Hi Art,
>
> Understandably, the term you are so unfamiliar with, insofar as no
> rearward radiation (not the same as no radiation to 180 degrees) is
> Lambertian. As may be expected, the term is derived from the work of
> mathematician Johann Heinrich Lambert (1728-1777).
>
> It is a distribution curve derived from reflections off of a "diffuse
> surface" (note, not the same thing as reflections off of a specular
> antenna element):
> (x²+y²+z²)² = z
>
> At 300 years+ both are pretty old works that each easily qualify
> within the purview of "first principles" if one is serious about
> radiation.
>
> 73's
> Richard Clark, KB7QHC

3629. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 01:21:33 UTC
From: richardharrison@webtv.net
Message-ID: <22856-4232441D-433@storefull-3258.bay.webtv.net>
Source record: 80868

I wrote:
"However, there is a measured by D.C. Glockner of Ohio State University pattern of the 3-element Yagi-Uda with more than 7 dB gain and almost zero radiation from the direction of 180-degrees from the maximum. It is on page 246."

No correction required but I should add that the book is the 3rd edition (2002) of "Antennas" by John D. Kraus et al.

Best regards, Richard Harrison, KB5WZI

3630. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 02:05:44 UTC
From: "aunwin@insightbb.com"
Message-ID: <Y7sYd.120462$4q6.89210@attbi_s01>
Source record: 80869

I did rotate it and placed it on the ground, the gain dropped
by 4db and the circular lobe
pointed straight up. Some time I will look at same at 1 WL
Art
"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:422f68db$1_2@127.0.0.1...
> aunwin@insightbb.com wrote:
>> If the phases and and magnitudes of the paired elements
>> are exactly the same, then radiation to the rear is zero.
>
> If you rotate the elements by 90 degrees, can you make the
> radiation toward the ground zero?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> -----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
> News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000
> Newsgroups
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3631. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 02:12:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <tei43119s3pss5echt6d86sumojentguvh@4ax.com>
Source record: 80870

On Sat, 12 Mar 2005 00:38:31 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:
>The formula for z which you gave would give me nightmares.

Hi Art,

That is the Cartesian form. A 2D polar form would follow:

I = I0 ï¿½ A ï¿½ cos (phi) ï¿½ cos (theta) / Pi
where
I is the intensity at a point with elevation theta
A is the area of the surface
I0 is the radiation directed normal to a diffuse surface
phi is the angle of incidence (all angles being considered)

A variant for conforming radiators is found in:

I = I0 ï¿½ cos (theta)

Observation will reveal why this is called Lambert's Cosine Law.
Simple draughting techniques will reveal the circular distribution
curve.

A simple example of the last equation is found in the common, unlensed
LED. Insofar as radios go, I expect the same response would follow
from placing an isotropic source above a diffuse reflector (you would
then have to use the first equation).

73's
Richard Clark, KB7QHC

3632. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 02:14:22 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4232516e$1_1@127.0.0.1>
Source record: 80871

aunwin@insightbb.com wrote:
> A cardioid pattern has radiation in the 180 degree portion behind the feed
> point

You want zero radiation in an entire hemisphere?
Arecibo probably meets that specification. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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3633. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 03:14:21 UTC
From: "aunwin@insightbb.com"
Message-ID: <g8tYd.58606$Ze3.9341@attbi_s51>
Source record: 80772

Yup.
They have now upgraded the mountain road so you don't have to take a spare
rear axle with you now.
Art
"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:4232516e$1_1@127.0.0.1...
> aunwin@insightbb.com wrote:
>> A cardioid pattern has radiation in the 180 degree portion behind the
>> feed point
>
> You want zero radiation in an entire hemisphere?
> Arecibo probably meets that specification. :-)
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> -----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
> News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000
> Newsgroups
> ---= East/West-Coast Server Farms - Total Privacy via Encryption =---

3634. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 03:15:42 UTC
From: "aunwin@insightbb.com"
Message-ID: <y9tYd.58728$r55.52088@attbi_s52>
Source record: 80773

But that formula for z does not appear to be correct!
Art
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:tei43119s3pss5echt6d86sumojentguvh@4ax.com...
> On Sat, 12 Mar 2005 00:38:31 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>>The formula for z which you gave would give me nightmares.
>
> Hi Art,
>
> That is the Cartesian form. A 2D polar form would follow:
>
> I = I0 • A • cos (phi) • cos (theta) / Pi
> where
> I is the intensity at a point with elevation theta
> A is the area of the surface
> I0 is the radiation directed normal to a diffuse surface
> phi is the angle of incidence (all angles being considered)
>
> A variant for conforming radiators is found in:
>
> I = I0 • cos (theta)
>
> Observation will reveal why this is called Lambert's Cosine Law.
> Simple draughting techniques will reveal the circular distribution
> curve.
>
> A simple example of the last equation is found in the common, unlensed
> LED. Insofar as radios go, I expect the same response would follow
> from placing an isotropic source above a diffuse reflector (you would
> then have to use the first equation).
>
> 73's
> Richard Clark, KB7QHC

3635. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 08:03:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bl6531tmpvotemcqje1301pv3h81stsuqh@4ax.com>
Source record: 80774

On Sat, 12 Mar 2005 03:15:42 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:
>But that formula for z does not appear to be correct!

Hi Art,

As I said, you are not working in Cartesians in the first place with
"polygons." It is a formula for computer generation of the surface.

If you absolutely need to understand the formula, read through the
code that is used to construct the distribution curve:

```
#define sz 2000000
#define bc 19
static double fr() {return rand()/(double)~(1<<31);}
static double sq(double x){return x*x;}
int hi[bc]; int out=0;
int main(){
{int j=bc; while(j--) hi[j]=0;}
{int j=sz; while(j--) {
double x = fr()*1.4-.7, y=fr()*1.4-.7, z=fr();
if(sq(x*x+y*y+z*z) < z) {
++hi[(int)(z/sqrt(x*x+y*y+z*z)*bc)];}
else ++out;}}
{int j; for(j=0; j<bc; ++j) printf("%d %d %8.2f\n",
j, hi[j], (sz-out)*(j+.5)/(bc*bc/2));}
printf ("%d out of box.\n", out);
}
```

If you still don't understand, the polar coordinate formulas are just
as useful, simpler, and take very little work to construct a "polygon"
that obtains complete closure. It is, after all, a construction much
like any of a number of classic curves. You need only conform to the
requirements of a Lambertian surface or emitter to obtain the curve
you describe.

73's
Richard Clark, KB7QHC

3636. Re: Windom/OCF antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 12:26:35 UTC
From: KC1DI <elbc2@pivot.net>
Message-ID: <1135nvtfg0kbj9f@corp.supernews.com>
Source record: 80775

DaveC wrote:
> Hi Group,
> I am planning to place a wire multiband, 50ohm coax feed, based on
> plans found on Buxcom. His is for 80m and up, I dont have that kind of
> room so used his formula to generate a 40m and up. My question is about
> matching the impedence. His 80m uses a 4:1 and assumes placement higher
> than 20 feet.
> I cant get the whole thing over 20 feet, but I can get part of it over
> 20. The antenna will start off on my roof peak (13 feet tall) then
> angle out at about 40 deg to a tree.
> I cant model this so I have to ask, can I still use the 4:1 or will I
> need something else?
> Thanks for any guidance!!
>

Hi Dave,

You should find that the antenna will work well for you except perhaps on 15m I have a very similar set up here and it works great.. Unlike he says on the Buxcom site though you will most likely need a choke balun 1:1 in the line to keep RF out of the Shack, Mine is similar to the Carolina Windom in that I placed a Choke balun about 30 feet down the feed line .. works quite well..
73 Dave kc1di

3637. HELP!!! Diamond HF Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 12:33:33 UTC
From: andreantunes@sic.pt
Message-ID: <8bf084a1.0503120433.1054160f@posting.google.com>
Source record: 80776

Hi all,

I have an "old" W-8010 Diamond antenna that don't use anymore.
Everything is in very good condition.

I would like to transform this antenna into a W-735.

This means that I would like to take my BU-50 balloon and the two 80m
traps from my W-8010 and make an antenna just for 40 and 80 meters.

Would like to know if any of you guys know if this is possible, and if
so, what would be the size (length) of the wires.
Also, would like to know if the 80m traps are the same.

Any help is much apreciated.
Best Regards,

Andre Antunes
CT2GEU
andreantunes@sic.pt
antunes.andre@netcabo.pt

3638. Re: What is "Blogging"

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 13:04:35 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <DNBYd.3019$wL6.972@trnddc03>
Source record: 80777

"Hmmm. Some might say the same about 'rag chewing' "......

Touche!.....

Joe
W3JDR

"clvrmnky" <clvrmnky-uunet@coldmail.com.invalid> wrote in message
news:WEoYd.93684$vO1.583155@nnrp1.uunet.ca...
> On 10/03/2005 9:17 PM, Jim Kelley wrote:
>>
>>
>> John Franklin wrote:
>>
>>> I am serious, guess I don't get out much what is "Blogging" ?
>>
>>
>> Somebody thought that wasting time needed a fancier name. :-)
>> Blog comes from Web Log. Dumb, huh?
>>
> Hmmm. Some might say the same about "rag chewing." :)

3639. Antenna analyzer and non-resonant antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 13:24:05 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <bgq531h9mr7mjuup1t0hijrmed0ol8pd8r@4ax.com>
Source record: 80778

I have built an antenna analyzer (AA-908) that reports SWR, complex impedance, capacitance and inductance. It works fine with coax-fed resonant antennas.

How can I use it to test a 40M double zepp with 300 ohm twinlead feedline? I am at this point interested in finding the frequencies in 160M band at which this antenna and particular-length feedline will propagate.

Needless to say, I see maxed out numbers almost all the time (SWR>10 and impedance >600). Should I use a balun? Is there something I can use (like a 50 ohm resistor in parallel) that will give me numbers that I can use? What should I be looking for?

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

3640. Re: Antenna analyzer and non-resonant antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 13:47:35 UTC
From: Dave <noone@nowhere.com>
Message-ID: <DrCdncFrP96Ybq_fRVn-oQ@crocker.com>
Source record: 80779

a 10:1 balun would probably help get readings down into a range that your analyzer can handle, assuming the >600 ohms is the real impedance.

"Ken" <cprstn54zz@att.net> wrote in message news:bgq531h9mr7mjuup1t0hijrmed0ol8pd8r@4ax.com...
> I have built an antenna analyzer (AA-908) that reports SWR, complex
> impedance, capacitance and inductance. It works fine with coax-fed
> resonant antennas.
>
> How can I use it to test a 40M double zepp with 300 ohm twinlead
> feedline? I am at this point interested in finding the frequencies in
> 160M band at which this antenna and particular-length feedline will
> propagate.
>
> Needless to say, I see maxed out numbers almost all the time (SWR>10
> and impedance >600). Should I use a balun? Is there something I can
> use (like a 50 ohm resistor in parallel) that will give me numbers
> that I can use? What should I be looking for?
>
> Ken KC2JDY
>
> Ken
> (to reply via email
> remove "zz" from address)

3641. Re: Antenna analyzer and non-resonant antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 14:17:36 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4232faf3$1_1@127.0.0.1>
Source record: 80780

Ken wrote:
> How can I use it to test a 40M double zepp with 300 ohm twinlead
> feedline? I am at this point interested in finding the frequencies in
> 160M band at which this antenna and particular-length feedline will
> propagate.

A 40m double Zepp is 1/2WL on 80m. You didn't say how long the
feedline is. You can get a ballpark idea of the impedance by
downloading the free demo version of EZNEC from www.eznec.com.

Assuming the dipole is 130 ft. long, EZNEC says the antenna
system can be resonated by a feedline length of 96 ft. using
300 ohm line with a VF = 0.9. The impedance seen looking into
the feedline is 0.7 ohms. EZNEC says the antenna has a feedpoint
impedance of 9.3-j1060 on 1.9 MHz with a sky high SWR on the
300 ohm line. This antenna will perform poorly on 160m.

A better solution for 160m would be to short the parallel
feedline together at the tuner and feed the whole thing against
ground, aka Marconi style, with the 40m double Zepp acting as
a top hat.
--
73, Cecil http://www.qsl.net/w5dxp

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3642. Re: Access rec.radio.amateur.antenna via the web

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 16:08:00 UTC
From: Clarence_A <no@No.com>
Message-ID: <AtEYd.17091$OU1.3675@newssvr21.news.prodigy.com>
Source record: 80781

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:d0sat3guu1@nwrdmz03.dmz.ncs.ea.ibs-infra.bt.com...
> Please add to your kill file to avoid future inconvenience.
>
> ======================
>
> Why do you put me to the inconvenience of going to the kill file
and all the
> rest of the messing about? Clear off, you pest!
>

"Reg Edwards" added to KILLFILE!

3643. Re: Radio Ham Arrested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 16:13:02 UTC
From: Clarence_A <no@No.com>
Message-ID: <iyEYd.17093$OU1.15906@newssvr21.news.prodigy.com>
Source record: 80782

"Anon" wrote
> Perhaps this explains why so many NG and
> chat room users employ an alias
>
> Anon by necessity
>
> ">Someone wrote
> > "Radio ham arrested over harassment on Internet
> >
> > GAZETTE & HERALD: RADIO ham [named in the link below] has been
> > arrested in connection with the harassment of an Internet
> > chat room user. "
> >
> > http://tinyurl.com/4catk
> >
They couldn't just mail him a summons? It doesn't take six
policemen to tell him he is required to appear in court!

3644. Re: Antenna analyzer and non-resonant antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 18:50:10 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <CRGYd.1789$uw6.670@trnddc06>
Source record: 80783

"Ken" <cprstn54zz@att.net> wrote in message
news:bgq531h9mr7mjuup1t0hijrmed0ol8pd8r@4ax.com...
>I have built an antenna analyzer (AA-908) that reports SWR, complex
> impedance, capacitance and inductance. It works fine with coax-fed
> resonant antennas.
>
> How can I use it to test a 40M double zepp with 300 ohm twinlead
> feedline? I am at this point interested in finding the frequencies in
> 160M band at which this antenna and particular-length feedline will
> propagate.
>
> Needless to say, I see maxed out numbers almost all the time (SWR>10
> and impedance >600). Should I use a balun? Is there something I can
> use (like a 50 ohm resistor in parallel) that will give me numbers
> that I can use? What should I be looking for?
>
> Ken KC2JDY
>
> Ken
> (to reply via email
> remove "zz" from address)

Ken

I consider dave,s suggestion to build a good transformer to be the best
way to estimate antenna impedance that is beyond the range of your meter.

Is a Smith Chart something you'd use? I cant say which method is best
for your use. But, I'd try estimating the antenna's impedance by
translating back toward the radiator with the assumption that you know. It
is necessary to know the *impedance*, not just the VSWR on the 50 ohm line.
Then, make an attempt to improve the antenna's impedance and see if your
assumptions are appropriate by re-measuring the impedance that results on
the 50 ohm line.

Jerry

3645. Re: Radio Ham Arrested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 20:01:58 UTC
From: Tony VE6MVP <tony@REMOVEve6mvp.com>
Message-ID: <a7h631hm7eosl1mrrffqajfknoen940nk2@4ax.com>
Source record: 80784

On Sat, 12 Mar 2005 16:13:02 GMT, "Clarence_A" <no@No.com> wrote:

>> > GAZETTE & HERALD: RADIO ham [named in the link below] has been
>> > arrested in connection with the harassment of an Internet
>> > chat room user. "
>> >
>> > http://tinyurl.com/4catk
>> >
>They couldn't just mail him a summons? It doesn't take six
>policemen to tell him he is required to appear in court!

1) Mail is usually not good enough notice to appear in court. Such
are delivered in person.

2) He almost certainly has a previous negative history of some sort.

Tony

3646. Re: Radio Ham Arrested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 20:22:29 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d0vj25lgj1@sparta.btinternet.com>
Source record: 80785

> He almost certainly has a previous negative history of some sort.
>
==========

Perhaps somebody who doesn't like him has untruthfully told the secret police he has some form of associations with an unknown terrorist organisation. If he should disappear from circulation, under the new Laws, nobody will ever know, not even he, what has happened to him.

But of course, it couldn't happen in this fine country of ours - Merrie England!

3647. gps at?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 20:52:05 UTC
From: ml <m@di.net>
Message-ID: <m-B7C9BC.15520112032005@news.verizon.net>
Source record: 80786

I have about a 150ft run on lmr on the roof is a 2/440 jpole from arrow

works great

id like to be able to plug in my gps receiver and wonder if their is a
way to :

get that signal over that distance

possibly do it w/the jpole

not shure if a tuner or rcv amp might do it?

thanks
m

3648. Re: Radio Ham Arrested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 22:05:58 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <pJJYd.50247$FM3.30073@fed1read02>
Source record: 80787

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:d0vj25lgj1@sparta.btinternet.com...
>> He almost certainly has a previous negative history of some sort.
>>
> ================================
>
> Perhaps somebody who doesn't like him has untruthfully told the secret
> police he has some form of associations with an unknown terrorist
> organisation. If he should disappear from circulation, under the new Laws,
> nobody will ever know, not even he, what has happened to him.
>
> But of course, it couldn't happen in this fine country of ours - Merrie
> England!
>
>

Reg proves his own point. Should there be a way to "disappear" unsavory
Brits, Reg would have been gone long ago!

Ed
wb6wsn

3649. EZNEC Model of 88ft doublet

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 22:18:08 UTC
From: Jim Miller <jim@jtmiller.com>
Message-ID: <1110665888.643793.123700@z14g2000cwz.googlegroups.com>
Source record: 80788

I downloaded the demo of EZNEC4 to see what it would show for a 88ft doublet 50ft in the air fed by 300ohm twinlead.

My model has two wires each 44ft long joined in the middle at 50ft elevation with another wire pair 0.1ft long 0.1ft of elevation.

They are joined by two 300ohm transmission lines and a split current source is placed at the 0.1 elevation junction.

When I run the SWR plot it shows over 100:1 with minima near 2:1 at 6.5Mhz and 11.75Mhz.

Does this sound about right or am I not modeling it correctly?

tnx
jtm

3650. Re: Tower Resonance Breaker?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 22:39:33 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <1136rtvh36iujbb@corp.supernews.com>
Source record: 80789

I agree with Torsten. You need make no changes to your present run of cables (along a messenger cable) other than adding clamp-on chokes to each wire (including the messenger cable). If the "run" is a significant part of 0.25 WL at a frequency of concern, you may find it desirable to place a second set of clamp-on-chokes about 0.25 WL from the first set or near the house entrance (whichever comes first).

You will need radials in order to have reasonable efficiency. An impedance bridge will help in finding the connection spot on the tower where the real part of Z is 50 (or 70) ohms.

Let us know what you do.
73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
<tclay@qmc.ph.msstate.edu> wrote in message
news:87k6ofpax1.fsf@qmc.ph.msstate.edu...

<snip>
>
> Shunt feeding the tower is probably the simplest option.
> Why not coil the feedlines into chokes when they leave the tower, or
> put stacks of ferrite beads on them to keep RF off them?
>
> Torsten
> N4OGW

3651. Re: EZNEC Model of 88ft doublet

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 23:07:00 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42337707$1_2@127.0.0.1>
Source record: 80790

Jim Miller wrote:
> They are joined by two 300ohm transmission lines and a split current
> source is placed at the 0.1 elevation junction.

You don't need two transmission lines for balanced
line. The dipole can be just one wire with the
single 300 ohm transmission line attached at the
50% point.
--
73, Cecil http://www.qsl.net/w5dxp

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3652. Re: EZNEC Model of 88ft doublet

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 23:22:27 UTC
From: jgboyles@aol.com
Message-ID: <1110669746.987740.254000@l41g2000cwc.googlegroups.com>
Source record: 80791

Jim Miller wrote:
> I downloaded the demo of EZNEC4 to see what it would show for a 88ft
> doublet 50ft in the air fed by 300ohm twinlead.

> When I run the SWR plot it shows over 100:1 with minima near 2:1 at
> 6.5Mhz and 11.75Mhz.
>
> Does this sound about right or am I not modeling it correctly?
>
> tnx
> jtm

Hi Jim, The 6.5 Mhz SWR sounds about right, the 11.75Mhz does not.
What are you trying to do, an exercise in modeling, or a specific
antenna and transmission line for a specific band?
This is just me, but for complete antenna systems, I use EZNEC for
the antenna input Impedance, and other stuff for the transmission lines
and matching networks.
Gary N4AST

3653. Re: EZNEC Model of 88ft doublet

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-12 23:27:02 UTC
From: jgboyles@aol.com
Message-ID: <1110670022.340226.256590@z14g2000cwz.googlegroups.com>
Source record: 80792

Cecil Moore wrote:
> Jim Miller wrote:
> > They are joined by two 300ohm transmission lines and a split
current
> > source is placed at the 0.1 elevation junction.
>
> You don't need two transmission lines for balanced
> line. The dipole can be just one wire with the
> single 300 ohm transmission line attached at the
> 50% point.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
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=----

Hi Cecil, I think he is refering to the way you model a non-radiating
transmission line. It is simply two wires, not two 300 ohm lines
attached to the 50% point.
Gary N4AST

3654. Re: Radio Ham Arrested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 00:09:15 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd3715b.20s.bit-bucket@shell.config.com>
Source record: 80793

> ">Someone wrote
>> "Radio ham arrested over harassment on Internet
>>
>> GAZETTE & HERALD: RADIO ham [named in the link below] has been
>> arrested in connection with the harassment of an Internet chat
>> room user. "
>>
>> http://tinyurl.com/4catk

"Radio ham arrested over harassment on Internet"

???? _Radio Ham_ -- this is relevant -- because -- ???

I guess he had no driver's license, no TV license, no library
card, no National Health (sic) card, no dog permits, no fishing
license, and so forth, und so weiter .... , so this was the
only way to differentiate him from *ALL* the other Gareth Evanses
in Hardens Close, Chippenham.

Jeeesh!

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

3655. Re: EZNEC Model of 88ft doublet

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 00:27:18 UTC
From: Jim Miller <jim@jtmiller.com>
Message-ID: <1110673638.399309.5310@z14g2000cwz.googlegroups.com>
Source record: 80794

OK, at cecil's suggestion I changed to a single 20 segment wire with a split I source at 50%. I ran the SWR plot against a 300ohm alternate impedence. Is that the way to see what effect a 300ohm twinlead will have? Now I get a minimum 2:1 SWR at 5.6Mhz and a pretty smooth convex curve out from there to 14.5Mhz with a max SWR along that leg of around 35 at 12.1Mhz.

tnx
jtm

3656. Re: EZNEC Model of 88ft doublet

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 00:29:29 UTC
From: Jim Miller <jim@jtmiller.com>
Message-ID: <1110673769.760988.224600@f14g2000cwb.googlegroups.com>
Source record: 80795

bzzzt...the minimum at 5.6Mhz was about 3:1 not 2:1...

jtm

3657. Yagi Hairpin Match

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 00:46:04 UTC
From: muskie <muskie@muskie.com>
Message-ID: <d10431$2uah$2@news.hgc.com.hk>
Source record: 80796

I'm a newbie in HAM and would like to build my own 430mhz 3 elements Yagi but don't have enough information. Although I have the ARRL Handbook and ARRL Antenna book. But, I do have some questions about that.

1. Detail information about the hairpin. match (i.e. length, the distance between the 2 legs and the location to solder)

2. The feedline should be even or odd 1/4 wavelength?

3. When solder the feedline to the hairpin, what's the location?

4. If I don't have the SWR meter, is it still possible to build the Yagi?

I did the search for a month on the net and newsgroup, but still don't have any luck to give me the answers. Thanks for any comment in advance!!!

3658. Re: Yagi Hairpin Match

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 02:36:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qv8731hvjsken0o7ju8ssv71aud9ljmo4t@4ax.com>
Source record: 80797

On Sun, 13 Mar 2005 08:46:04 +0800, "muskie" <muskie@muskie.com>
wrote:
>1. Detail information about the hairpin. match (i.e. length, the distance
>between the 2 legs and the location to solder)

Hi OM,

You should have some form of a design in front of you, even if it is a
copy of an advertising brochure to work from. At this scale, it is
pretty simple to build a working model, but first observe the answer
to question 4 below.

>2. The feedline should be even or odd 1/4 wavelength?

If you did your matching right (this is the answer to question 3), it
won't matter. However, you cannot tell if you did the matching right
until you get to question 4 below.

>3. When solder the feedline to the hairpin, what's the location?

This is one of those variables that you determine when all else is
done. As such it requires a SWR meter (see how these issues cascade
to your tools?).

>4. If I don't have the SWR meter, is it still possible to build the Yagi?

With as much cut-and-try, you need more tools than a screwdriver and
pliers. Building to a scaled model only goes so far when you have to
actually perform a sanity check. The SWR meter will tell you how well
the design matches to the power transfer from a transmitter, a notable
performance variable, but not the only one.

>I did the search for a month on the net and newsgroup, but still don't have
>any luck to give me the answers. Thanks for any comment in advance!!!

When you build your own, each construction is its own masterpiece.
The only way to guarantee performance is to build an identical copy.
You can buy a model, but then you wouldn't need to build one after
that.... There's as many models as there are characteristics that you
want to optimize. So, you have to FIRST determine, what
characteristics are important, THEN find the model (or build one in
software, then in copper, then one that is weatherproof).

The simple resolution is to invest in tools and expect to go through
at least a couple or three designs. That is, for a yagi style. There
are simpler designs that work the first time - but you didn't ask THAT
question.

73's
Richard Clark, KB7QHC

3659. Mostly horizontal polarization of HF arriving at my antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 02:55:27 UTC
From: tf3kx@simnet.is
Message-ID: <cc4f4620.0503121855.151a414a@posting.google.com>
Source record: 80798

I have an inverted-V, approximately resonant on 40, 20, 15 and 10m.

I have tried numerous verticals for comparison, but on these bands the inverted-V always receives signals on these bands better or equally well, at best. The verticals have been well grounded (using a "large, good quality" metal sheet roof as the ground) and I have done my best to minimize losses. The verticals have been anywhere from 1/4 to 5/8 wavelengths long. But they are always outperformed by my inv-V on these bands. Only on 80 and 160m are the verticals better.

Now, this leads me to wondering if the radio waves arriving at my QTH tend to be largely horizontally polarized on the higher frequencies? Or can there be any other explanation that "good" verticals, even 5/8 wavelengths long are never better than the inv-V. Any thoughts?

The verticals and the inv-V were all mounted on the metal roof of my house. The house is located in a poor-quality ground area (rocks, shallow vegetation), the direction to Europe is across a low hill approx. 1/2 mile away while the direction to America is across the open sea approx. 1/8 mile away from my house.

73 - Kristinn, TF3KX

3660. Re: EZNEC Model of 88ft doublet

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 04:26:52 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4233c200$1_2@127.0.0.1>
Source record: 80799

jgboyles@aol.com wrote:
> Hi Cecil, I think he is refering to the way you model a non-radiating
> transmission line. It is simply two wires, not two 300 ohm lines
> attached to the 50% point. Gary N4AST

EZNEC's native transmission lines are non-radiating.
--
73, Cecil http://www.qsl.net/w5dxp

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3661. Re: Mostly horizontal polarization of HF arriving at my antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 04:34:27 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <npPYd.2614$qW.2343@newsread3.news.atl.earthlink.net>
Source record: 80800

I had a wilson 4 band verticle mounted on top of a 30 foot tower with
4 radials run out for each band, in short if I could hear 'em I could work
'em. It was that simple........ Noise seems to be more pronounced with
verticle polarization. I did have a 40M inverted vee on that tower as well
and used to switch between the antennas. Since I was on the west coast at
the time, the east coasters were stronger on the verticle than the inverted
vee. I would in NO way say my tests were very scientific, just looked at the
S meter readings. Yes it was an actual meter movement (IC-720) had one. I
hope this helps you in some way with what you are trying to accomplish.

John
"Kristinn Andersen, TF3KX" <tf3kx@simnet.is> wrote in message
news:cc4f4620.0503121855.151a414a@posting.google.com...
>I have an inverted-V, approximately resonant on 40, 20, 15 and 10m.
> SNIP <
> Now, this leads me to wondering if the radio waves arriving at my QTH
> tend to be largely horizontally polarized on the higher frequencies?
> Or can there be any other explanation that "good" verticals, even 5/8
> wavelengths long are never better than the inv-V. Any thoughts?
> 73 - Kristinn, TF3KX

3662. Re: EZNEC Model of 88ft doublet

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 04:44:25 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4233c61d$1_1@127.0.0.1>
Source record: 80801

Jim Miller wrote:

> OK, at cecil's suggestion I changed to a single 20 segment wire with a
> split I source at 50%. I ran the SWR plot against a 300ohm alternate
> impedence. Is that the way to see what effect a 300ohm twinlead will
> have? Now I get a minimum 2:1 SWR at 5.6Mhz and a pretty smooth convex
> curve out from there to 14.5Mhz with a max SWR along that leg of around
> 35 at 12.1Mhz.

That's more like it and you don't need a split-I source in the
middle of one wire. Split-I sources are used at the intersection
of two wires. 492/88' = 5.6 MHz. 984/88' = 11.2 MHz.

For 7 MHz and up, this antenna would be better behaved with 450
ohm ladder-line or open wire line. The best Z0 for the feedline
is Sqrt(Rmin*Rmax) ~ Sqrt(50*7000) ~ 600 ohms.
--
73, Cecil http://www.qsl.net/w5dxp

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3663. Re: EZNEC Model of 88ft doublet

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 04:45:35 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4233c662$1_1@127.0.0.1>
Source record: 80802

Jim Miller wrote:

> bzzzt...the minimum at 5.6Mhz was about 3:1 not 2:1...

Yep, that puts the feedpoint impedance in the 100 ohm
range. 300/100 = 3
--
73, Cecil http://www.qsl.net/w5dxp

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3664. Qaudrifilar wideband balun transformer?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 12:11:43 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <jua831p2s3fhpuuu81i5bvjulf3rvado7m@4ax.com>
Source record: 80803

I see in chap. 19 of my 19th ed. ARRL Antenna Handbook a description of a quadrifilar balun transformer with taps at 16:1, 9:1, 6:1 and 4:1.

Is such a balun sold commercially?

If I homebrew it, how do I know where to put the three lower-ratio taps? Inasmuch as the taps are usually made by putting a small loop in the magnet wire, this can't be done after the winding is done.

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

3665. Re: EZNEC Model of 88ft doublet

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 12:48:43 UTC
From: Jim Miller <jim@jtmiller.com>
Message-ID: <1110718123.617622.269370@l41g2000cwc.googlegroups.com>
Source record: 80804

Hi Cecil

Thanks for your help. Looks like I've got a tiger by the tail. I'm currently using #26awg fed by 300ohm ladderline to minimize visibility. Both contribute to pushing the SWR higher across the spectrum. If I'm not able to get the tuner to match this setup I'll try the 450 ladder and and 18awg and risk the visibility. Actually I've gotten the antenna higher than I thought I would be able to and the 18awg would probably be ok. The ladder line is a bit more difficult to deal with at twice the width unless I can disguise it or hide it behind a tree trunk. Then there is still the issue of providing a guard against kids messing with it.

I'm going to take a multimeter to some white and grey pvc conduit today to see if I can detect any difference in conductivity as some have speculated the grey was more conductive. Which ever I chose I'll have to do some camoflage painting but if the resistance is high and comparable for both I'll select the smallest diameter which allows the ladderline to pass through without cramping.

The hardest part of all of this was getting the halyards up and that's now done. Changing wires isn't a big deal as long as adequate performance and visibility can be balanced.

tnx
jtm

3666. Re: Radio Ham Arrested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 13:27:46 UTC
From: Chris Ross <pragmatist@kc.rr.com>
Message-ID: <xdXYd.3552$hu3.2166@twister.rdc-kc.rr.com>
Source record: 80805

This from a country which it is illegal to defend oneself from a criminal attack? Say it ain't so...

3667. Re: Radio Ham Arrested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 13:45:55 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d11g6jnpj1@titan.btinternet.com>
Source record: 80807

```
> This from a country which it is illegal to defend oneself from a
> criminal attack? Say it ain't so...

==============================

It ain't so. It is illegal only to defend oneself against the secret
police.
```

3668. Re: Antenna analyzer and non-resonant antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 13:46:17 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <423443c7.5900424@news.crosslink.net>
Source record: 80806

On Sat, 12 Mar 2005 08:24:05 -0500, Ken <cprstn54zz@att.net> wrote:

>I have built an antenna analyzer (AA-908) that reports SWR, complex
>impedance, capacitance and inductance. It works fine with coax-fed
>resonant antennas.
>
>How can I use it to test a 40M double zepp with 300 ohm twinlead
>feedline? I am at this point interested in finding the frequencies in
>160M band at which this antenna and particular-length feedline will
>propagate.
>
>Needless to say, I see maxed out numbers almost all the time (SWR>10
>and impedance >600). Should I use a balun? Is there something I can
>use (like a 50 ohm resistor in parallel) that will give me numbers
>that I can use? What should I be looking for?

Dear Ken,

Here's something else to keep in mind. Your new instrument is designed and calibrated for use on 50 ohm transmission line. Even if your 300 ohm twinlead were matched properly to an antenna, and there are no standing waves on the line, your instrument will still show an SWR of 6:1

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

3669. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 15:07:46 UTC
From: Korbin Dallas <korbindallas@yahoo.com>
Message-ID: <pan.2005.03.13.15.07.38.458717@yahoo.com>
Source record: 80808

On Thu, 03 Mar 2005 13:24:36 -0800, WA2SI wrote:

> Hi folks,
>
> I just bought a batch of Amphenol PL-259 83-1SPs to assemble some
> jumpers. When did Amphenol shift from 'Made In USA' to 'Assembled In
> Mexico'? The whole reason for buying Amphenol was to:
>
> A) Enjoy that Amphenol quality. (BTW, they don't even look the same.
> The dielectric has a cheap milky recycled look and the name and model
> nr. are no longer stamped into the sleeve ring.)
>
> B) Support products 'Made In USA'.
>
> Ok, this was my two minute rant. Tnx fer listening.
>
> 73 de Bert
> WA2SI
> FISTS #9384
> QRP ARCI #11782

If the product was built in the USA the price would be so High you
would not purchase it.

Would you really pay %500 more for the same product just to have Made
in USA stamped on it? We always look for the bargain price and that
usually means foreign produced products.

Moving production to Mexico where manufacturing cost are lower allows
Amphenol to remain in business.

These days Mexico is being undersold by China where the cost are less than
that of Mexico.

3670. Little help....choke position

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 15:12:07 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <eLYYd.10639$Fy.2243@okepread04>
Source record: 80810

My upper band antenna is a Van Gordon "All Bander". It started out life as a 134' dipole fed with 100' of 450 ohm ladder line. I cut half the ladder line and installed a PL-259 on the end.

My feedline going to it is a length of rg-58 coax with the end being a coil of 12 turns wound around a CD case. The turns were wound, glued then the case was removed, leaving a perfect air coil.

I later trimmed the antenna so it has a low SWR at 7.18 mhz and it works fine.

Now to the issue - yesterday I bought a LDG AT-100 PRO autotuner with the idea that I could tune my 40m antenna to the upper bands. It works but if I tune or operate higher than 85w on 10m FM, the tuner erratically flashes it's SWR bargraph and if I push it further, locks up. Powering the tuner off and on again fixes it (unless I push my luck again).

I've got a good ground but it's 25' away. I'm hooked up to it with braid and 12 awg wire. All station equipment is tied with braid to a central point where the 12 awg wire starts.

I was wondering what would happen if I removed the coax running to my choke? There is enough ladder line to reach. Maybe I should buy a LDG balun and eliminate the coax completley? I would think that would cause more problems as I would have ladder line in the shack?

I tried disconnecting the ground to the tuner and re routing the tuner's power cord with no real resolution of the problem.

Help?

--
73's es gd dx de Ken KG WX
Grid EM17ip, Flying Pigs #1055,
List Owner, Yahoo! E-groups:
VX-2R & FT-857

3671. Re: Cold Water Pipe Ground?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 15:12:12 UTC
From: Korbin Dallas <korbindallas@yahoo.com>
Message-ID: <pan.2005.03.13.15.12.10.461585@yahoo.com>
Source record: 80809

On Sun, 27 Feb 2005 14:01:14 -0800, wizard12342002 wrote:

> It appears that my cold water pipe is made completely of copper (no
> PVC). If I attach to it right where it enters the house (but on the
> inside), will this be an effective lightning ground? The electrical
> panel connects at this point also.
>
> Thanks,
>
> -JJ

Despite all the Noise about grounding...

Household Plumbing should never be used as an lightning protection ground!

3672. Re: Drill vs. MagMount ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 15:15:50 UTC
From: Korbin Dallas <korbindallas@yahoo.com>
Message-ID: <pan.2005.03.13.15.15.48.556027@yahoo.com>
Source record: 80811

On Fri, 04 Mar 2005 23:51:18 -0800, Everett wrote:

> All things being equal, is there a performance advantage (in 2meter/70cm
> bands) permanently mounting an antenna via a hole in the roof vs. using a
> MagMount??
>
> How about other bands??
>
> Thanks,
> Everett

Yes a properly installed antenna will out perform a MagMount, always has
alway will.

3673. Re: Is PVC pipe UV resistant?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 15:17:35 UTC
From: Korbin Dallas <korbindallas@yahoo.com>
Message-ID: <pan.2005.03.13.15.17.33.910033@yahoo.com>
Source record: 80812

On Thu, 03 Mar 2005 17:05:53 -0800, JimK2TL@gmail.com wrote:

> Greetings
> Does anyone know if typical schedule 40 PVC pipe is UV resistant? I
> have some antenna projects in mind that will be built from this stuff.
> I suppose I can paint it for some extra protection, but I was wondering
> if it is necessary?
>
> Thanks
> Jim/K2TL

No, PVC is not UV Resistant...

3674. Re: Looking for the best 2M/440 mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 15:22:24 UTC
From: Korbin Dallas <korbindallas@yahoo.com>
Message-ID: <pan.2005.03.13.15.22.16.710610@yahoo.com>
Source record: 80813

On Tue, 01 Mar 2005 13:40:45 -0500, C.J.Clegg wrote:

>
> Looking for the very best 2M/440 dual-band mobile antenna made.
> Looking primarily for the highest gain on both bands. Mounting and
> size (length) are not important, i.e. can be anything.
>
> Any suggestions?
>
> Thanks...

Larsen NMO2/70B or NMO2/70C in years of mobile operation no other
mobile antenna has delivered the day after day performance these antennas
have.

3675. Re: Is PVC pipe UV resistant?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 16:25:06 UTC
From: Clarence_A <no@No.com>
Message-ID: <CPZYd.18104$OU1.3205@newssvr21.news.prodigy.com>
Source record: 80814

"Korbin Dallas" <korbindallas@yahoo.com> wrote in message
news:pan.2005.03.13.15.17.33.910033@yahoo.com...
> On Thu, 03 Mar 2005 17:05:53 -0800, JimK2TL@gmail.com wrote:
>
> > Greetings
> > Does anyone know if typical schedule 40 PVC pipe is UV
resistant? I
> > have some antenna projects in mind that will be built from
this stuff.
> > I suppose I can paint it for some extra protection, but I was
wondering
> > if it is necessary?
> >
> > Thanks
> > Jim/K2TL
>
> No, PVC is not UV Resistant...

I have an antenna in a PVC case which has been on my roof (in the
SUN) for over ten years. When Can I expect the PVC to fail?

3676. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 16:30:07 UTC
From: Clarence_A <no@No.com>
Message-ID: <jUZYd.18158$OU1.949@newssvr21.news.prodigy.com>
Source record: 80816

"Korbin Dallas" <korbindallas@yahoo.com> wrote in message
news:pan.2005.03.13.15.07.38.458717@yahoo.com...
> On Thu, 03 Mar 2005 13:24:36 -0800, WA2SI wrote:
>
> > Hi folks,
> >
> > I just bought a batch of Amphenol PL-259 83-1SPs to assemble
some
> > jumpers. When did Amphenol shift from 'Made In USA' to
'Assembled In
> > Mexico'? The whole reason for buying Amphenol was to:
> >
> > A) Enjoy that Amphenol quality. (BTW, they don't even look the
same.
> > The dielectric has a cheap milky recycled look and the name
and model
> > nr. are no longer stamped into the sleeve ring.)
> >
> > B) Support products 'Made In USA'.
> >
> > Ok, this was my two minute rant. Tnx fer listening.
> >
> > 73 de Bert
> > WA2SI
> > FISTS #9384
> > QRP ARCI #11782
>
> If the product was built in the USA the price would be so High
you
> would not purchase it.
>
> Would you really pay %500 more for the same product just to have
Made
> in USA stamped on it? We always look for the bargain price and
that
> usually means foreign produced products.
>
> Moving production to Mexico where manufacturing cost are lower
allows
> Amphenol to remain in business.
>
> These days Mexico is being undersold by China where the cost are
less than
> that of Mexico.

>

BS!

There are connector houses who assemble in the US on custom order
and they are no more expensive than the assembled in Mexico parts.

Amphenol went to Mexico to get away from the union that was
breaking their back!

3677. Re: Radio Ham Arrested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 16:30:57 UTC
From: Clarence_A <no@No.com>
Message-ID: <5VZYd.18167$OU1.6051@newssvr21.news.prodigy.com>
Source record: 80815

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:d11g6jnpj1@titan.btinternet.com...
> > This from a country which it is illegal to defend oneself from
a
> > criminal attack? Say it ain't so...
>
> ==============================
>
> It ain't so. It is illegal only to defend oneself against the
secret
> police.
>

I don't believe you!

3678. Re: Is PVC pipe UV resistant?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 16:52:49 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <1138rvh4g720pb6@corp.supernews.com>
Source record: 80817

"resistant" is hard to define. I have a j-pole made out of PVC that has been on the roof for almost thirty years. I suppose at some time it will fail, but probably not in my lifetime. I certainly wouldn't expect it to have the same pressure and burst characteristics if I was using it with water pressure, but it seems to hold up well as an antenna structure.

My company has been making vertical dipoles using Schedule 40 PVC as the "radome" for nearly twenty years, and as yet, not a single reported field failure.

Jim

"Korbin Dallas" <korbindallas@yahoo.com> wrote in message news:pan.2005.03.13.15.17.33.910033@yahoo.com...
> On Thu, 03 Mar 2005 17:05:53 -0800, JimK2TL@gmail.com wrote:
>
>> Greetings
>> Does anyone know if typical schedule 40 PVC pipe is UV resistant? I
>> have some antenna projects in mind that will be built from this stuff.
>> I suppose I can paint it for some extra protection, but I was wondering
>> if it is necessary?
>>
>> Thanks
>> Jim/K2TL
>
> No, PVC is not UV Resistant...
>

3679. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 18:19:37 UTC
From: Bert Craig <wa2si@optonline.netNOSPAM>
Message-ID: <9B%Yd.21161$Ku2.8844@fe09.lga>
Source record: 80818

"Korbin Dallas" <korbindallas@yahoo.com> wrote in message
news:pan.2005.03.13.15.07.38.458717@yahoo.com...
> On Thu, 03 Mar 2005 13:24:36 -0800, WA2SI wrote:
>
>> Hi folks,
>>
>> I just bought a batch of Amphenol PL-259 83-1SPs to assemble some
>> jumpers. When did Amphenol shift from 'Made In USA' to 'Assembled In
>> Mexico'? The whole reason for buying Amphenol was to:
>>
>> A) Enjoy that Amphenol quality. (BTW, they don't even look the same.
>> The dielectric has a cheap milky recycled look and the name and model
>> nr. are no longer stamped into the sleeve ring.)
>>
>> B) Support products 'Made In USA'.
>>
>> Ok, this was my two minute rant. Tnx fer listening.
>>
>> 73 de Bert
>> WA2SI
>> FISTS #9384
>> QRP ARCI #11782
>
> If the product was built in the USA the price would be so High you
> would not purchase it.

Yes, I would. I have witnessed, firsthand, the result of not reinvesting in our own infrastructure. We've recently watched and entire IT department eliminated and their tasks exported offshore. Some dismiss it as "sound business practice," yet choose to remain ignorant of the bigger picture because that would interfere with their own career aspirations. Increasing "the bottom line" is viewed as a feather in one's cap, no matter what means are used to effect this end.

> Would you really pay %500 more for the same product just to have Made
> in USA stamped on it?

You betcha! My rigs are Ten-Tec and Elecraft, not Yaesu, Icom, Alinco, or Kenwood. My keys/paddles are Vibroplex, Bencher, March, or KG2ED, not GHD or Hi-Mound. Why? Because, despite the misconception of some, the quality is comparible and there is an additional sense of satisfaction that my money may be making onto the dinner table of John and/or Jane Doe in the USA as opposed to going offshore. Call it patriotic reinvestment.

> We always look for the bargain price and that
> usually means foreign produced products.

A bargain price is not always a bargain. What if your son or daughter worked at Ford or GM and lost his/her job because the Toyota Camry sold for $3,500.00 less than a Taurus or Impala; Would that Camry you bought as a retirement gift to yourself still seem like such a bargain?

This may be somewhat of an extreme example as $3,500.00 can be a real problem for many folk's budgets, but there are plenty of much smaller things folks can do to send corporate America the message; "If you export our jobs, we will not patronize you business."

Indifference is a real killer.

> Moving production to Mexico where manufacturing cost are lower allows
> Amphenol to remain in business.

I returned mine and bought J&I instead. The quality is just fine and they're made in New Jersey.

> These days Mexico is being undersold by China where the cost are less than
> that of Mexico.

--
Vy 73 de Bert
WA2SI
FISTS #9384
QRP ARCI #11782

3680. Re: Drill vs. MagMount ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 18:29:31 UTC
From: Buck <iam@this.site>
Message-ID: <9i1931dg52698ks228gkb2gc9ed0lf0vjg@4ax.com>
Source record: 80819

On Sun, 13 Mar 2005 15:15:50 GMT, Korbin Dallas
<korbindallas@yahoo.com> wrote:

>On Fri, 04 Mar 2005 23:51:18 -0800, Everett wrote:
>
>> All things being equal, is there a performance advantage (in 2meter/70cm
>> bands) permanently mounting an antenna via a hole in the roof vs. using a
>> MagMount??
>>
>> How about other bands??
>>
>> Thanks,
>> Everett
>
>Yes a properly installed antenna will out perform a MagMount, always has
>alway will.
>

How does the hole mount compare to the lip-mount that is well
grounded?

I don't really want to drill a hole in my roof, but I want to get off
the magnet and a lipmount on my hatch will leave the antenna at
roof-top level.

--
73 for now
Buck
N4PGW

3681. Re: Mostly horizontal polarization of HF arriving at my antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 18:41:07 UTC
From: TOM <noname@noprovider.nodomain>
Message-ID: <7P%Yd.1796$oa6.1254@trnddc07>
Source record: 80820

HF signals are usually not predominantly polarized more horizontal or
vertical.

The effect that you are seeing is due to the effective height of the dipole
above ground. On 40,20,15,10 the dipole is high enough (in terms of
wavelengths)
that it develops a good pattern at lower angles of radiation (or reception).

On 80 and 160 meters, your dipole is too close to the ground for it to have
a
good low-angle pattern.

Thus what you are seeing is that the signals you want to listen to are
arriving
at an angle lower than what your 80/160 meter dipoles are effective at. The
vertical
antenna has a lower angle of reception on these bands than the dipole.

If you listen to signals out to ~300 km on 80 meters, you may find that your
dipole
outperforms the vertical because those signals are arriving at your antenna
from a
fairly high angle.

-- Tom

"Kristinn Andersen, TF3KX" <tf3kx@simnet.is> wrote in message
news:cc4f4620.0503121855.151a414a@posting.google.com...
>I have an inverted-V, approximately resonant on 40, 20, 15 and 10m.
>
> I have tried numerous verticals for comparison, but on these bands the
> inverted-V always receives signals on these bands better or equally
> well, at best. The verticals have been well grounded (using a "large,
> good quality" metal sheet roof as the ground) and I have done my best
> to minimize losses. The verticals have been anywhere from 1/4 to 5/8
> wavelengths long. But they are always outperformed by my inv-V on
> these bands. Only on 80 and 160m are the verticals better.
>
> Now, this leads me to wondering if the radio waves arriving at my QTH
> tend to be largely horizontally polarized on the higher frequencies?
> Or can there be any other explanation that "good" verticals, even 5/8
> wavelengths long are never better than the inv-V. Any thoughts?
>
> The verticals and the inv-V were all mounted on the metal roof of my
> house. The house is located in a poor-quality ground area (rocks,
> shallow vegetation), the direction to Europe is across a low hill

> approx. 1/2 mile away while the direction to America is across the
> open sea approx. 1/8 mile away from my house.
>
> 73 - Kristinn, TF3KX

3682. wire thickness

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 21:03:25 UTC
From: ml <m@di.net>
Message-ID: <m-465262.16032213032005@news.verizon.net>
Source record: 80821

I have a rather short dipole i can't 'move' the ends appart any more.

currently using 18g stranded

just wondering if i went to a larger wire ga would there be any
appreciable gains??

tnx

3683. Re: wire thickness

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 21:20:14 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <i82Zd.2777$qf2.746@newsread2.news.atl.earthlink.net>
Source record: 80722

"ml" <m@di.net> wrote in message
news:m-465262.16032213032005@news.verizon.net...
> I have a rather short dipole i can't 'move' the ends appart any more.
>
> currently using 18g stranded
>
>
> just wondering if i went to a larger wire ga would there be any
> appreciable gains??
>

The diameter of the wire will make almost no differance. If the antenna is up high enough you may be able to drop the ends some to gain more electrical length.

3684. Re: wire thickness

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 22:11:23 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <1139ekei246f22@corp.supernews.com>
Source record: 80723

ml wrote:

> I have a rather short dipole i can't 'move' the ends appart any more.
>
> currently using 18g stranded
>
>
> just wondering if i went to a larger wire ga would there be any
> appreciable gains??
>
>
>
> tnx

Thicker wire yields wider band width but does not affect wavelength.

Dave WD9BDZ

3685. Re: Little help....choke position

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 22:18:15 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <kre931pja8mgrfe4m5qllbrfm9ej5dd00k@4ax.com>
Source record: 80724

On Sun, 13 Mar 2005 09:12:07 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>
>I was wondering what would happen if I removed the coax
>running to my choke? There is enough ladder line to reach.
>Maybe I should buy a LDG balun and eliminate the coax
>completley? I would think that would cause more problems
>as I would have ladder line in the shack?

I guess every installation is different, but I've seen no problems,
rfi or otherwise, from bringing 450-ohm ladderline into the shack, to
the balun on the back of my mfj tuner.

bob
k5qwg

>
>I tried disconnecting the ground to the tuner and re routing
>the tuner's power cord with no real resolution of the problem.
>
>Help?

3686. Re: Is PVC pipe UV resistant?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 22:48:41 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <vjg9319uuvluibrq2bk9sj1fpuc065j24d@4ax.com>
Source record: 80725

On Sun, 13 Mar 2005 16:25:06 GMT, "Clarence_A" <no@No.com> wrote:

>
>"Korbin Dallas" <korbindallas@yahoo.com> wrote in message
>news:pan.2005.03.13.15.17.33.910033@yahoo.com...
>> On Thu, 03 Mar 2005 17:05:53 -0800, JimK2TL@gmail.com wrote:
>>
>> > Greetings
>> > Does anyone know if typical schedule 40 PVC pipe is UV
>resistant? I
>> > have some antenna projects in mind that will be built from
>this stuff.
>> > I suppose I can paint it for some extra protection, but I was
>wondering
>> > if it is necessary?
>> >
>> > Thanks
>> > Jim/K2TL
>>
>> No, PVC is not UV Resistant...
>
>I have an antenna in a PVC case which has been on my roof (in the
>SUN) for over ten years. When Can I expect the PVC to fail?

As soon as you bring it down to AZ. I have a 120' run of 2" grey PVC
from the house to the tower. It's mostly above ground with a stake
and clamp every 10'. It looks like a snake, the top side turns color
and it's cracked in a couple of places.
>

3687. Re: wire thickness

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 22:49:55 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d12g2j$6re$1@titan.btinternet.com>
Source record: 80726

Increasing the wire diameter will not make slightest detectable difference in performance.

But if for some reason you think an increase in length will be beneficial, as it usually is for short antennas, then increase length by extending and bending the ends by about 90 degrees in either the horizontal or vertical directions.

You can extend one or both of the ends down to insulated ground level.

You can extend the ends sideways for as long as you can manage it without any noticeable difference in performance from the whole length being in a straight line. Perhaps the most important characteristic of the antenna, if it is to remain balanced, is that the feedline should be attached approximately at the centre of the overall length. But it's not critical.

There is no doubt that increasing the overall length of a dipole, by whatever means, up to the overall length of 1/3-wavelengths at the lowest frequency of interest, will improve performance. Particularly in transmitting, multiband applications.

Reg, G4FGQ

3688. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-13 23:15:02 UTC
From: "aunwin@insightbb.com"
Message-ID: <WP3Zd.125588$tl3.4268@attbi_s02>
Source record: 80727

Put the antenna half way up and a small part broke!
Have put the antenna to one side
and I will pick it up again during the summer
Regards
Art

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:dySVd.30807$r55.174@attbi_s52...
>I have just come to realise that if one drew a polygon of element phases in
>a array
> and all elements were 180 degrees to its companion element and excluding
> the
> driven element, the max gain and max front to back will occur at the SAME
> frequency!
> Until now I was of the understanding that these two max figures could not
> occur at
> the same frequency. Is there anything written about this possibility?
> Regards
> Art
>

3689. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 00:17:17 UTC
From: Harold Burton <hwburton@cableone.net>
Message-ID: <1139m06mll4t829@corp.supernews.com>
Source record: 80728

"Bert Craig" <wa2si@optonline.netNOSPAM> wrote in message
news:9B%Yd.21161$Ku2.8844@fe09.lga...
> "Korbin Dallas" <korbindallas@yahoo.com> wrote in message
> news:pan.2005.03.13.15.07.38.458717@yahoo.com...
>> On Thu, 03 Mar 2005 13:24:36 -0800, WA2SI wrote:
>>
> A bargain price is not always a bargain. What if your son or daughter
> worked at Ford or GM and lost his/her job because the Toyota Camry sold
> for $3,500.00 less than a Taurus or Impala; Would that Camry you bought as
> a retirement gift to yourself still seem like such a bargain?
>

I agree with your basic point, but but both the Camry and Sienna
are made in Toyota plants inside the U.S.A., I believe. I just made a net
run looking into this and saw in one netsite information claiming
at least 50% of the Toyotas sold in the US were built in the US. I also
suspect that a lot of Ford and GMC auto parts are not US made. I'd rather it
did not, but the worlds economy constantly mutates and workforces must
change also. We badly need to keep
some seed industries inside the nation, though, just in case we get into
wartime supply difficulties.

Harold Burton

3690. Re: wire thickness

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 00:26:05 UTC
From: Harold Burton <hwburton@cableone.net>
Message-ID: <1139mgmrr24770d@corp.supernews.com>
Source record: 80729

"ml" <m@di.net> wrote in message
news:m-465262.16032213032005@news.verizon.net...
>I have a rather short dipole i can't 'move' the ends appart any more.
>
> currently using 18g stranded
>
>
> just wondering if i went to a larger wire ga would there be any
> appreciable gains??
>
>
>
> tnx

Perhaps a little wider bandwidth, would probably require a lot more diameter to achieve much. Not an area of expertise for me, but I have read that bending dipoles is not always a bad thing. You might try adding wire perpendicular to your dipole ends. Also an inverted vee might allow some additional length along the 45 degree downward angle, I believe it might also help with impedance matching (or so I've read).

Harold
KD5SAK

3691. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 00:42:19 UTC
From: WA2SI <wa2si@arrl.net>
Message-ID: <1110760939.658576.83740@o13g2000cwo.googlegroups.com>
Source record: 80730

Harold Burton wrote:
> "Bert Craig" <wa2si@optonline.netNOSPAM> wrote in message
> news:9B%Yd.21161$Ku2.8844@fe09.lga...
> > "Korbin Dallas" <korbindallas@yahoo.com> wrote in message
> > news:pan.2005.03.13.15.07.38.458717@yahoo.com...
> >> On Thu, 03 Mar 2005 13:24:36 -0800, WA2SI wrote:
> >>
> > > A bargain price is not always a bargain. What if your son or
daughter
> > > worked at Ford or GM and lost his/her job because the Toyota Camry
sold
> > > for $3,500.00 less than a Taurus or Impala; Would that Camry you
bought as
> > > a retirement gift to yourself still seem like such a bargain?
> > >
> >
> > I agree with your basic point, but but both the Camry and Sienna
> > are made in Toyota plants inside the U.S.A., I believe. I just made a
net
> > run looking into this and saw in one netsite information claiming
> > at least 50% of the Toyotas sold in the US were built in the US. I
also
> > suspect that a lot of Ford and GMC auto parts are not US made. I'd
rather it
> > did not, but the worlds economy constantly mutates and workforces
must
> > change also. We badly need to keep
> > some seed industries inside the nation, though, just in case we get
into
> > wartime supply difficulties.
> >
> > Harold Burton

Thanks for your reply, your point is well taken. I still believe in the basic concept though. I may be somewhat naive, but I believe WE, the consumer, can have a much bigger influence on the world's economy; and thus make it better for WE, the workforce. Sadly, many choose to do nothing and proclaim that the situation is "beyond their control." Then they chortle at the great buy they got at Wal-marts while the mom & pop stores on Main St. close.

Indifference is a killer.

Vy 73 de Bert
WA2SI

3692. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 01:38:06 UTC
From: Harold Burton <hwburton@cableone.net>
Message-ID: <1139qnnbob0j74c@corp.supernews.com>
Source record: 80731

"WA2SI" <wa2si@arrl.net> wrote in message
news:1110760939.658576.83740@o13g2000cwo.googlegroups.com...
>
> Harold Burton wrote:
>> "Bert Craig" <wa2si@optonline.netNOSPAM> wrote in message
>> news:9B%Yd.21161$Ku2.8844@fe09.lga...
>> > "Korbin Dallas" <korbindallas@yahoo.com> wrote in message
>> > news:pan.2005.03.13.15.07.38.458717@yahoo.com...
>> >> On Thu, 03 Mar 2005 13:24:36 -0800, WA2SI wrote:
>> >>
> Thanks for your reply, your point is well taken. I still believe in the
> basic concept though. I may be somewhat naive, but I believe WE, the
> consumer, can have a much bigger influence on the world's economy; and
> thus make it better for WE, the workforce. Sadly, many choose to do
> nothing and proclaim that the situation is "beyond their control." Then
> they chortle at the great buy they got at Wal-marts while the mom & pop
> stores on Main St. close.
>
> Indifference is a killer.
>
> Vy 73 de Bert
> WA2SI

Intelligent and adult reply, my compliments to you. I sometimes hesitate to
enter a net discusion, lest I trigger an immature and profane tirade. Your
response reflects well on your intelligence and
your upbringing. Us old guys recognize and appreciate good family
foundations.

HWB

3693. Re: Is PVC pipe UV resistant?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 02:46:33 UTC
From: Clarence_A <no@No.com>
Message-ID: <dW6Zd.18459$Pz7.2578@newssvr13.news.prodigy.com>
Source record: 80732

"Just�n K�se" wrote
> Clarence_A wrote
> >"Korbin Dallas" wrote
> > JimK2TL@gmail.com wrote:

> >> > Greetings
> >> > Does anyone know if typical schedule 40 PVC pipe is UV
> >> > resistant? I
> >> > have some antenna projects in mind that will be built from
> >> > this stuff.
> >> > I suppose I can paint it for some extra protection,
> >> > but I was wondering if it is necessary?
> >> >
> >> > Thanks
> >> > Jim/K2TL
> >>
> >> No, PVC is not UV Resistant...
> >
> > I have an antenna in a PVC case which has been
> > on my roof (in the SUN) for over ten years.
> > When Can I expect the PVC to fail?
>
> At some future next time when a gusty wind applies
> enough vibration to cause the brittle case to stress
> fracture and crumble.
> Note* - Gusty winds are often accompanied by
> precipitation which will give your newly exposed
> antenna a good soaking.
> -- JK

Can't tell what you are trying to say.
I live in California in an area where we get 70 to 90 MPH winds several times a year, sometimes the (water proof) PVC gets rained on, but not much (11 to 36 inches a year. Sun for about 325 Days a year. Still see no damage of any sort. I do not however expect it to last forever, but then neither will I!

BTW: the antenna is Aluminum wire and the water would not damage it either, but then I can't hang the wire out in the wind! It is just several strands of #15 electric fence wire. (Four per element.)

3694. Re: Is PVC pipe UV resistant?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 02:56:35 UTC
From: Clarence_A <no@No.com>
Message-ID: <D37Zd.18463$Pz7.9521@newssvr13.news.prodigy.com>
Source record: 80733

"Wes Stewart" wrote
> "Clarence_A" wrote
> >"Korbin Dallas" wrote in message
> >> JimK2TL@gmail.com wrote:
> >>
> >> > Greetings
> >> > Does anyone know if typical schedule 40 PVC pipe is UV
> >resistant? I
> >> > have some antenna projects in mind that will be built from
> >this stuff.
> >> > I suppose I can paint it for some extra protection, but I
was
> >wondering
> >> > if it is necessary?
> >> >
> >> > Thanks
> >> > Jim/K2TL
> >>
> >> No, PVC is not UV Resistant...
> >
> >I have an antenna in a PVC case which has been on my roof (in
the
> >SUN) for over ten years. When Can I expect the PVC to fail?
>
> As soon as you bring it down to AZ. I have a 120' run of 2"
grey PVC
> from the house to the tower. It's mostly above ground with a
stake
> and clamp every 10'. It looks like a snake, the top side turns
color
> and it's cracked in a couple of places.
> >

That is not schedule 40 and I did not use the light irrigation pipe. I have been in Arizona (for 29 years) and can not say I ever used PVC for anything. I used Galvanized pipe for sprinklers too. But that was about thirty years ago and before.

I However we had a pool heater from the black flex pipe which lasted for many years. It is no good for RF though!

3695. New Board

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 03:51:46 UTC
From: chuck Adkins <k8cpachuck@gmail.com>
Message-ID: <1110772306.745633.15010@l41g2000cwc.googlegroups.com>
Source record: 80734

http://s9.invisionfree.com/Radio_Waves/

3696. EZ NEC trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 04:24:26 UTC
From: Scott M <spamsmasher@comcast.net>
Message-ID: <8tadnaj4wpmwj6jfRVn-tg@comcast.com>
Source record: 80735

I have been trying to learn how to use EZNEC. I got the (fully functional) demo version and began the tutorial in the help file to learn how to use the software. I opened the dipole file and tried to change the frequency but when I click in the frequency field, nothing happens and I can't modify anything. I uninstalled, re-downloaded, and re-installed the software. Same problem.

Has anyone else experienced this with EZNEC? Any ideas?

3697. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 05:40:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113a8tqqcg3q1a8@corp.supernews.com>
Source record: 80736

Gene Fuller wrote:
> Art,
>
> Why not?
>
> The cardioid pattern from a two-element array was reported back as least
> as far as 1937, by the famous George H. Brown. In the ideal case (free
> space, no losses, etc.) the radiation directly to the rear is precisely
> zero.
>
> If you add various real world effects then the back lobe is not
> precisely zero, and this is shown in the ARRL Antenna Book referenced by
> Cecil.
> . . .

Actually, this isn't quite true. If you manage to get perfectly phased and equal magnitude currents in two identical elements where the phase angle equals 180 degrees minus the element spacing (such as the classic 90-degree fed, 90-degree spaced cardioid), you don't get an infinite front-back ratio. In the case of the cardioid with typical diameter quarter wavelength elements, you end up with around a 35 dB front/back ratio. With longer elements, close to a half wavelength, the front/back ratio can deteriorate to less than 10 dB when base currents are identical in magnitude and correctly phased. The reason is that the mutual coupling between elements alters the current distribution on the elements. The mutual coupling from element 1 to element 2 isn't the same as the coupling from element 2 to element 1 (the mutual Z is the same, but the coupled voltage and coupled impedance aren't). The net result is that the two elements have different current distributions, so despite having identical magnitude base currents the two elements don't generate equal magnitude fields. The overall fields from the two elements end up being imperfectly phased, also.

This occurs for theoretically perfect and perfectly fed elements, and isn't due to "real world" effects.

I published some comments about this effect in "Technical Correspondence" in July 1990 QST ("The Impact of Current Distribution on Array Patterns"). I'm certainly not the first to have observed it -- some papers published as early as the '40s are referenced in my article. But I had never seen its effect on front/back ratio of cardioids mentioned before. Modern versions of the ARRL Antenna Book clearly show the small reverse lobe of a typical antenna with quarter wavelength elements.

I stumbled across it when doing some modeling with ELNEC, the predecessor of EZNEC, and originally thought it was an error in the program. You'll see it in a plot from the Cardioid.EZ EZNEC example file (which is also included with the demo program), and a brief explanation in the corresponding Antenna Notes file.

A theoretically infinite front/back ratio can be achieved by modification of the base currents. The amount of modification required depends on the length and diameter of the elements. Only a small modification is needed if elements are a quarter wavelength high and small diameter, but in that case, real world effects will probably have at least as much and likely more of an effect on the front/back than the current distribution phenomenon. Rather drastic modification is required of the base currents of elements approaching a half wavelength high, however, as elaborated in the "Technical Correspondence" piece.

Roy Lewallen, W7EL

3698. Re: Drill vs. MagMount ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 05:46:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113a99g410sht59@corp.supernews.com>
Source record: 80737

Korbin Dallas wrote:
>
> Yes a properly installed antenna will out perform a MagMount, always has
> alway will.
>

By how much? Why?

Roy Lewallen, W7EL

3699. Re: EZ NEC trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 05:51:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113a9j4i197aida@corp.supernews.com>
Source record: 80738

No one else has reported this to me. I'd like to track it down, so
please contact me directly at w7el@eznec.com.

Roy Lewallen, W7EL

Scott M wrote:
> I have been trying to learn how to use EZNEC. I got the (fully functional)
> demo version and began the tutorial in the help file to learn how to use the
> software. I opened the dipole file and tried to change the frequency but
> when I click in the frequency field, nothing happens and I can't modify
> anything. I uninstalled, re-downloaded, and re-installed the software. Same
> problem.
>
> Has anyone else experienced this with EZNEC? Any ideas?
>
>

3700. Re: Mostly horizontal polarization of HF arriving at my antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 08:47:11 UTC
From: tf3kx@simnet.is
Message-ID: <cc4f4620.0503140047.6abb0d78@posting.google.com>
Source record: 80739

Tom: I agree with you on the 160/80m explanation for the better performance of the vertical than the inv-V.

Generally it is assumed that polarization of arriving HF signals is randomly oriented and constantly changing - which I have no grounds to refute. Thus, your suggestion that my inv-V (horizontal antenna) is simply gaining advantage from its height (and in some cases azimuthal directivity) is a viable explanation. Keep in mind that the inv-V is supported by an aluminum pole with an apex 6m (18ft) above my metallic roof, and the roof itself is at 8m (24ft) above the surrounding ground - thus the apex point is at 14m (42ft) above ground.

It just struck me that even the "supposedly best" verticals (5/8 wl, using good connections to the metal roof as a counterpoise) are consistently substantially weaker on reception on 40-10m than the inv-V. The difference varies from zero to 7-8 S-units. I would have expected the vertical to be better in at least a few cases - but it's not.

But, OK - the inv-V dipole is gaining further from its height. Any other suggestions, anyone?

73 - Kristinn, TF3KX

"TOM" <noname@noprovider.nodomain> wrote in message news:<7P%Yd.1796$oa6.1254@trnddc07>...
> HF signals are usually not predominantly polarized more horizontal or
> vertical.
>
> The effect that you are seeing is due to the effective height of the dipole
> above ground. On 40,20,15,10 the dipole is high enough (in terms of
> wavelengths)
> that it develops a good pattern at lower angles of radiation (or reception).
>
> On 80 and 160 meters, your dipole is too close to the ground for it to have
> a
> good low-angle pattern.
>
> Thus what you are seeing is that the signals you want to listen to are
> arriving
> at an angle lower than what your 80/160 meter dipoles are effective at. The
> vertical
> antenna has a lower angle of reception on these bands than the dipole.
>
> If you listen to signals out to ~300 km on 80 meters, you may find that your
> dipole
> outperforms the vertical because those signals are arriving at your antenna

> from a
> fairly high angle.
>
> -- Tom
>
>
>
> "Kristinn Andersen, TF3KX" <tf3kx@simnet.is> wrote in message
> news:cc4f4620.0503121855.151a414a@posting.google.com...
> >I have an inverted-V, approximately resonant on 40, 20, 15 and 10m.
> >
> > I have tried numerous verticals for comparison, but on these bands the
> > inverted-V always receives signals on these bands better or equally
> > well, at best. The verticals have been well grounded (using a "large,
> > good quality" metal sheet roof as the ground) and I have done my best
> > to minimize losses. The verticals have been anywhere from 1/4 to 5/8
> > wavelengths long. But they are always outperformed by my inv-V on
> > these bands. Only on 80 and 160m are the verticals better.
> >
> > Now, this leads me to wondering if the radio waves arriving at my QTH
> > tend to be largely horizontally polarized on the higher frequencies?
> > Or can there be any other explanation that "good" verticals, even 5/8
> > wavelengths long are never better than the inv-V. Any thoughts?
> >
> > The verticals and the inv-V were all mounted on the metal roof of my
> > house. The house is located in a poor-quality ground area (rocks,
> > shallow vegetation), the direction to Europe is across a low hill
> > approx. 1/2 mile away while the direction to America is across the
> > open sea approx. 1/8 mile away from my house.
> >
> > 73 - Kristinn, TF3KX

3701. Good Commercial G5RV ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 10:16:21 UTC
From: Gary
Message-ID: <4soa3117spb2rk1u5sb3clbo9jo77n5qda@4ax.com>
Source record: 80740

I will have enough problems getting a G5RV erected so I'd just as soon buy a commercail unit. Does anyone have a source for a heavy duty G5RV with a current balun as I'll be feeding it with RG8X from my shack. Running ladder line ot twin lead from my shack and staying away from metal objects (other coax, aluminum siding etc) would be most diffictult.

Thanks in advance.

73 Gary

3702. Single wire aerial - what do I do?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 14:16:32 UTC
From: (unknown)
Message-ID: <42359ae8.17334672@news.dial.pipex.com>
Source record: 80741

A supid question from someone who thought he knew a bit about electronics...

I've bought a mini hi-fi to place permanently in the kitchen but the FM reception is bad and I want to treat it to an aerial in the loft. The issues are:

- The FM radio only has a short single wire for an aerial, no coax socket.
- The transmission cable will have to run up a duct that's full of mains wiring
- It also runs close to the computer upstairs, which emits interference

My intention was to run coax cable up the duct, hitched to a four-element (or thereabouts) aerial in the loft. But now I'm totally confused by ribbons, coax, baluns, impedence (not stated by the manufacturer) and all the other trappings of this science.

Questions:

Trawling the net, some pundits suggest twin flat ribbon as a simple solution. But surely the stuff is unscreened and will be highly susceptible to stray radiation, reflections etc if I run it up the duct? Am I right in thinking that, with coax cable, the "outer" acts as a shield to the signal running through the "inner"?

Every configuration, whether it's ribbon or coax, ends up with two conductors. Where does the second one go in the absence of a proper socket? To earth / chassis / nowhere? (There's also a socket for an AM coiled aerial, if that helps).

Signal strength in our area is fairly weak but does improve with height. All I want is to boost the signal on main national (UK) stations to an acceptable level for stereo.

At the moment I have a length of Twin & Earth lighting cable running up the duct - we used it as a dummy just to get something fed through (nightmare job!). Don't suppose this will be any use? I was half hoping that this cable, running about 15ft vertically, might in itself provide enough extra signal, but attaching it to the radio's aerial improves things only a little.. We could always use it to pull through a proprietory cable.

Help please. I don't know where to start - especially with the single wire issue. I was hoping to rig up something functional without a lot

of coils and calculations!

Thanks
Paul

3703. 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 14:26:57 UTC
From: john doe <john.doe@host.com>
Message-ID: <pan.2005.03.14.14.26.57.458249@host.com>
Source record: 80742

Can anyone point me to a good site for construction a 5/8 wave 2M antenna???

I tried home-brewing one already with poor results .... a conductor up a
piece of PVC .... same conductor wound into a coil at the bottome
connected in series to the center of the coax. 4 1/4 wave radials
connected to outer conductor.

Thanks,

--> Rob
ka2pbt

3704. Re: Good Commercial G5RV ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 14:45:35 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <ao8b31dj13so3gt8kall5es7p80t847crj@4ax.com>
Source record: 80743

On Mon, 14 Mar 2005 05:16:21 -0500, Gary <gdn50@@@@usol.com> wrote:

>I will have enough problems getting a G5RV erected so I'd just as soon
>buy a commercail unit. Does anyone have a source for a heavy duty G5RV
>with a current balun as I'll be feeding it with RG8X from my shack.
>Running ladder line ot twin lead from my shack and staying away from
>metal objects (other coax, aluminum siding etc) would be most
>diffictult.
>
>Thanks in advance.
>
>73 Gary

I've had good luck with products from both The Wireman and Radio
Works. THey both have sell the g5rv, and both have web sites with all
the paraphernalia you'll need.

bob
k5qwg

3705. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 15:51:02 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <GpiZd.135391$Th1.100071@bgtnsc04-news.ops.worldnet.att.net>
Source record: 80744

Hi Roy,

I have read many of your articles, and I have no doubt you are correct.

However, in the ideal case, specifically in the limit as the wire diameter goes to zero, the current perturbation from mutual inductance vanishes. (The mutual inductance does not vanish, only its impact on current distribution.)

I just spent a few minutes playing around with EZNEC 3, and I was able to achieve a null of -52 dBi (-57 dBmax) for two half-wave elements, with nominal 90 degree spacing and 90 degree phasing. The wire size was as small as possible. This null was in the symmetry plane and directly in the anti-end-fire direction of course. I expect with more computational precision, and perhaps fine tuning frequencies and dimensions this null could be driven farther. The reported current imbalance was a maximum of 0.2%, mid-way between the center and the ends of the wires. The phase imbalance between the wires was a maximum of 0.2 degrees.

I am not trying to say this is practical. I was just pointing out the Art's use of polygons and canceling phasors was not particularly unique.

We have since learned that what Art is trying to accomplish is to eliminate all radiation in the back hemisphere. The cardioid example is obviously moot for his quest.

73,
Gene
W4SZ

Roy Lewallen wrote:
> Gene Fuller wrote:
>
>> Art,
>>
>> Why not?
>>
>> The cardioid pattern from a two-element array was reported back as
>> least as far as 1937, by the famous George H. Brown. In the ideal case
>> (free space, no losses, etc.) the radiation directly to the rear is
>> precisely zero.
>>
>> If you add various real world effects then the back lobe is not
>> precisely zero, and this is shown in the ARRL Antenna Book referenced
>> by Cecil.

>> . . .
>
>
> Actually, this isn't quite true. If you manage to get perfectly phased
> and equal magnitude currents in two identical elements where the phase
> angle equals 180 degrees minus the element spacing (such as the classic
> 90-degree fed, 90-degree spaced cardioid), you don't get an infinite
> front-back ratio. In the case of the cardioid with typical diameter
> quarter wavelength elements, you end up with around a 35 dB front/back
> ratio. With longer elements, close to a half wavelength, the front/back
> ratio can deteriorate to less than 10 dB when base currents are
> identical in magnitude and correctly phased. The reason is that the
> mutual coupling between elements alters the current distribution on the
> elements. The mutual coupling from element 1 to element 2 isn't the same
> as the coupling from element 2 to element 1 (the mutual Z is the same,
> but the coupled voltage and coupled impedance aren't). The net result is
> that the two elements have different current distributions, so despite
> having identical magnitude base currents the two elements don't generate
> equal magnitude fields. The overall fields from the two elements end up
> being imperfectly phased, also.
>
> This occurs for theoretically perfect and perfectly fed elements, and
> isn't due to "real world" effects.
>
> I published some comments about this effect in "Technical
> Correspondence" in July 1990 QST ("The Impact of Current Distribution on
> Array Patterns"). I'm certainly not the first to have observed it --
> some papers published as early as the '40s are referenced in my article.
> But I had never seen its effect on front/back ratio of cardioids
> mentioned before. Modern versions of the ARRL Antenna Book clearly show
> the small reverse lobe of a typical antenna with quarter wavelength
> elements.
>
> I stumbled across it when doing some modeling with ELNEC, the
> predecessor of EZNEC, and originally thought it was an error in the
> program. You'll see it in a plot from the Cardioid.EZ EZNEC example file
> (which is also included with the demo program), and a brief explanation
> in the corresponding Antenna Notes file.
>
> A theoretically infinite front/back ratio can be achieved by
> modification of the base currents. The amount of modification required
> depends on the length and diameter of the elements. Only a small
> modification is needed if elements are a quarter wavelength high and
> small diameter, but in that case, real world effects will probably have
> at least as much and likely more of an effect on the front/back than the
> current distribution phenomenon. Rather drastic modification is required
> of the base currents of elements approaching a half wavelength high,
> however, as elaborated in the "Technical Correspondence" piece.
>
> Roy Lewallen, W7EL

3706. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 16:00:52 UTC
From: Buck <iam@this.site>
Message-ID: <epcb31h2s2h1t2hrd3ifg7tlbvga6kue2h@4ax.com>
Source record: 80745

>I agree with your basic point, but but both the Camry and Sienna
>are made in Toyota plants inside the U.S.A., I believe. I just made a net
>run looking into this and saw in one netsite information claiming
>at least 50% of the Toyotas sold in the US were built in the US. I also
>suspect that a lot of Ford and GMC auto parts are not US made. I'd rather it
>did not, but the worlds economy constantly mutates and workforces must
>change also. We badly need to keep
>some seed industries inside the nation, though, just in case we get into
>wartime supply difficulties.
>
>Harold Burton
>

I don't believe that there are many, if any, cars that are made in
____ anymore. I think they are all international.

Back to the issue, as to the foreign owned companies in the USA, while
some of their money is being fed back to the locals, the majority of
the money goes overseas to their bank accounts or other foreign
purchases.

Unfortunately, there is no easy solution that won't hurt someone here
in the US. Tariffs would raise our cost of living something terrible,
blocking imports will cause a higher demand in relationship to supply
causing another price increase. Instead of profit sharing, union
workers want higher wages.

There is no easy solution. What helps one group will certainly hurt
another.

--
73 for now
Buck
N4PGW

3707. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 16:11:33 UTC
From: "aunwin@insightbb.com"
Message-ID: <VIiZd.67784$r55.49264@attbi_s52>
Source record: 80746

Gene,
At a matter of interest during the 80s I tried to get to zero
radiation at 180 degree point
since Lawson stated it was possible. After covering the half acre under the
long boom
with a ground screen, in fraustration, I finally gave up
with the pursuit. On one of my present models the rear radiation never
exceed 40db
for more than 180 degrees but as Roy pointed out earlier you still have to
deal with
the higher angles which was the case with my model in that when the angle
reached
30 degrees elevation we were back to 20 db..
The center "plume" radiation seems difficult to eradicate.
I think I will try your suggetion of radiators with radiators
of 0.01 diameter to see what happens
Regards
Art

"Gene Fuller" <W4SZzzzzzz@att.net> wrote in message
news:GpiZd.135391$Th1.100071@bgtnsc04-news.ops.worldnet.att.net...
> Hi Roy,
>
> I have read many of your articles, and I have no doubt you are correct.
>
> However, in the ideal case, specifically in the limit as the wire diameter
> goes to zero, the current perturbation from mutual inductance vanishes.
> (The mutual inductance does not vanish, only its impact on current
> distribution.)
>
> I just spent a few minutes playing around with EZNEC 3, and I was able to
> achieve a null of -52 dBi (-57 dBmax) for two half-wave elements, with
> nominal 90 degree spacing and 90 degree phasing. The wire size was as
> small as possible. This null was in the symmetry plane and directly in the
> anti-end-fire direction of course. I expect with more computational
> precision, and perhaps fine tuning frequencies and dimensions this null
> could be driven farther. The reported current imbalance was a maximum of
> 0.2%, mid-way between the center and the ends of the wires. The phase
> imbalance between the wires was a maximum of 0.2 degrees.
>
> I am not trying to say this is practical. I was just pointing out the
> Art's use of polygons and canceling phasors was not particularly unique.
>
> We have since learned that what Art is trying to accomplish is to

> eliminate all radiation in the back hemisphere. The cardioid example is
> obviously moot for his quest.
>
> 73,
> Gene
> W4SZ
>
> Roy Lewallen wrote:
>> Gene Fuller wrote:
>>
>>> Art,
>>>
>>> Why not?
>>>
>>> The cardioid pattern from a two-element array was reported back as least
>>> as far as 1937, by the famous George H. Brown. In the ideal case (free
>>> space, no losses, etc.) the radiation directly to the rear is precisely
>>> zero.
>>>
>>> If you add various real world effects then the back lobe is not
>>> precisely zero, and this is shown in the ARRL Antenna Book referenced by
>>> Cecil.
>>> . . .
>>
>>
>> Actually, this isn't quite true. If you manage to get perfectly phased
>> and equal magnitude currents in two identical elements where the phase
>> angle equals 180 degrees minus the element spacing (such as the classic
>> 90-degree fed, 90-degree spaced cardioid), you don't get an infinite
>> front-back ratio. In the case of the cardioid with typical diameter
>> quarter wavelength elements, you end up with around a 35 dB front/back
>> ratio. With longer elements, close to a half wavelength, the front/back
>> ratio can deteriorate to less than 10 dB when base currents are identical
>> in magnitude and correctly phased. The reason is that the mutual coupling
>> between elements alters the current distribution on the elements. The
>> mutual coupling from element 1 to element 2 isn't the same as the
>> coupling from element 2 to element 1 (the mutual Z is the same, but the
>> coupled voltage and coupled impedance aren't). The net result is that the
>> two elements have different current distributions, so despite having
>> identical magnitude base currents the two elements don't generate equal
>> magnitude fields. The overall fields from the two elements end up being
>> imperfectly phased, also.
>>
>> This occurs for theoretically perfect and perfectly fed elements, and
>> isn't due to "real world" effects.
>>
>> I published some comments about this effect in "Technical Correspondence"
>> in July 1990 QST ("The Impact of Current Distribution on Array
>> Patterns"). I'm certainly not the first to have observed it --
>> some papers published as early as the '40s are referenced in my article.

>> But I had never seen its effect on front/back ratio of cardioids
>> mentioned before. Modern versions of the ARRL Antenna Book clearly show
>> the small reverse lobe of a typical antenna with quarter wavelength
>> elements.
>>
>> I stumbled across it when doing some modeling with ELNEC, the predecessor
>> of EZNEC, and originally thought it was an error in the program. You'll
>> see it in a plot from the Cardioid.EZ EZNEC example file (which is also
>> included with the demo program), and a brief explanation in the
>> corresponding Antenna Notes file.
>>
>> A theoretically infinite front/back ratio can be achieved by modification
>> of the base currents. The amount of modification required depends on the
>> length and diameter of the elements. Only a small modification is needed
>> if elements are a quarter wavelength high and small diameter, but in that
>> case, real world effects will probably have at least as much and likely
>> more of an effect on the front/back than the current distribution
>> phenomenon. Rather drastic modification is required of the base currents
>> of elements approaching a half wavelength high, however, as elaborated in
>> the "Technical Correspondence" piece.
>>
>> Roy Lewallen, W7EL

3708. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 16:13:01 UTC
From: Buck <iam@this.site>
Message-ID: <addb31h9er7sfp1ql2vs8hh76a9c7n3lal@4ax.com>
Source record: 80747

>Thanks for your reply, your point is well taken. I still believe in the
>basic concept though. I may be somewhat naive, but I believe WE, the
>consumer, can have a much bigger influence on the world's economy; and
>thus make it better for WE, the workforce. Sadly, many choose to do
>nothing and proclaim that the situation is "beyond their control." Then
>they chortle at the great buy they got at Wal-marts while the mom & pop
>stores on Main St. close.
>
>Indifference is a killer.
>
>Vy 73 de Bert
>WA2SI

"WE the consumer" earning $100,000 per year with two incomes can
afford to spend $40,000 on an automobile or $500 per month on
groceries, but "WE the consumer" earning $12,000 per year has to be
more froogle. By the time they spend $5-600 on housing, they don't
have the money to spend an extra $50/week on groceries just to keep
mom-and-pop corner store in business.

I don't disagree with you, it's a sad situation. There isn't an easy
answer. It is very hard to find things made in the USA anymore.

--
73 for now
Buck
N4PGW

3709. Re: Mostly horizontal polarization of HF arriving at my antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 17:05:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <useb31dnbdm638j0ndm4s73bfis4njh7nu@4ax.com>
Source record: 80748

On 14 Mar 2005 00:47:11 -0800, tf3kx@simnet.is (Kristinn Andersen, TF3KX) wrote:

>Thus, your suggestion that my inv-V (horizontal antenna) is
>simply gaining advantage from its height (and in some cases azimuthal
>directivity) is a viable explanation. Keep in mind that the inv-V is
>supported by an aluminum pole with an apex 6m (18ft) above my metallic
>roof, and the roof itself is at 8m (24ft) above the surrounding ground
>- thus the apex point is at 14m (42ft) above ground.
>
>It just struck me that even the "supposedly best" verticals (5/8 wl,
>using good connections to the metal roof as a counterpoise) are
>consistently substantially weaker on reception on 40-10m than the
>inv-V. The difference varies from zero to 7-8 S-units. I would have
>expected the vertical to be better in at least a few cases - but it's
>not.
>
>But, OK - the inv-V dipole is gaining further from its height. Any
>other suggestions, anyone?
>
Hi Kristinn,

It is rather simplistic to describe the inverted V as being a Horizontal antenna. It has a significant Horizontal preference, yes, but only broadside (and there subtends perhaps only a third of the antenna's total response). It also has a minor Vertical preference over the Horizontal response for a third of the total field along the antenna's axis. For the remaining third of the total field, the inverted V is roughly equal in Horizontal and Vertical response.

73's
Richard Clark, KB7QHC

3710. Re: appropriate cable slack

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 17:40:40 UTC
From: Dan Jacobson <jidanni@jidanni.org>
Message-ID: <87is3ucehz.fsf@jidanni.org>
Source record: 80755

Got a great answer from someone who perhaps preferred to be anonymous:

There is no problem coiling up excess coax. As long as you don't coil it too tight. There is a 6" minimum bend radius for RG-8 size cable. The inductance thing is something someone got garbled. Coiling it up will create inductance for signals flowing on the outside of the coax. This is called a choke balun and is commonly used at the feed point of the antenna. It has no effect, other than the length of the cable adds a little loss, to the desired signal that is flowing on the inside of the cable. Remember in coax the desired signal flows between the inside of the shield braid and center conductor. Any signal flowing on the outside of the coax has no use and may be undesirable. This is why you can tape coax to masts and bury it underground with no effect on the signal. On 80m there is not always a reason to cut the cable just long enough to reach, but on VHF/UHF excess length just means more loss in the coax and is not desirable. Also if you have a lot of extra coax coiled up and you are using a tuner to say make the 80m dipole work on 30m the extra length could cost you something. For example I use my 160/80/40/30 dipole array on 60m (5MHz) band. The Z of the antenna is something like 388-j1200ohms. This high SWR increases the loss in my coax by allot on 60m. In fact the loss is 7.5db. This means my 100 watt is reduced to 18 watts at the antenna. If my feed line was shorter the loss would be less of course. So in this case if I had a lot of extra feed line, short[en!]ing it could really improve my signal strength.

3711. Re: New URL for W2DU Web Page plus Quadrifilar Helix in Reflections 2

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 17:44:12 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <6nib31lr3m4f8ugio844qrcp0bu23eqpor@4ax.com>
Source record: 80749

On Mon, 07 Mar 2005 20:45:24 GMT, Walter Maxwell <w2du@iag.net> wrote:

>
>Sorry to report that as of Sunday Mar 6, several of my reference pages
>are no longer found on my web page. I am investigating as to the
>reason for their disappearance. It's especially disturbing that the
>pages referring to the quadrifilar helix antenna research are among
>the missing. I will get the missing files back on the web page as soon
>as possible.
>
>Sorry for the inconvenience to those who are looking for the QHA data.
>
>Walt, W2DU
>
>On Thu, 03 Mar 2005 19:43:58 GMT, Walter Maxwell <w2du@iag.net> wrote:
>
>>The new URL for my web page is w2du.com. My new email address is
>>walt@w2du.com.
>>
>>Please use my new web page URL when accessing it. My page will soon
>>have new material added, but for now it has only selected chapters
>>from Reflections 2, which include the R&D report of my RCA research on
>>the quadrifilar helix antenna flying on all TIROS-N NOAA
>>polar-orbiting weather spacecraft. The research included antenna
>>pattern and impedance measurements I made on more than a thousand
>>different electrical and physical configurations of the antenna in the
>>late 1970's that produced the one used on the TIROS-N spacecraft. A
>>picture of the test model used in the measurements appears in my R&D
>>report.
>>
>>Walt Maxwell, W2DU

As of 3-13-05 my web page is up an running again. There has been a
modification to make it more friendly, and with some new added
material. During the next few weeks I will be placing even more
information on the page that I hope will be entertaining, and it will
also include historical material concerning early space exploration.

My new email address is there for those of you who have questions.

Enjoy.

Walt Maxwell, W2DU

3712. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 17:48:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <o7hb31tva85ir04v9i2u7ceudi9l236pik@4ax.com>
Source record: 80750

On Mon, 14 Mar 2005 11:00:52 -0500, Buck <iam@this.site> wrote:
>Instead of profit sharing, union workers want higher wages.

Hi Buck,

[not specifically to you, but in the tenor of a St. Helens steam vent]

One has to ask where's the profit to share when the CEO is raping the shareholder? Look at the trial of Bernie Ebbers and the Legally Blonde Defense that is becoming the rage along Wall Street:

"I don't, to this day, know technology. I don't know finance and accounting.

"The closest thing I've ever had to an accounting course is a preliminary course in economics."

In school, it appears he shopped around for a degree because, as he admits:
"...my marks weren't too good."

In his defense, associates would comment:

"...when it came to the numbers. He didn't understand them."

"...anytime we got too far into the details, you could tell we were speaking right past him."

Bernie is not unique. The Titans of industry are all quite willing to step up to the plate and buckle at the knees to declare they are not fit to understand their industry, but that they were hired to be life skills coaches. Talk about gutless. These are the Monoliths of commerce that have plowed the auto industry into their wallets to leave rust behind.

There several hundred major companies that have restated their gains into losses. Every one of these companies paid bonuses for phony performance, bonuses their Boardroom buddies have absolutely refused to recapture in light of fraud and mismanagement. Talk about gutless.

What unions have failed to do is to become shareholders and members of the Board in lieu of assured contracts. Talk about gutless.

No one ever speaks of guts and government in the same breath. Confirming this, the American way of life is now slipping beneath the waves of international inflation. The Dollar is still dropping to the subdued cheer of the administration. They are talking about doubling the social security loss to support two systems, with each clipped

back to "save costs."

We live in a $20 TRILLION dollar economy, with the total tax bite of $3.5 TRILLION and across the board americans (deservedly lower case) are whining about having the burden of a 17.5% rate. I am quite sure most of you reading this are sure you pay far more. But how motivated are you to demand what is simply average? How many are motivated with profit sharing to pay a necessary share to really invest in America? Talk about gutless.

73's
Richard Clark, KB7QHC

3713. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 18:02:20 UTC
From: clvrmnky <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <MkkZd.93962$vO1.584510@nnrp1.uunet.ca>
Source record: 80751

On 10/03/2005 4:15 PM, clvrmnky wrote:
> On 10/03/2005 1:04 PM, Cecil Moore wrote:
>
>> clvrmnky wrote:
>>
>>> The lack of good RF ground is going to be a challenge, and may
>>> preclude any of this.
>>
>>
>>
>> If you use a balanced antenna system, you don't need
>> an RF ground for the receive function.
>
>
> Hmmm. I can probably make a decent-sized folded dipole out on the
> patio. It will have to turn a corner, but I can probably get a
> fair-sized loop out there.

Ok, further to this. Even if I'm not to care about impedance matching or choking, my receiver has an unbalanced antenna input. One side of the antenna connection simply goes to "chassis" ground.

This implies that I should use a traditional BalUn to make the balance connection work for me. Otherwise, one side of a dipole or looped longwire is just going to go straight to ground (such as it is.)

I built myself a reasonably stealthy random-wire running along the top of my wooden balcony railing (which turns a 90-deg corner around the building) for a total length of around 25-30 ft. I was considering simply looping the wire to make a bent, untuned, "folded dipole" (the wires would be 5-6 inches apart) just to get more wire into the wind.

To realize this, I am supposing I'll have to use a true BalUn to get the signal into my unbalanced front-end somehow. Since most designs for a true BalUn assumes I have a decent ground, I'm a bit stumped by your comment. Perhaps the ground of the BalUn can just go to the coax sleeve?

Thanks for all your suggestions.

3714. Re: Single wire aerial - what do I do?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 18:36:34 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <i62hg2-d5i.ln1@p400bob.lse.com.au>
Source record: 80752

Hi Paul

Yes it looks like you have a real problem here..

- Yes running ribbon up a power duct is not a good idea. Generally speaking ribbon is pretty good in rejecting noise when there is it least a few inches of air spacing between it and metal objects. The nature of ribbon (or balanced feeder) is that any noise induced in one wire will also appear in the other and they will add out of phase in the receiver.

- Yes coax is a better idea, but be aware that the length of coax will also receive in its own right if both the radio and antenna ends arent terminated in its surge impedence (ie 75 ohms). There are some variations on this statement but I wont go deeper.

- The wire coming out the back of the radio is probably loosely referenced against its metal chassis. Unless you want to go inside the radio your only real option is to join the coax outer to the chassis near where the single wire exits, and the centre conductor to the wire itself (after cutting it short or removing/replacing it)

- The above of course gives you an unknown RX load impedence.

- The existing power twin and earth might be usable except for the possibility of induced noise. I assume you mounted a dipole at the top of it? I would guess that it would be maybe 100-200 ohms impedence but I dont know the effect of the earth wire to that. If you had nothing better to do you could always make it into a tuned feeder length or multiples of 1/2 wavelengths. Dunno if its worth the effort though. (Tuned feeder installations allow you to have any feeder impedence provided the source and load are the same impedence. Doubt its any point doing in an RX system but worth mentioning out of interest)

- If patience was in huge supply I'd try matching at the receiver input for a 75 ohm cable. I'd go inside the radio to do this.

- If the signal is still way too low it might be worthwhile buying/building a masthead preamp to go near/on the antenna. Then noise induced by the power duct and computer would then be lower. You may also want to notch other strong stations at the input of the preamp with a series of 1/4 wave stubs so the preamp doesnt overload.

Hope this helps - or at least doesnt confuse!

Cheers Bob (Sydney Australia)

Paul Davies wrote:
> A supid question from someone who thought he knew a bit about

> electronics...

3715. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 19:09:41 UTC
From: dplatt@radagast.org
Message-ID: <113boblagc9dv70@corp.supernews.com>
Source record: 80753

>Can anyone point me to a good site for construction a 5/8 wave 2M antenna???
>
>I tried home-brewing one already with poor results .... a conductor up a
>piece of PVC .... same conductor wound into a coil at the bottome
>connected in series to the center of the coax. 4 1/4 wave radials
>connected to outer conductor.

I believe there's a project in the ARRL Handbook which shows how to convert a Radio Shack CB whip antenna to a 2-meter 5/8-wave - it has the details for the matching coil that is required.

http://www.arrl.org/tis/info/pdf/8009022.pdf has another QST article which shows how to construct one from scratch, using a technique that doesn't require a matching coil (the matching inductor is made from a stub).

I haven't tried either of these myself.

With regard to the version you made - did you account for the loading effect of the PVC when you measured and trimmed the length of your radiator?

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3716. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 19:12:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3vmb31dhcva3c561aai4534faf9fmk770r@4ax.com>
Source record: 80754

On Mon, 14 Mar 2005 13:02:20 -0500, clvrmnky
<clvrmnky-uunet@coldmail.com.invalid> wrote:
>This implies that I should use a traditional BalUn to make the balance
>connection work for me. Otherwise, one side of a dipole or looped
>longwire is just going to go straight to ground (such as it is.)

Hi OM,

You reject the BalUn (matching/choking) to only presume the
implication (one wire goes to ground) forces you to use it for another
reason?

Wrong implication, even if the solution works. The one side of any
dipole/loop antenna design going "straight to ground" (ground a
euphemism for Hell?) is not a loss in any sense of the design. The
receiver is sharing the same path - unless it is strictly battery
operated without a charger connection.

Your radio wants to see a signal potential applied across its input
and chassis (as you put it, which is suitable enough). With a
monopole the input is satisfied, but you need either a ground or
counterpoise connected to the chassis. With a dipole or loop, the two
returning wires meet the radio's needs at the input/chassis
connection. A ground connection or counterpoise for the dipole/loop
would be benign in the practical sense. You won't need it (unless you
have lightning phobias); and with the common specie of radio you will
have it, somewhere, anyway (it will then simply be uncontrolled and
variable).

>Perhaps the ground of the BalUn can just go to the coax sleeve?

That will work fine.

73's
Richard Clark, KB7QHC

3717. Re: Antenna design breakthru

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 19:13:05 UTC
From: Jim Kelley <jwkelley@nospam.edu>
Message-ID: <d14qkr$3ba$1@news.service.uci.edu>
Source record: 80759

aunwin@insightbb.com wrote:

> Dayton Hamfest Forums
> Subgect;Antenna design breakthu
> All is not known about antennas apparently!

True. But it varies from individual to individual. For example, I know considerably less about them than most of the regulars who post here.

73, ac6xg

3718. Antenna design breakthru

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 19:55:36 UTC
From: "aunwin@insightbb.com"
Message-ID: <Y_lZd.128002$tl3.73096@attbi_s02>
Source record: 80756

Dayton Hamfest Forums
Subgect;Antenna design breakthu
All is not known about antennas apparently!
Regards
Art

3719. Re: Antenna design breakthru

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 19:58:21 UTC
From: drwxr-xr-x <bit-bucket@config.com>
Message-ID: <slrnd3br6t.2iqc.bit-bucket@shell.config.com>
Source record: 80757

On Mon, 14 Mar 2005 19:55:36 GMT, aunwin@insightbb.com wrote:
> Dayton Hamfest Forums
> Subgect;Antenna design breakthu
> All is not known about antennas apparently!
> Regards
> Art

And, there's more to learn about snake-oil and fairy dust.

3720. Radio Shack chokes?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 20:01:42 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <G4mZd.10694$Fy.725@okepread04>
Source record: 80758

I was having a problem with my new LDG AT-100PRO autotuner - If I went above 50w FM on 10 meters, The tuner's CPU would "crash". Powering the tuner off and on again would usually fix it but sometimes I'd have to re-program some of the settings.

I am trying to tune a 40m dipole that has this feed arraingment:

Rig/SWR Bridge/Switch/Tuner/RG58 (25')/RG58 coil (12 turns @ 5-1/2" dia/450 ohm ladder line (50')/antenna

Thinking I had RF in the shack, I went to Radio Shack & bought $21 worth of ferrite chokes. I put a coaxial choke on the input to the tuner and another on the output. I put a snap on (square) choke on the feedline going from the rig to the swr bridge and another on the power cable to the rig.

I tried many setups including putting chokes on the tuner's power cable and ended up with the above setup working the best.

Now (finally!) to my questions:

1) How good are radio shack chokes?
2) I was only able to get 4 turns around the feedline's choke - is that enough?
3) Am I just messing too much around trying to get a 40m dipole to tune on 10m?
4) Would I do better to add a balun and run the 450 ohm ladder line direct to the tuner?

--
73's es gd dx de Ken KG WX
Grid EM17ip, Flying Pigs #1055,
List Owner, Yahoo! E-groups:
VX-2R & FT-857

3721. Maldol 6-2-70 aerial SO-239 thread ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 20:23:22 UTC
From: nick smith <NickS@ntlworld.com>
Message-ID: <_omZd.1631$4r2.296@newsfe5-gui.ntli.net>
Source record: 80760

I am trying to find a suitable connector (PL-259) for 213 cable that will screw on to the connector at the base of the above aerial. Its a tri-band white stick about 2 mtrs long.

My connectors seem to screw on about 2 or 3 turns then stiffen up and won't do up fully, as if its a slightly different thread.

I do seem to recall that there are / were two threads at some time in the past, but I have only just bought the aerial and connectors, and assumed they would be the same thread.

Can anyone confirm / answer the problem ?

Thanks,

Nick

3722. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 21:07:50 UTC
From: clvrmnky <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <G2nZd.94008$vO1.584233@nnrp1.uunet.ca>
Source record: 80761

On 14/03/2005 2:12 PM, Richard Clark wrote:
> On Mon, 14 Mar 2005 13:02:20 -0500, clvrmnky
> <clvrmnky-uunet@coldmail.com.invalid> wrote:
>
>>This implies that I should use a traditional BalUn to make the balance
>>connection work for me. Otherwise, one side of a dipole or looped
>>longwire is just going to go straight to ground (such as it is.)
>
> You reject the BalUn (matching/choking) to only presume the
> implication (one wire goes to ground) forces you to use it for another
> reason?
>
Not reject, so much as realizing that a balun is first a way to match an "balanced" to an "unbalanced" device. I was concentrating on the impedance matching aspects, which they can also be used for. Simply because I wasn't sure how I was going to grow my antenna. Cecil mentioned that a counterpoise or ground is not needed with balanced inputs, which led me back in a circle to baluns.

Really, I'm just trying to approximate a good enough "correct" way to do things.

> Wrong implication, even if the solution works. The one side of any
> dipole/loop antenna design going "straight to ground" (ground a
> euphemism for Hell?) is not a loss in any sense of the design. The
> receiver is sharing the same path - unless it is strictly battery
> operated without a charger connection.
>
Right now I'm running battery only because I have perfectly useful rechargeables. Anyway, it is giving me a chance to see if the PS adds any noise. It doesn't appear to.

> Your radio wants to see a signal potential applied across its input
> and chassis (as you put it, which is suitable enough). With a
> monopole the input is satisfied, but you need either a ground or
> counterpoise connected to the chassis. With a dipole or loop, the two
> returning wires meet the radio's needs at the input/chassis
> connection. A ground connection or counterpoise for the dipole/loop
> would be benign in the practical sense. You won't need it (unless you
> have lightning phobias); and with the common specie of radio you will
> have it, somewhere, anyway (it will then simply be uncontrolled and
> variable).
>
It would seem this is another place where various holy wars have waged over the years. My survey of the literature indicates that a great many

people don't even consider a dipole of any stripe fed to an unbalance RX/TX as a "dipole."

Isn't this the notion of many of those cheapo plastic baluns one gets to feed coax to an older TV which would have accepted parallel line? Well, I suppose these are ostensibly to match impedance, but they are described as converting balanced to unbalanced connections.

I understand that ground (as a notion) is not an absolute. I have what I have. I *may* be able to convince my landlord to let me trail a wire off the balcony to the ground. We'll see.

>>Perhaps the ground of the BalUn can just go to the coax sleeve?
>
> That will work fine.
>
According to what you suggested so far, both sides of my loop can go directly to my antenna input. Ok, can do. I'll give it a try and see if things work measurably better. Of course, I'm measuring with my ears, but I am being able to pull more signal out of the air already.

More to chew on. Thanks for your time.

3723. Aerial Booster

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 21:12:14 UTC
From: paulh@fsmail.net
Message-ID: <1110834734.269580.261290@g14g2000cwa.googlegroups.com>
Source record: 80762

I have been looking at aerial boosters for my TV but confused why the input and 4 outputs are the same gender. I would have thought the input and output would be different.

Here is the link for picture
http://www.ronielectronics.co.uk/Details.asp?ProdID=1362&PageDel=PRODUCT:%20SLX4P%204%20WAY%20PLUG%20IN%20amp:

Thanks

Paul

3724. Re: Radio Ham Arrested

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 21:19:20 UTC
From: clvrmnky <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <sdnZd.94009$vO1.584538@nnrp1.uunet.ca>
Source record: 80763

On 12/03/2005 3:22 PM, Reg Edwards wrote:
>>He almost certainly has a previous negative history of some sort.
>>
>
> ================================
>
> Perhaps somebody who doesn't like him has untruthfully told the secret
> police he has some form of associations with an unknown terrorist
> organisation. If he should disappear from circulation, under the new Laws,
> nobody will ever know, not even he, what has happened to him.
>
> But of course, it couldn't happen in this fine country of ours - Merrie
> England!

Hmmm. Not anymore, apparently:

<http://news.bbc.co.uk/1/hi/uk_politics/4341269.stm>
<http://news.bbc.co.uk/1/hi/uk/4199875.stm>

3725. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 21:53:57 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <UJnZd.63341$7z6.13832@lakeread04>
Source record: 80764

"Richard Clark" <kb7qhc@comcast.net> wrote

> A ground connection or counterpoise for the dipole/loop
> would be benign in the practical sense. You won't need it (unless you
> have lightning phobias);

Well said. And most of us who get anywhere near as much rain as Richard does (in WA) unfortunately have a LOT more lightning to deal with in the summer. In that case, shield-grounding the coax of a dipole should happen as soon as the feedline is down at ground-level, and again at the station entrance/single point ground, where it should connect to a coax surge/lightning arrestor.

> >Perhaps the ground of the BalUn can just go to the coax sleeve?
>
> That will work fine.
>
> 73's
> Richard Clark, KB7QHC

Indeed, matching transformers such as Industrial Communications Engineers make, insist the metal xfmr case be grounded for safe and proper operation. I ground long wires on both an I.C.E. xfmr and a current-type Balun, directly to ground rods that the equipment is mounted on. This is also the connection point for ground radials for the long wire, if used.

Best regards,

Jack Painter
Virginia Beach, Virginia

3726. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 22:22:08 UTC
From: jgboyles@aol.com
Message-ID: <1110838928.281961.322100@o13g2000cwo.googlegroups.com>
Source record: 80765

> With regard to the version you made - did you account for the loading
> effect of the PVC when you measured and trimmed the length of your
> radiator?

Hi Dave, I was just about to recommend the QST article, but you beat
me. A few comments on why his antenna did not perform: As you stated,
the PVC will change the input Z of the radiator. Just about anything
that is too close to the radiator will change things.
According to EZNEC, a 5/8 radiator with 1/4 radials 5 WL above ground
is 80-j300. As such, with a single series inductor matching section,
the best 50 ohm match is 1.6:1. This could get worse or better
depending on the antenna's environment. It will also change if you
slope the radials.
There is an article in the ARRL Antenna Compendium #1 pp.101 that
deals with 5/8 antennas. It basically explains why a 5/8, depending on
the application, is NOT the best performing radiator.
Gary N4AST

3727. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 22:38:43 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nc4c31l59rurkvdbaiaqi87smmbv9llaba@4ax.com>
Source record: 80766

On Mon, 14 Mar 2005 16:53:57 -0500, "Jack Painter" <223bthp@cox.net>
wrote:
> And most of us who get anywhere near as much rain as Richard
>does (in WA) unfortunately have a LOT more lightning to deal with in the
>summer.

Hi Jack,

In all actuality, Seattle sees the least lightning nationwide. If
you drew a line from Seattle to Miami, you would find that the
incidence of lightning grows roughly ten-fold as you progressed along
that line.

73's
Richard Clark, KB7QHC

3728. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 22:51:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pj4c31tp8lmu73u5gphtga1o3nq5h9439e@4ax.com>
Source record: 80767

On Mon, 14 Mar 2005 16:07:50 -0500, clvrmnky
<clvrmnky-uunet@coldmail.com.invalid> wrote:
>Right now I'm running battery only because I have perfectly useful
>rechargeables. Anyway, it is giving me a chance to see if the PS adds
>any noise. It doesn't appear to.

Hi OM,

That is fortunate. Try not to introduce any grounds such as you
discuss below.

>It would seem this is another place where various holy wars have waged
>over the years. My survey of the literature indicates that a great many
>people don't even consider a dipole of any stripe fed to an unbalance
>RX/TX as a "dipole."

Dipole has only one meaning of value: Two Poles. Each pole acts as
the electromotive opposite of the other. Without opposites, no
current flows (and in a sense, a monopole finds its dipolar opposite
in ground).

>Isn't this the notion of many of those cheapo plastic baluns one gets to
> feed coax to an older TV which would have accepted parallel line?
>Well, I suppose these are ostensibly to match impedance, but they are
>described as converting balanced to unbalanced connections.

BalUns are so simple that the cheap ones work quite well.

>I understand that ground (as a notion) is not an absolute. I have what
>I have. I *may* be able to convince my landlord to let me trail a wire
>off the balcony to the ground. We'll see.

Don't go there. Introduction of alternate grounds, especially if they
do not conform to code bring the almost certainty of ground loops.
You don't even want to consider the insurance risk. There is probably
no reception advantage over the already available service ground found
at the wall socket. (I am perhaps mistakenly presuming this was for a
receiver only.)

>According to what you suggested so far, both sides of my loop can go
>directly to my antenna input.

The input and chassis, per accepted terms for both.

>Ok, can do. I'll give it a try and see
>if things work measurably better.

You may find you are already at the knee of the curve of diminishing returns. What will pay off is

1. making the antenna connection as remote as possible;
2. using coax;
3. choking that connection;
4. providing for antenna tuning at the radio.

73's
Richard Clark, KB7QHC

3729. Re: Aerial Booster

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 22:53:13 UTC
From: harrogate2 <harrogate2@ntlworld.com>
Message-ID: <tBoZd.1044$0i3.302@newsfe6-gui.ntli.net>
Source record: 80768

<paulh@fsmail.net> wrote in message
news:1110834734.269580.261290@g14g2000cwa.googlegroups.com...
> I have been looking at aerial boosters for my TV but confused why
the
> input and 4 outputs are the same gender. I would have thought the
input
> and output would be different.
>
> Here is the link for picture
>
http://www.ronielectronics.co.uk/Details.asp?ProdID=1362&PageDel=PRODU
CT:%20SLX4P%204%20WAY%20PLUG%20IN%20amp:
>
> Thanks
>
> Paul
>

You don't want one of that type anyway.

A plug-top unit like that will have to amplify an already attenuated
signal and will just result in noise.

You need a masthead amp to boost the signal whilst it is still
pristene, then let the cable attenuate the clean and bigger signal.

--
Woody

harrogate2 at ntlworld dot com

3730. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 23:04:24 UTC
From: dplatt@radagast.org
Message-ID: <113c63odiv18q31@corp.supernews.com>
Source record: 80769

In article <1110838928.281961.322100@o13g2000cwo.googlegroups.com>,
<jgboyles@aol.com> wrote:

>Hi Dave, I was just about to recommend the QST article, but you beat
>me. A few comments on why his antenna did not perform: As you stated,
>the PVC will change the input Z of the radiator. Just about anything
>that is too close to the radiator will change things.

On second reading of that QST article, I admit to being a bit curious.
The K4LPQ version (with a shorted inductive stub inside the radiator,
soldered to it) is clear enough. However, the W9WQ version using a
longer, open-circuited inductive stub wire isn't a straightforward
translation of this, because there's no soldered (or other DC)
connection between the radiator and anything else!

I infer that in the W9WQ version, the stub wire is performing two
functions at once - it's adding a series inductance, and it's also
coupling the RF out onto the radiator in a capacitive fashion. This
would imply that the stub needs to provide a bit more inductive
reactance than in the K4LPQ shorted-coax version, with some of this
reactance cancelling out the radiator's -j300 and the rest cancelling
out whatever amount of capacitive reactance exists between the stub
wire and the radiator.

Am I reading this right, or am I missing something?

[Regretfully it seems likely that both W9WQ and K4LPQ are now silent
keys, so I can't ask for advice from the horses' mouths.]

> According to EZNEC, a 5/8 radiator with 1/4 radials 5 WL above ground
>is 80-j300. As such, with a single series inductor matching section,
>the best 50 ohm match is 1.6:1. This could get worse or better
>depending on the antenna's environment. It will also change if you
>slope the radials.

I've seen a number of 5/8-wave antenna designs which deal with this
issue by using something other than a simple series coil. The
commonest approach seems to be to use a coil which is connected in
shunt between the radiator and the ground plane, with the "hot" side
of the coax being fed to a point tapped partway up on the coil. This
approach transforms the radiator impedance down to the 50 ohms needed
to match the coax, and also provides the series inductance needed to
cancel out the reactance. It also provides DC grounding for the
radiator.

http://www.fluxfm.nl/schema/5-8%20golf%20met%20radialen.PDF is one
such design. It requires some amount of tooling (e.g. to lathe down

the plastic parts to the specified configuration) but I suspect that a version could be homebrewed up using simpler materials and methods. The photos show the way to build the tapped matching coil assembly, and could probably be adapted to other coil construction methods. I believe the ARRL Handbook article which adapts a Radio Shack CB mobile antenna uses a similar tapped coil.

Another approach might be to change the length of the radiator a bit, to change the resistive part of the feedpoint impedance from 80 ohms down closer to 50 ohms, and modify the coil to suit. I haven't run any simulations to see how much change in the radiator length would be required, and what this change would do to the antenna's gain pattern.

> There is an article in the ARRL Antenna Compendium #1 pp.101 that
>deals with 5/8 antennas. It basically explains why a 5/8, depending on
>the application, is NOT the best performing radiator.

I'll have to look it up if I can find a copy of that edition to see what they have to say. I agree, in some cases the horizon-directed gain of a 5/8 isn't what you want. For in-city and in-the-hills mobile use, a 1/4-wave might give more reliable performance, precisely because its RF energy is more broadly directed.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

3731. Re: Aerial Booster

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 23:05:47 UTC
From: paulh@fsmail.net
Message-ID: <1110841546.998724.92500@f14g2000cwb.googlegroups.com>
Source record: 80770

Bear with me Woody.

What the hell's a masthead amp and where can I get one.

Will it feed two TVs from one aerial ?

Paul

3732. Re: Radio Shack chokes?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 23:16:14 UTC
From: jgboyles@aol.com
Message-ID: <1110842174.615705.50180@l41g2000cwc.googlegroups.com>
Source record: 80771

Ken Bessler wrote:

>
> Now (finally!) to my questions:
>
> 1) How good are radio shack chokes?
> 2) I was only able to get 4 turns around the feedline's choke
> - is that enough?
> 3) Am I just messing too much around trying to get a 40m
> dipole to tune on 10m?
> 4) Would I do better to add a balun and run the 450 ohm
> ladder line direct to the tuner?
>
> --
> 73's es gd dx de Ken KGØWX
> Grid EM17ip, Flying Pigs #1055,
> List Owner, Yahoo! E-groups:
> VX-2R & FT-857

Hi Ken, I have had that problem with Auto tuners myself, and could not get a satisfactory solution. The Vendors solution is Ferrite on the coax, and make sure you have a good RF ground at the tuner.
The problem is almost certainly RF feedback getting into the tuner. Since you have elimated current on the shield of the coax by the Radio Shack cores (they should work, don't know of any recent studies of these cores on 10m) that is not the problem.
The problem may be RF potential at the tuner by direct radiation. To eliminate this you need a very good RF ground directly at the tuner. For 10M this is a very short connection to a good earth ground. A 20' long ground connection is not the answer.
You might try hooking a fan 10m dipole in parallel with the 40m dipole. This would provide a better match for the Auto Tuner. If the problem is still there, then it is direct radiation. Better RF ground, or reduce power.
Gary N4AST

3733. Re: Aerial Booster

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 23:25:35 UTC
From: paulh@fsmail.net
Message-ID: <1110842735.540520.17200@o13g2000cwo.googlegroups.com>
Source record: 80625

Is this what I need?

Why is it different from a Booster?

http://www.tlc-direct.co.uk/Products/MX200.html?ref=www.kelkoo.co.uk

3734. Re: Aerial Booster

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 23:45:14 UTC
From: dplatt@radagast.org
Message-ID: <113c8gak3j4e4ad@corp.supernews.com>
Source record: 80626

>Is this what I need?

That's just the (indoor) power supply, which would send DC power up the coaxial cable to a masthead amplifier.

>Why is it different from a Booster?

"Booster" is a very general and unspecific term. It could refer to either or both of two different functions.

Function #1: signal splitting and isolation. A splitter will "divide" the incoming RF power two, three, four, or more ways, and feed the power to the desired number of TV sets. A splitter also provides impedance matching and isolation, so that connecting or disconnecting one TV set from a branch doesn't cause the picture quality to change on the other TV sets.

You need a splitter to run two or more TV sets or VCRs or DVRs properly.

Function #2: amplification. An amplifier will increase the strength of the incoming signal(s) and feed the amplified signal to its output. Amplification may be needed for any or all of several reasons:

- The incoming signal at the antenna is just too darned weak.

- You're using a splitter to divide the power several ways, and a signal which was strong enough to give good image quality on a single TV set is not strong enough when split N different ways.

- The (inevitable) electrical losses in your coaxial cables are reducing the strength of the incoming signal too much.

A simple "booster" (in consumer-marketing language) is often a combination of a 2- or 4-way splitter, and a simple amplifier. It's usually installed indoors.

In many cases, the best place to add an amplifier (if you need one at all) is up on the antenna mast, as close as is practical to the antenna (hence the name "masthead"). This location allows the amplifier to increase the power in the incoming signal *before* a bunch of the signal is lost in the coax cables. It minimizes the effect of the additional noise which any amplifier adds to the signal.

So - in cases where you really do need more signal, the best combination is often:

[1] A high-quality masthead amplifier - one which can boost the weak signals *without* being overloaded by strong signals from local

stations or non-TV transmitters.

[2] A power-supply unit (such as the one your URL points to), connected to the antenna cable near where it enters the house.

[3] A passive (non-amplified) wide-frequency-range signal splitter, which has enough ports on it to feed the TV sets and etc. you care about, but no more ports than that (unused ports on a splitter do use up some of the signal power).

If you have only a single TV set, you can get by with just [1] and [2] and don't need [3].

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

3735. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 23:46:59 UTC
From: jgboyles@aol.com
Message-ID: <1110844019.664256.138590@o13g2000cwo.googlegroups.com>
Source record: 80627

Dave Platt wrote:
> In article <1110838928.281961.322100@o13g2000cwo.googlegroups.com>,
> <jgboyles@aol.com> wrote:
>
> >Hi Dave, I was just about to recommend the QST article, but you beat
> >me. A few comments on why his antenna did not perform: As you
stated,
> >the PVC will change the input Z of the radiator. Just about
anything
> >that is too close to the radiator will change things.
>
> On second reading of that QST article, I admit to being a bit
curious.
> The K4LPQ version (with a shorted inductive stub inside the radiator,
> soldered to it) is clear enough. However, the W9WQ version using a
> longer, open-circuited inductive stub wire isn't a straightforward
> translation of this, because there's no soldered (or other DC)
> connection between the radiator and anything else!
>
> I infer that in the W9WQ version, the stub wire is performing two
> functions at once - it's adding a series inductance, and it's also
> coupling the RF out onto the radiator in a capacitive fashion. This
> would imply that the stub needs to provide a bit more inductive
> reactance than in the K4LPQ shorted-coax version, with some of this
> reactance cancelling out the radiator's -j300 and the rest cancelling
> out whatever amount of capacitive reactance exists between the stub
> wire and the radiator.
>
> Am I reading this right, or am I missing something?
>
> [Regretfully it seems likely that both W9WQ and K4LPQ are now silent
> keys, so I can't ask for advice from the horses' mouths.]
>
> > According to EZNEC, a 5/8 radiator with 1/4 radials 5 WL above
ground
> >is 80-j300. As such, with a single series inductor matching
section,
> >the best 50 ohm match is 1.6:1. This could get worse or better
> >depending on the antenna's environment. It will also change if you
> >slope the radials.
>
> I've seen a number of 5/8-wave antenna designs which deal with this
> issue by using something other than a simple series coil. The
> commonest approach seems to be to use a coil which is connected in

> shunt between the radiator and the ground plane, with the "hot" side
> of the coax being fed to a point tapped partway up on the coil. This
> approach transforms the radiator impedance down to the 50 ohms needed
> to match the coax, and also provides the series inductance needed to
> cancel out the reactance. It also provides DC grounding for the
> radiator.
>
> http://www.fluxfm.nl/schema/5-8%20golf%20met%20radialen.PDF is one
> such design. It requires some amount of tooling (e.g. to lathe down
> the plastic parts to the specified configuration) but I suspect that
a
> version could be homebrewed up using simpler materials and methods.
> The photos show the way to build the tapped matching coil assembly,
> and could probably be adapted to other coil construction methods. I
> believe the ARRL Handbook article which adapts a Radio Shack CB
mobile
> antenna uses a similar tapped coil.
>
> Another approach might be to change the length of the radiator a bit,
> to change the resistive part of the feedpoint impedance from 80 ohms
> down closer to 50 ohms, and modify the coil to suit. I haven't run
> any simulations to see how much change in the radiator length would
be
> required, and what this change would do to the antenna's gain
pattern.
>
> > There is an article in the ARRL Antenna Compendium #1 pp.101 that
> >deals with 5/8 antennas. It basically explains why a 5/8, depending
on
> >the application, is NOT the best performing radiator.
>
> I'll have to look it up if I can find a copy of that edition to see
> what they have to say. I agree, in some cases the horizon-directed
> gain of a 5/8 isn't what you want. For in-city and in-the-hills
> mobile use, a 1/4-wave might give more reliable performance,
precisely
> because its RF energy is more broadly directed.
>
> --
> Dave Platt <dplatt@radagast.org>
AE6EO
> Hosting the Jade Warrior home page:
http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

Hi Dave, I'm sure you are reading it right, will look and see if I can
add anything later.
Gary N4AST

3736. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-14 23:59:01 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <dzpZd.63365$7z6.29224@lakeread04>
Source record: 80628

"Richard Clark" <kb7qhc@comcast.net> wrote
"Jack Painter" <223bthp@cox.net>
> wrote:
> > And most of us who get anywhere near as much rain as Richard
> >does (in WA) unfortunately have a LOT more lightning to deal with in the
> >summer.
>
> Hi Jack,
>
> In all actuality, Seattle sees the least lightning nationwide. If
> you drew a line from Seattle to Miami, you would find that the
> incidence of lightning grows roughly ten-fold as you progressed along
> that line.
>
> 73's
> Richard Clark, KB7QHC

Hi Richard, I knew that, and meant by inference that it was admirable for someone (you) with so little lightning, to realize it is not a minor-thing for others.

I might act like my station is bulletproof (because I spent the time and money to try to make it so), but when you watch that line of a storm approaching, and lightning is striking every few seconds on a path you can see coming straight for you, the realization that one is likely to land on top of you is real, not a phobia, lol. All too often, it does strike one of the tall pines in my yard, sometimes jumping to non-conductive things like wooden fences, which it splits on its way to ground.

In Virginia Beach, we get more than half the lightning Miami gets, but slightly less than half what the 100+ area of West-Central Florida does. It serves to make summer a lot less fun for those with masts, wires and towers up in the air!

Best regards,

Jack

3737. Re: Aerial Booster

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 00:09:53 UTC
From: paulh@fsmail.net
Message-ID: <1110845393.262698.166030@z14g2000cwz.googlegroups.com>
Source record: 80629

Thanks Dave

3738. Re: Mostly horizontal polarization of HF arriving at my antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 00:52:35 UTC
From: Tom <noname@noprovider.nodomain>
Message-ID: <nlqZd.2501$Z07.349@trnddc02>
Source record: 80630

Kristinn:

A poorly performing vertical is usually traced to an inadequate ground system, which reduces it's efficiency. Less often, it could also be caused by an electrically shortened antenna, which can experience poor efficiency. Assuming approximately one quarter wavelength for each radial, on 40 m you would want quite a few 10 meter long radials; the plot of land needed is in the order of 310 square meters. A metal roof may or may not prove to be a useful ground reference. There are a lot of things that can go wrong.

A 5/8 wavelength vertical achieves gain by pattern enhancement at lower radiation angles and sacrificing signals at higher elevation angles. If you have poor ground (in the near field) or poor ground conductivity/dielectric constant (in the not-so-near field) you probably will not be able to realize this gain. My experience with 5/8 wave verticals on HF is that they did not work as well as anticipated. If the arrival angle of the HF signal is higher than the lobe of the vertical antenna, then 'gain' has hurt, not helped.

A properly designed 4-square vertical antenna system over a good ground radial system will perform very well on 40 meters for DX. The Hy-Gain Hytower vertical antenna with a good quality ground radial system has proven to perform reasonably well on HF.

-- Tom

"Kristinn Andersen, TF3KX" <tf3kx@simnet.is> wrote in message news:cc4f4620.0503140047.6abb0d78@posting.google.com...
> Tom: I agree with you on the 160/80m explanation for the better
> performance of the vertical than the inv-V.
>
> Generally it is assumed that polarization of arriving HF signals is
> randomly oriented and constantly changing - which I have no grounds to
> refute. Thus, your suggestion that my inv-V (horizontal antenna) is
> simply gaining advantage from its height (and in some cases azimuthal
> directivity) is a viable explanation. Keep in mind that the inv-V is
> supported by an aluminum pole with an apex 6m (18ft) above my metallic
> roof, and the roof itself is at 8m (24ft) above the surrounding ground
> - thus the apex point is at 14m (42ft) above ground.
>
> It just struck me that even the "supposedly best" verticals (5/8 wl,
> using good connections to the metal roof as a counterpoise) are
> consistently substantially weaker on reception on 40-10m than the
> inv-V. The difference varies from zero to 7-8 S-units. I would have
> expected the vertical to be better in at least a few cases - but it's

> not.
>
> But, OK - the inv-V dipole is gaining further from its height. Any
> other suggestions, anyone?
>
> 73 - Kristinn, TF3KX
>
>
> "TOM" <noname@noprovider.nodomain> wrote in message
> news:<7P%Yd.1796$oa6.1254@trnddc07>...
>> HF signals are usually not predominantly polarized more horizontal or
>> vertical.
>>
>> The effect that you are seeing is due to the effective height of the
>> dipole
>> above ground. On 40,20,15,10 the dipole is high enough (in terms of
>> wavelengths)
>> that it develops a good pattern at lower angles of radiation (or
>> reception).
>>
>> On 80 and 160 meters, your dipole is too close to the ground for it to
>> have
>> a
>> good low-angle pattern.
>>
>> Thus what you are seeing is that the signals you want to listen to are
>> arriving
>> at an angle lower than what your 80/160 meter dipoles are effective at.
>> The
>> vertical
>> antenna has a lower angle of reception on these bands than the dipole.
>>
>> If you listen to signals out to ~300 km on 80 meters, you may find that
>> your
>> dipole
>> outperforms the vertical because those signals are arriving at your
>> antenna
>> from a
>> fairly high angle.
>>
>> -- Tom
>>
>>
>>
>> "Kristinn Andersen, TF3KX" <tf3kx@simnet.is> wrote in message
>> news:cc4f4620.0503121855.151a414a@posting.google.com...
>> >I have an inverted-V, approximately resonant on 40, 20, 15 and 10m.
>> >
>> > I have tried numerous verticals for comparison, but on these bands the
>> > inverted-V always receives signals on these bands better or equally

>> > well, at best. The verticals have been well grounded (using a "large,
>> > good quality" metal sheet roof as the ground) and I have done my best
>> > to minimize losses. The verticals have been anywhere from 1/4 to 5/8
>> > wavelengths long. But they are always outperformed by my inv-V on
>> > these bands. Only on 80 and 160m are the verticals better.
>> >
>> > Now, this leads me to wondering if the radio waves arriving at my QTH
>> > tend to be largely horizontally polarized on the higher frequencies?
>> > Or can there be any other explanation that "good" verticals, even 5/8
>> > wavelengths long are never better than the inv-V. Any thoughts?
>> >
>> > The verticals and the inv-V were all mounted on the metal roof of my
>> > house. The house is located in a poor-quality ground area (rocks,
>> > shallow vegetation), the direction to Europe is across a low hill
>> > approx. 1/2 mile away while the direction to America is across the
>> > open sea approx. 1/8 mile away from my house.
>> >
>> > 73 - Kristinn, TF3KX

3739. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 02:05:29 UTC
From: john doe <john.doe@host.com>
Message-ID: <QqidncAOFsds36vfRVn-2g@comcast.com>
Source record: 80631

No I didn't account for the PVC ..... but I made it longer than my design
and then trimmed past my design length and it never seemed to make a
difference. Considering my inductor was also formed around the PVC that was
probably way off too.....

I modeled the whole thing with nec first. This is what my input file looked
like:
http://mywebpages.comcast.net/ka2pbt/2M-5-8wave-dat.txt

and this is what my output looked like:
http://mywebpages.comcast.net/ka2pbt/2M-5-8wave-out.txt

Construction was a radiator 58.5 inches long fed along a 1/2" sched-40,
inductor was 19 turns around the same sched-40 2 inches long. The were 4
radials at 90 deg each 19.38"

Any comments welcome ....

Thanks,

--> de ka2pbt

"Dave Platt" <dplatt@radagast.org> wrote in message
news:113boblagc9dv70@corp.supernews.com...
> >Can anyone point me to a good site for construction a 5/8 wave 2M
> >antenna???
>>
>>I tried home-brewing one already with poor results .... a conductor up a
>>piece of PVC .... same conductor wound into a coil at the bottome
>>connected in series to the center of the coax. 4 1/4 wave radials
>>connected to outer conductor.
>
> I believe there's a project in the ARRL Handbook which shows how to
> convert a Radio Shack CB whip antenna to a 2-meter 5/8-wave - it has
> the details for the matching coil that is required.
>
> http://www.arrl.org/tis/info/pdf/8009022.pdf has another QST article
> which shows how to construct one from scratch, using a technique that
> doesn't require a matching coil (the matching inductor is made from a
> stub).
>
> I haven't tried either of these myself.
>
> With regard to the version you made - did you account for the loading
> effect of the PVC when you measured and trimmed the length of your
> radiator?

>
> --
> Dave Platt <dplatt@radagast.org> AE6EO
> Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

3740. Re: Radio Shack chokes?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 02:22:23 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <yFrZd.10719$Fy.7281@okepread04>
Source record: 80632

<jgboyles@aol.com> wrote in message
news:1110842174.615705.50180@l41g2000cwc.googlegroups.com...

Hi Ken, I have had that problem with Auto tuners myself, and could not
get a satisfactory solution. The Vendors solution is Ferrite on the
coax, and make sure you have a good RF ground at the tuner.
The problem is almost certainly RF feedback getting into the tuner.
Since you have elimated current on the shield of the coax by the Radio
Shack cores (they should work, don't know of any recent studies of
these cores on 10m) that is not the problem.
The problem may be RF potential at the tuner by direct radiation. To
eliminate this you need a very good RF ground directly at the tuner.
For 10M this is a very short connection to a good earth ground. A 20'
long ground connection is not the answer.
You might try hooking a fan 10m dipole in parallel with the 40m
dipole. This would provide a better match for the Auto Tuner. If the
problem is still there, then it is direct radiation. Better RF ground,
or reduce power.
Gary N4AST

==========
Thanks, Gary.

I messed around with different chokes on different positions
until I had eliminated 90% of the problem. One of the biggest
helps was putting both a snap on square choke *and* a coaxial
choke right at the back of the rig where the HF coax attaches.

I used 2 standards - I had my son listen on the computer with
headphones and rate the FM buzz from 1 to 100. We started
at 75 and ended up at 2. I also switched from 20m to 10m and
kept track on what power level would cause problems on trying
to tune 10m. I started with 65 watts and ended with 95 watts.

I have a Cuscraft R7000 that KB0OMQ gave (!!) me - when
I get that up, I imagine my problems will be solved, at least as
far as trying to get my 40m antenna to load on 10m

--
73's es gd dx de Ken KGWX
Grid EM17ip, Flying Pigs #1055,
List Owner, Yahoo! E-groups:
VX-2R & FT-857

3741. Re: Radio Shack chokes?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 02:30:45 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <113ci6orlf3jk71@corp.supernews.com>
Source record: 80633

Ken and Gary;

Coax fed auto tuners have a range of about 3:1 SWR. This means that for a 50 ohm feed the greatest antenna input that it can match is 150 ohms. If you want to feed any type of antenna with a generally unknown input impedance you need to use open wire feed line. Using this feed line you can auto match a wider range of miss match 10 or 15 to 1. For matching absolutely any impedance use a manual tuner.

Dave WD9BDZ

Ken Bessler wrote:

> <jgboyles@aol.com> wrote in message
> news:1110842174.615705.50180@l41g2000cwc.googlegroups.com...
>
> Hi Ken, I have had that problem with Auto tuners myself, and could not
> get a satisfactory solution. The Vendors solution is Ferrite on the
> coax, and make sure you have a good RF ground at the tuner.
> The problem is almost certainly RF feedback getting into the tuner.
> Since you have elimated current on the shield of the coax by the Radio
> Shack cores (they should work, don't know of any recent studies of
> these cores on 10m) that is not the problem.
> The problem may be RF potential at the tuner by direct radiation. To
> eliminate this you need a very good RF ground directly at the tuner.
> For 10M this is a very short connection to a good earth ground. A 20'
> long ground connection is not the answer.
> You might try hooking a fan 10m dipole in parallel with the 40m
> dipole. This would provide a better match for the Auto Tuner. If the
> problem is still there, then it is direct radiation. Better RF ground,
> or reduce power.
> Gary N4AST
>
> ==========
> Thanks, Gary.
>
> I messed around with different chokes on different positions
> until I had eliminated 90% of the problem. One of the biggest
> helps was putting both a snap on square choke *and* a coaxial
> choke right at the back of the rig where the HF coax attaches.
>
> I used 2 standards - I had my son listen on the computer with
> headphones and rate the FM buzz from 1 to 100. We started
> at 75 and ended up at 2. I also switched from 20m to 10m and
> kept track on what power level would cause problems on trying

> to tune 10m. I started with 65 watts and ended with 95 watts.
>
> I have a Cuscraft R7000 that KB0OMQ gave (!!) me - when
> I get that up, I imagine my problems will be solved, at least as
> far as trying to get my 40m antenna to load on 10m
>

3742. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 02:53:22 UTC
From: dplatt@radagast.org
Message-ID: <113cjh27sso0k13@corp.supernews.com>
Source record: 80634

In article <QqidncAOFsds36vfRVn-2g@comcast.com>,
john doe <john.doe@host.com> wrote:

>No I didn't account for the PVC ..... but I made it longer than my design
>and then trimmed past my design length and it never seemed to make a
>difference. Considering my inductor was also formed around the PVC that was
>probably way off too.....
>
>I modeled the whole thing with nec first. This is what my input file looked
>like:
>http://mywebpages.comcast.net/ka2pbt/2M-5-8wave-dat.txt
>
>and this is what my output looked like:
>http://mywebpages.comcast.net/ka2pbt/2M-5-8wave-out.txt
>
>Construction was a radiator 58.5 inches long fed along a 1/2" sched-40,
>inductor was 19 turns around the same sched-40 2 inches long. The were 4
>radials at 90 deg each 19.38"

Is that 58.5 inch figure a typo? Your NEC model says 51 inches, and
my quickie spreadsheet calculation says 50.9 inches for a 145 MHz
center of band.

I also wonder about the coil - it calculates out to be just over 1
microHenry, or about j910 ohms at 145 MHz. That seems like quite a
bit too much, based on jgboyles's posting earlier today indicating a
feedpoint Z of about 80-j300.

The PDF to which I posted a link earlier today uses a coil of only
10.5 turns, spread out over a distance of about 2.5" on a 3/4" form.
That's about .6 uH or j550 ohms... and it's a shunt-fed design so the
actual series inductance (above the tap point) is even lower.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3743. 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 03:54:06 UTC
From: Buck <iam@this.site>
Message-ID: <61nc3117hsnej579vm406qdu526gbsm240@4ax.com>
Source record: 80635

On Mon, 14 Mar 2005 14:26:57 GMT, "john doe" <john.doe@host.com>
wrote:

>Can anyone point me to a good site for construction a 5/8 wave 2M antenna???
>
>I tried home-brewing one already with poor results .... a conductor up a
>piece of PVC .... same conductor wound into a coil at the bottome
>connected in series to the center of the coax. 4 1/4 wave radials
>connected to outer conductor.
>
>Thanks,
>
>--> Rob
> ka2pbt

Can the 5/8 wave antenna be matched with a tuning stub such as the
J-Pole uses?

--
73 for now
Buck
N4PGW

3744. Re: Radio Shack chokes?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 04:10:24 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <1110859824.712772.223060@o13g2000cwo.googlegroups.com>
Source record: 80636

David G. Nagel wrote:
> Ken and Gary;
>
> Coax fed auto tuners have a range of about 3:1 SWR. This means that
for
> a 50 ohm feed the greatest antenna input that it can match is 150
ohms.

That's roughly true for the usual (lousy) ATUs sold by the likes of Yaesu as rig accessories. It is most definitely not true in the cases of most of the third-party "coax-fed" autotuners. My LDG AT-11MP easily matches the high VSWRs presented by my G5RV on all the HF ham bands with the exception of 30M. I forget which band it is but the feedpoint impedance at the shack end of the coax falls outside the ability of my MFJ antenna analyzer to measure it which means that the AT-11MP is successfully dealing with a VSWR in excess of 12:1. The servo-tuned ATU in my old TS-940SAT is almost as good as the LDG autotuner in this respect.

> If you want to feed any type of antenna with a generally unknown
input
> impedance you need to use open wire feed line. Using this feed line
you
> can auto match a wider range of miss match 10 or 15 to 1. For
matching
> absolutely any impedance use a manual tuner.
>
> Dave WD9BDZ

w3rv

3745. Re: Mostly horizontal polarization of HF arriving at my antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 05:34:08 UTC
From: nm5k@wt.net
Message-ID: <1110864848.366624.303810@f14g2000cwb.googlegroups.com>
Source record: 80637

It just struck me that even the "supposedly best" verticals (5/8 wl,
using good connections to the metal roof as a counterpoise) are
consistently substantially weaker on reception on 40-10m than the
inv-V. The difference varies from zero to 7-8 S-units. I would have
expected the vertical to be better in at least a few cases - but it's
not. ....

The *best* 5/8 wave antennas would not use a roof
as the ground plane. I think this is half the problem.
You are running an elevated vertical, "ground plane",
but your radial system is not resonant. This would
greatly effect the performance of most all the various
length radiators. Then you have to consider the construction
of the roof, how well each piece is electrically connected,
etc, etc..Then you mention the poor overall ground rating
for your local in general. This all combines for a mediocre
antenna. Then on top of that, you have to consider the height
above ground in wavelengths, for each particular band, and
the efficiency for each band. Naturally, the lower bands
would see the most ground losses, from the low height.
I can see a 5/8 antenna for 10m being fairly poor, when
mounted on a untuned roof. In a case like that, you should
use an elevated antenna, with elevated radials above the roof.
Or, use a 1/2 wave which requires no radials. On the lower
bands, I think the performance is probably not so good, due
to the ground system not being near as good as you think it is.
Being elevated, it really should be resonant for each band to
be used. I can see it being a toss on 20m up, but on 40m, and
lower, the vertical should be best for dx. "over 1500 miles"
If it's not, it's not working as well as it could. MK

3746. Re: Drill vs. MagMount ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 05:45:12 UTC
From: nm5k@wt.net
Message-ID: <1110865512.801733.7350@g14g2000cwa.googlegroups.com>
Source record: 80638

By how much? Why?

I would assume the direct connection with the roof
metal. I tried this one time, after trashing a larson
magmount with about 84 knocks off the car...
When I converted it over to a hole mount, with the
usual NMO, there was a good bit of difference. I didn't
measure, as the mag mount was toast, but it was quite
large actually. Like maybe a change for say S9 on a
machine, to maybe 15-20 over S9. Very noticable in my
case using the larson 5/8 antenna on top of a car roof.
Was like a different antenna..
MK

3747. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 05:55:55 UTC
From: nm5k@wt.net
Message-ID: <1110866155.419338.173830@g14g2000cwa.googlegroups.com>
Source record: 80639

Can the 5/8 wave antenna be matched with a tuning stub such as the
J-Pole uses?...

Probably, but seems easier to to use a 5 turn coil at
the base...But I agree...A 5/8 GP is not a very good 2m
antenna. Better off building a high quality 1/4 wave GP.
Seriously... By high quality, I mean instead of 3-4 sloped
radials, use 6-8 radials, and even better , use a 2nd set
for decoupling. You can also build "sleeve" versions.
5/8's are ok on HF, where the angles are not critical, and on
10m, will usually be the best choice. But on 2m, they are usually
lame.
But, don't take my word. Build a 5/8 GP, and then build a 1/4
GP, and see which is best. I bet the 1/4 wave wins. For a
5/8 to work well on VHF/UHF, it needs to be a collinear dual
5/8 design, or at the least, use sloped 5/8 or 3/4 wave radials.
5/8's with 1/4 wave radials have pretty lousy patterns for 2m use.
MK

3748. Re: Drill vs. MagMount ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 08:26:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113d725i0j3rfa1@corp.supernews.com>
Source record: 80640

That's very interesting. I can't see how the mag mount could change the pattern shape any, so your experience indicates a severe loss in the coupling capacitor, maybe as high as 90% or more. That's hard to imagine, so I wonder if anyone else has had a similar experience -- or, much better yet, actual measurements.

Roy Lewallen, W7EL

nm5k@wt.net wrote:
> By how much? Why?
>
>
> I would assume the direct connection with the roof
> metal. I tried this one time, after trashing a larson
> magmount with about 84 knocks off the car...
> When I converted it over to a hole mount, with the
> usual NMO, there was a good bit of difference. I didn't
> measure, as the mag mount was toast, but it was quite
> large actually. Like maybe a change for say S9 on a
> machine, to maybe 15-20 over S9. Very noticable in my
> case using the larson 5/8 antenna on top of a car roof.
> Was like a different antenna..
> MK
>

3749. Marine band antenna for the Yaesu VX-7R

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 09:23:34 UTC
From: muskie <muskie@muskie.com>
Message-ID: <d16b5b$53c$1@news.hgc.com.hk>
Source record: 80641

Hi,

I'm thinkinig to make an antenna for the marine band (156mhz) and hooked to my vx-7r portable.

1. How could I make it to a reasonable carrying size (perhaps less than 12 inches)?

2. Is it possible to use the steel wire and put the heat shrink tube outside?

3. Is the wire solder to the SMA core and no ground need?

Thanks,

Muskie

3750. Re: Single wire aerial - what do I do?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 09:42:15 UTC
From: (unknown)
Message-ID: <4236a803.1189546@news.dial.pipex.com>
Source record: 80642

Wow Bob, that was some reply. Very much appreciated.

>-... but be aware that the length of coax will
>also receive in its own right if both the radio and antenna ends arent
>terminated in its surge impedence (ie 75 ohms).

Couldn't quite understand that (word ot two missing?)

>I assume you mounted a dipole at the top
>of it?

Nope, the top end is just sitting on the floor of the loft, the
surplus coiled up. Last night I did get a reasonably clean signal from
Radio 3 in stereo so we're not looking at a need for massive gains.

>- If patience was in huge supply I'd try matching at the receiver input
>for a 75 ohm cable. I'd go inside the radio to do this.

Would this need a transformer, inductance/capacitance circuit, static
resistor, or what??

Bob, could you explain one mystery to me? A normal aerial arrangement,
whether fed by ribbon or coax, is effectively one continuous loop of
wire. DC resistance is at most a few ohms - ie pretty much a dead
short. Impedence is resistance to AC, ie the signal, but the fact that
impedence is present doesn't remove the dead short. So how come
anything gets around the loop at all?!!

Or is it that the entire loop can be seen as one side of a circuit for
which it provides a potential difference?

And another: Where does this PD occur? Across the receiving element of
the aerial, or within the element relative to earth? Does this mean an
aerial 'loop" works differently from a single long wire?

You probably see what I'm getting at.

Thanks again
Paul

On Tue, 15 Mar 2005 05:36:34 +1100, Bob Bob <bcnntp@optusnet.com.au>
wrote:

>Hi Paul
>
>Yes it looks like you have a real problem here..
>

3751. Re: Here are the links:Magnetic Loop Antenna, AOR Digital Voice Modem.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 12:33:53 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-1503050733530001@jbw-mac.itd.nrl.navy.mil>
Source record: 80643

In article <39ecsqF5th1qbU1@individual.net>, electronics_tech
<electronix_tech@yahoo.com> wrote:

> Duh. Sorry guys. I must be half asleep. Here are the links.
>
> http://www.standpipe.com/w2bri/index.htm Magnetic Loop Antennas
>

Ah, yes. A "magnetic" loop antenna as opposed to an "electric" loop
antenna. Funny, but none of my seminal antenna books (Kraus, Jasik,
Terman, etc.) mentions such a beast. A visit to the above website
indicates that W2BRI is referring to an electrically small loop (he
recognizes this), which is the customary term for the type of device being
described. That an electrically small loop behaves as a magnetic current
element does not qualify the use of "magnetic" in its name, IMHO. Radio
waves are electromagnetic by nature - you don't transmit or receive
exclusively radiated electric or magnetic fields. Sincerely, and 73's
from N4GGO,

John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

3752. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 13:57:09 UTC
From: kenwood_dude <kw_dude@nospam.com>
Message-ID: <4236E9B3.19DC1D36@nospam.com>
Source record: 80644

Many of these foreign owned companies pay no
us income taxes, their profits are moved out of USA.

Losses are also sent over to the companies that are
based here but owned by parent companies in
camen islands, tax sheltered countries.

> I don't believe that there are many, if any, cars that are made in
> ____ anymore. I think they are all international.
>
> Back to the issue, as to the foreign owned companies in the USA, while
> some of their money is being fed back to the locals, the majority of
> the money goes overseas to their bank accounts or other foreign
> purchases.
>
> Unfortunately, there is no easy solution that won't hurt someone here
> in the US. Tariffs would raise our cost of living something terrible,
> blocking imports will cause a higher demand in relationship to supply
> causing another price increase. Instead of profit sharing, union
> workers want higher wages.
>
> There is no easy solution. What helps one group will certainly hurt
> another.
>
>

3753. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 13:59:52 UTC
From: kenwood_dude <kw_dude@nospam.com>
Message-ID: <4236EA54.E57095CA@nospam.com>
Source record: 80645

>

Hi,

Just look at Walt Disney Co. Eisner is leaving but not fast enough,
he has 900 million is disney shares, while the state of NC pension plan
only holds 90 million worth of stock.

Look at HOme Depot, ceo/pres. nardelli (ge ceo reject!)
24 million salary, 10 million in 'forgiven loans' hires friends
mega million dollar salary fance cars for everyone !

>
>
> One has to ask where's the profit to share when the CEO is raping the
> shareholder? Look at the trial of Bernie Ebbers and the Legally
> Blonde Defense that is becoming the rage along Wall Street:

3754. Re: New Board

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 14:11:06 UTC
From: -XC- <nobody@home.net>
Message-ID: <lqGdnbLukLRhcavfRVn-vw@comcast.com>
Source record: 80646

Yet ANOTHER board??? Me thinks there are too many already!
Don't hams chat on the RADIO anymore?

3755. Re: Marine band antenna for the Yaesu VX-7R

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 14:11:42 UTC
From: Spam Fighter <spamcollector@sympatico.ca>
Message-ID: <pan.2005.03.15.14.11.40.534074@sympatico.ca>
Source record: 80647

On Tue, 15 Mar 2005 17:23:34 +0800, muskie wrote:

> Hi,
>
> I'm thinking to make an antenna for the marine band (156mhz) and hooked
> to my vx-7r portable.
>
> 1. How could I make it to a reasonable carrying size (perhaps less than
> 12 inches)?
>
> 2. Is it possible to use the steel wire and put the heat shrink tube
> outside?
>
> 3. Is the wire solder to the SMA core and no ground need?
>
> Thanks,
>
> Muskie

Cool radio! How do you like it? Have you used it to work any ham radio satellites, or copy any weather satellite pictures? How is for cross talk? What do you think of the HF receiver? Have you copied any weather charts off of HF with it?

Since your vx-7r is not type certified as a commercial maritime radio, you need not worry about constructing an antenna suitable for transmitting.

Almost any antenna from a paper clip to the helically loaded rubber whip that came with your vx-7r will receive just fine on the commercial maritime frequencies around 156.8 MHz. If you put the antenna that came with your radio on an antenna analyzer I suspect you would see very little difference between the 146 MHz amateur 2M FM band, going up to 156.8 MHz for the maritime band or going down to 137.5 MHz for the polar orbiting weather satellite band.

Yaesu lists marine band coverage as a feature. How bad can it be? What do you want to achieve by changing your existing rubber whip?

gblair (I)
_at_ (really)
sympatico (hate)
dot (spam)
ca (email)

_/_/_/

UNMATCHED WEATHERPROOFING
The VX-7R case, keypad, speaker, and connectors are carefully sealed to protect the internal circuitry against water damage. And the optional CMP460A Speaker/Mic, like the transceiver itself, is rated for 30 minutes of submersion at a depth of up to three feet!

THE BEST VERSATILITY EVER
50/144/430 MHz: 5w Power
Utilizing a reliable FET power amplifier circuit, the VX-7R provides a full 5 Watts of power output on the 50, 144, and 430 MHz Amateur bands, with bonus coverage of the 222 MHz band at 300 mW (USA version Only) of power output. And for 6-meter AM enthusiasts, you also get 1 Watt of carrier power on the 50 MHz band! Four power levels may be selected, for optimum battery life.

Dual Receive: V-V/U-U/V-U/GEN-HAM
The VX-7R is capable of four modes of Dual Receive, including simultaneous reception on (1) two VHF frequencies; (2) two UHF frequencies; (3) one VHF and one UHF frequency; or (4) one "General Coverage" frequency and one "Ham" frequency. And when a call is received on the "Main" band, you can set up the VX-7R to reduce the audio level on the "Sub" band, if you like!

Wide Frequency Coverage
With continuous AM/FM reception coverage of 500 kHz to 999 MHz (cellular frequencies are blocked and non-restorable), the VX- 7R is ideal for monitoring HF shortwave broadcasts, the AM and FM Broadcast bands, plus a wide variety of Marine, Public Safety, and Government bands. And special memory banks for the Weather, Marine, and Shortwave bands make station selection effortless!

_/_/_/

3756. Re: Here are the links:Magnetic Loop Antenna, AOR Digital Voice Modem.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 16:30:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <p23e31hbvd79rtdcouiq3hdedtq4erpdsu@4ax.com>
Source record: 80648

On Tue, 15 Mar 2005 07:33:53 -0500, wood@itd.nrl.navy.mil (J. B. Wood)
wrote:
>That an electrically small loop behaves as a magnetic current
>element does not qualify the use of "magnetic" in its name, IMHO.

Hi John,

If you review your references (or perhaps others) under the heading
Radiation Resistance, you would undoubtedly encounter the small loop.
It would be used to derive the math for Rr in terms of current and
magnetics, and the device would be called a Magnetic Dipole. Then the
author would probably move on to then show that the Electric Dipole
exhibits identical derivations. Magnetic antennas have a basis in a
lot of scientific literature.

73's
Richard Clark, KB7QHC

3757. Re: Here are the links:Magnetic Loop Antenna, AOR Digital Voice Modem.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 17:40:30 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-1503051240300001@jbw-mac.itd.nrl.navy.mil>
Source record: 80649

In article <p23e31hbvd79rtdcouiq3hdedtq4erpdsu@4ax.com>, Richard Clark <kb7qhc@comcast.net> wrote:

> On Tue, 15 Mar 2005 07:33:53 -0500, wood@itd.nrl.navy.mil (J. B. Wood)
> wrote:
> >That an electrically small loop behaves as a magnetic current
> >element does not qualify the use of "magnetic" in its name, IMHO.
>
> Hi John,
>
> Magnetic antennas have a basis in a
> lot of scientific literature.
>

Hello, and while I'm certainly aware of the term "magnetic dipole" (a theoretically tiny magnet that can be equated to a miniature current loop), I still maintain "magnetic antenna" is misleading (I would take it to mean a mag-mount antenna) and don't remember seeing it in any textbook or any peer-reviewed paper published in a respected journal such as the IEEE Transactions on Antennas and Propagation. As to how it might be used by the ARRL (a source of a wealth of practical antenna info) or the amateur radio community at large I can't say. And yes, electrically small loops are the subject of considerable literature. Sincerely,

P.S. Are any folks out there still extolling the virtues of the Crossed-Field Antenna (CFA) other than those at antennex.com?

John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

3758. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 17:53:33 UTC
From: clvrmnky <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <xiFZd.94077$vO1.584975@nnrp1.uunet.ca>
Source record: 80650

On 14/03/2005 5:51 PM, Richard Clark wrote:
> On Mon, 14 Mar 2005 16:07:50 -0500, clvrmnky
> <clvrmnky-uunet@coldmail.com.invalid> wrote:
>
>>Right now I'm running battery only because I have perfectly useful
>>rechargeables. Anyway, it is giving me a chance to see if the PS adds
>>any noise. It doesn't appear to.
>
>
> Hi OM,
>
> That is fortunate. Try not to introduce any grounds such as you
> discuss below.
>
>
>>It would seem this is another place where various holy wars have waged
>>over the years. My survey of the literature indicates that a great many
>>people don't even consider a dipole of any stripe fed to an unbalance
>>RX/TX as a "dipole."
>
>
> Dipole has only one meaning of value: Two Poles. Each pole acts as
> the electromotive opposite of the other. Without opposites, no
> current flows (and in a sense, a monopole finds its dipolar opposite
> in ground).
>
I've had an epiphany of sorts, and I think you may be partially to blame! Well, that and "Basic Electronics" published by the US Navy.

The reason I'm so doggedly trying to get all this is that I'm also working on getting my amateur radio license. One problem with this is that I may be conflating "best practises" I'm reading about for TX with RX purposes. This is the danger of just enough knowledge. I'm determined to learn how these devices work, and how to best use them.

However, last night I realized that I can think about a RX antenna as an HF AC current /generator/ running with a small voltage potential (i.e., ~1 uV), and that my receiver completes this AC circuit.

Then it follows that a longwire needs an RF ground (of some nature) to "complete" the circuit. Hence, the use of a counterpoise in some situations. My receiver is one part of an AC circuit that wants some kind of RF ground to see the voltage potential being generated by the antenna. Crystal radio sets seem less like magic now.

Of course, grounds for lightning, static or noise attenuation is related, but not specifically part of the antenna as an AC generator.

So, my "folded dipole" (or, likewise, any doublet) does not rely on ground to complete this AC circuit, and works relatively well as an AC generator with a small voltage potential it presents at the receiver front-end. It follows that all the ground I should need (for good operation) is a good chassis ground, even if that is only the neutral side of the wall-wart (is that where it is?). Other issues like ground loops, reduction of common-mode noise &etc. is a separate issue; these can *sometimes* be solved by different devices on the antenna system, but I see now how they could also add problems.

So, when people complain about balance/unbalanced situations, they often talk about the radiation lobes of a TX antenna being uneven in some manner they would like to minimize. Perhaps there are gain issues, as well. I have no idea how my analogy works in this regard with RX antennas (perhaps my dipole will be slightly "deaf" on a particular axis if I do not balance/tune it before plugging it into my receiver), but I can take a baby step and suggest that the various things we can put between the antenna and the receiver are often RLC circuits meant to lengthen or shorten the electrical length of the wire. The main intent is to manipulate the resonance of the antenna for whatever purpose.

I know my explanation has a certain amount of hand-waving and holes, but it is really helping me understand how the antenna fits into the receiver as a total system.

The rest of your comments make a lot more sense to me when I think of things in this manner.

Thanks to everyone in this thread for coaching me in what I hope is the right direction.

-- cm

3759. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 18:06:16 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns961A673231BD8spectrumhogstarbandn@207.106.92.175>
Source record: 80651

>
> Just look at Walt Disney Co. Eisner is leaving but not fast enough,
> he has 900 million is disney shares, while the state of NC pension plan
> only holds 90 million worth of stock.
>

Just for clarity, I want to point out that Disney, (and all the other businesses you cited), are money making propositions. The State of NC is a money spending organization, not money making. Quite a difference.

Ed

3760. Re: Here are the links:Magnetic Loop Antenna, AOR Digital Voice Modem.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 18:17:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113e9m8c7t25h04@corp.supernews.com>
Source record: 80652

As far as I can determine, "magnetic loop" (often shortened to "magloop") is a term strictly used by amateurs. It came into popular use something like 15 or 20 years ago. The name enhances the widely held mistaken belief among amateurs that it responds only to magnetic fields. I've seen the term "magnetic probe" or "magnetic antenna" in the EMC community to describe such antennas because of their near field characteristics.

The CFA antenna has transmogrified to the EH antenna, which is still being promoted by its creators and disciples. There will always be a market for this sort of antenna, along with astrology and homeopathic remedies, among people who lack the critical skills to evaluate evidence.

Roy Lewallen, W7EL

J. B. Wood wrote:
> In article <p23e31hbvd79rtdcouiq3hdedtq4erpdsu@4ax.com>, Richard Clark
> <kb7qhc@comcast.net> wrote:
>
>
>>On Tue, 15 Mar 2005 07:33:53 -0500, wood@itd.nrl.navy.mil (J. B. Wood)
>>wrote:
>>
>>>That an electrically small loop behaves as a magnetic current
>>>element does not qualify the use of "magnetic" in its name, IMHO.
>>
>>Hi John,
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>>Magnetic antennas have a basis in a
>>lot of scientific literature.
>>
>
>
> Hello, and while I'm certainly aware of the term "magnetic dipole" (a
> theoretically tiny magnet that can be equated to a miniature current
> loop), I still maintain "magnetic antenna" is misleading (I would take it
> to mean a mag-mount antenna) and don't remember seeing it in any textbook
> or any peer-reviewed paper published in a respected journal such as the
> IEEE Transactions on Antennas and Propagation. As to how it might be used
> by the ARRL (a source of a wealth of practical antenna info) or the
> amateur radio community at large I can't say. And yes, electrically small
> loops are the subject of considerable literature. Sincerely,
>
> P.S. Are any folks out there still extolling the virtues of the
> Crossed-Field Antenna (CFA) other than those at antennex.com?

>
> John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
> Naval Research Laboratory
> 4555 Overlook Avenue, SW
> Washington, DC 20375-5337

3761. Re: Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 18:33:59 UTC
From: WA6IPD <wa6ipd@dslextreme.com>
Message-ID: <c00982b94c29949e86a9cd694bbff069@localhost.talkaboutradio.com>
Source record: 80653

I have a home brew Carolina Windom that I have pruned for 80 meters. I have compared it with a G5RV and a full size inverted V for 80 meters. I like to chase 80 meter DX and I am in Southern California. The Windom gets much better reports than the G5RV on both 80 & 40 those are the only bands I checked and I can find little difference between it and the full size inverted V. Some times the inverted V will be better by one s unit then the Windom will be but for DX the Windom always seems better and I get very good reports out of the Pacific. I think different antennas work differently at each QTH and only experimenting will reveal whats best for you.

3762. Re: Single wire aerial - what do I do?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 19:19:02 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <72pjg2-u0b.ln1@p400bob.lse.com.au>
Source record: 80656

Hi Paul

> Couldn't quite understand that (word ot two missing?)

See if I can explain better..

A coax line will radiate (if its a transmitting circuit) and receive signal (as a receiving cct) if it isnt terminated into the (same) impedence at both ends of the cable that is the same as the cable itself. In other words the shield wire isnt always an effective screen. What is also an issue is if the symmetry of the source and load isnt preserved. ie if you feed a dipole direct with coax the "balanced" aerial and "unbalanced" coax will add up to an amount of line radiation. A balun is often used to balance an unbalanced feeder. This can either be a wire wound transformer or loops of coax. Feeding a vertical 1/4 wave whip is a good example of feeding an unbalanced antenna with unbalanced cable..

You can probably imagine that this coax radiating/receiving issue is a big problem when the cable runs through a cars engine compartment.

> Would this need a transformer, inductance/capacitance circuit, static
> resistor, or what??

Well that depends on the cct inside. Being a wide band device the impedence will vary greatly and no doubt have a reactive component. I have no idea what the norm is for FM broadcast receivers, even those with 75 ohm or 300ohm connectors! I'd suspect a simple L/C matching circuit would do it but might even opt for a small toroidal balun. I'd just assume that the Z would be about 300 ohms and create a 4:1 RF transformer (thats 2:1 turns) for the 75 ohm coax. The balun will tend to resolve any reactance and balance problem as well.

My personal preference for an antenna would be a single quad loop fed over the last 1/4 wave with a piece of RG62 93 ohm coax. This will match the Z of the antenna (about 110 ohms) with the coax. I'd also coil up about 5 turns of coax into a 3" loop where it feeds the antenna. This will resolve the balanced/unbalanced line radiation problem. This is of course more a transmitter config and given that you want to use over a wide range of freqs the 1/4 matching section would be a mute point.

> Bob, could you explain one mystery to me? A normal aerial arrangement,
> whether fed by ribbon or coax, is effectively one continuous loop of
> wire. DC resistance is at most a few ohms - ie pretty much a dead
> short. Impedence is resistance to AC, ie the signal, but the fact that
> impedence is present doesn't remove the dead short. So how come
> anything gets around the loop at all?!!

You have to think of the antenna as a tuned AC circuit. In fact completely throw away any thoughts of a DC circuit havning any effect whatsoever. Same kind of logic as a power transformer not looking like a short circuit. Think of the antenna as being feed by an instantaneous voltage that takes a fixed time to get from the feedpoint to where there is a "short cicruit" in the wire. The signal from one side of the coax arrives "in phase" with the one from the other side so no current flows between them. The trick is in the length of the wire in question. For a folded dipole the impedence looks like about 300 ohms provided the antenna is tuned to resonance. If you depart from resonance the conjugate impedence (resistive plus reactive) will always rise. If you start feeding this antenna at twice the freqency for what it was designed you end up with a very high impedence (say 10K plus ohms). You are now "voltage feeding" the thing.

It can and is a little more compex than this and I am not sure I have done it justice. Try another analogy. If you are pushing a child on a swing in sync with it, the energy you put in will be effectively used. If however you push in the exact opposite sense (by timing 180 degrees out of phase) you hit what look like a short circuit. Think in terms of instantaneous voltage in different parts of the antenna that change over time.

> And another: Where does this PD occur? Across the receiving element of
> the aerial, or within the element relative to earth? Does this mean an
> aerial 'loop" works differently from a single long wire?

Really testing my basic theory here! <grin>

For most applications you would tend to think that the volts would occur at the antenna feedpoint as an AC value 180 degrees difference from one side to the other. You can draw the instantaneous current and voltage on the wire if you like (and this is handy for working out the shape of the radiated pattern) but probably isnt helpful in your case.

Also think in terms of maximum power transfer with soruce and load Z... Reactance of course complicates that and the *real* theory involves looking at capacitive and indictive reactance..

I hope this all means something to you!

Cheers Bob

3763. Re: Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 19:19:35 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d17cg7lqi1@sparta.btinternet.com>
Source record: 80654

> I have a home brew Carolina Windom that I have pruned for 80 meters.
I
> have compared it with a G5RV and a full size inverted V for 80
meters. I
> like to chase 80 meter DX and I am in Southern California. The
Windom
> gets much better reports than the G5RV on both 80 & 40 those are the
only
> bands I checked and I can find little difference between it and the
full
> size inverted V. Some times the inverted V will be better by one s
unit
> then the Windom will be but for DX the Windom always seems better
and I
> get very good reports out of the Pacific. I think different
antennas work
> differently at each QTH and only experimenting will reveal whats
best for
> you.
>
==========

If you rotate the directions of all the antennas you will get a
completely different set of results and draw a different set of
conclusions. Which is correct?

Reg.

3764. i need a mike wiring digram for my ft 301 yaesu?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 19:36:46 UTC
From: coop874@webtv.net
Message-ID: <10932-4237394E-112@storefull-3275.bay.webtv.net>
Source record: 80655

thanks for any info

3765. Re: Here are the links:Magnetic Loop Antenna, AOR Digital Voice Modem.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 20:13:12 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-1503051513120001@jbw-mac.itd.nrl.navy.mil>
Source record: 80657

In article <113e9m8c7t25h04@corp.supernews.com>, Roy Lewallen
<w7el@eznec.com> wrote:

> As far as I can determine, "magnetic loop" (often shortened to
> "magloop") is a term strictly used by amateurs. It came into popular use
> something like 15 or 20 years ago. The name enhances the widely held
> mistaken belief among amateurs that it responds only to magnetic fields.
> I've seen the term "magnetic probe" or "magnetic antenna" in the EMC
> community to describe such antennas because of their near field
> characteristics.
>

Hello, Roy. The use of "magnetic probe" for a small loop(s) intended to sniff out induction (near) fields from a radiating structure seems appropriate. But using "magnetic antenna" for a small loop that is to be used as a far-field receiving antenna just doesn't make sense, IMHO. Ditto for a transmitting antenna. In the case of the receiving antenna, my hunch is that all this came about because the plane of the loop when aligned with the H-field vector of an incident plane wave produces maximum current in the loop. Sincerely,

John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

3766. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 20:14:27 UTC
From: john doe <john.doe@host.com>
Message-ID: <pan.2005.03.15.20.14.27.292174@host.com>
Source record: 80658

On Tue, 15 Mar 2005 02:53:22 +0000, Dave Platt wrote:

>
> Is that 58.5 inch figure a typo? Your NEC model says 51 inches, and
> my quickie spreadsheet calculation says 50.9 inches for a 145 MHz
> center of band.
>
Actually, the 51 you're seeing in the NEC model is probably the number of segments. One end is at 0,0,36 and the other is at 0,0,94.5; so yes it's really 58.5 inches. I came to this number by playing with the model until the REAL component of the impedance got as close to 50 as I could get it.

> I also wonder about the coil - it calculates out to be just over 1
> microHenry, or about j910 ohms at 145 MHz. That seems like quite a
> bit too much, based on jgboyles's posting earlier today indicating a
> feedpoint Z of about 80-j300.

My model comes up with a feedpoint impedance of 5.4485E+01-j2.8560E+03

So I tried to build a coil with an inductive reactance to cancel that .. I came up with 3.13 microhenries.

Is my model way off?????

3767. Re: i need a mike wiring digram for my ft 301 yaesu?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 20:37:36 UTC
From: Paul <paul@mbars.co.uk>
Message-ID: <42374792@212.67.96.135>
Source record: 80659

"j c" <coop874@webtv.net> wrote in message
news:10932-4237394E-112@storefull-3275.bay.webtv.net...
> thanks for any info
>

Hi
You will find the manual at
www.mbars.co.uk

its in the manuals section under Yaesu and it contains the pin out for the
mic.
Regards Paul

3768. Re: Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 20:55:55 UTC
From: Bert Craig <wa2si@optonline.netNOSPAM>
Message-ID: <N4IZd.31546$HT2.24715@fe11.lga>
Source record: 80660

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:d17cg7lqi1@sparta.btinternet.com...
>
>> I have a home brew Carolina Windom that I have pruned for 80 meters.
> I
>> have compared it with a G5RV and a full size inverted V for 80
> meters. I
>> like to chase 80 meter DX and I am in Southern California. The
> Windom
>> gets much better reports than the G5RV on both 80 & 40 those are the
> only
>> bands I checked and I can find little difference between it and the
> full
>> size inverted V. Some times the inverted V will be better by one s
> unit
>> then the Windom will be but for DX the Windom always seems better
> and I
>> get very good reports out of the Pacific. I think different
> antennas work
>> differently at each QTH and only experimenting will reveal whats
> best for
>> you.
>>
> ==========
>
> If you rotate the directions of all the antennas you will get a
> completely different set of results and draw a different set of
> conclusions. Which is correct?
> ----
> Reg.

The "correct" conclusion is the one that works for the individual proposing
the query.

I replaced a conventional 66' doublet with a Carolina Windom 40 LP. It was
put up in exactly the same place the doublet was. I immediately noticed that
I worked stations that I'd previously worked easier and their received sigs
were stronger as well. I also worked many stations that I'd not heard
before.

Does this mean the Windom is superior? No way! It just happened to work out
that way for my particular set of variables.

Don't forget, for every antenna you physically put up and actually yield
favorable results with, there will be a bunch of folks armed with an antenna

modeling program who will tell you why it can't work.

If it works for you, enjoy it. I'm going to try a full-wave loop next.

--
Vy 73 de Bert
WA2SI
FISTS #9384
QRP ARCI #11782

3769. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 21:09:19 UTC
From: nm5k@wt.net
Message-ID: <1110920959.330894.317170@o13g2000cwo.googlegroups.com>
Source record: 80661

Hummm...Should be about .336 mh for a grounded coil.
About .182 mh for a insulated coil. In the real
world will usually amount to about 5 turns of coil
average on say a .5 to 1 inch form. Trim coil for
best match. MK

3770. Re: Drill vs. MagMount ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 21:17:18 UTC
From: nm5k@wt.net
Message-ID: <1110921438.144901.295040@f14g2000cwb.googlegroups.com>
Source record: 80662

I can't see how the mag mount could change the
pattern shape any, so your experience indicates a severe loss in the
coupling capacitor, maybe as high as 90% or more.....

A pretty large amount...I guess it is possible maybe my
mag mount performance was down a bit due to it being
knocked off the car so many times...Not sure why that
would effect it much though..Maybe the connections were
getting a bit corroded also...Hard to say really...
Probably would be a better test to compare against a
brand new one...The one I had was the standard rectangular
looking larson mag mount. Looks sorta like a small box with
magnets underneath..I do have to say though...When I switched
to the hole mount, the increase in performance was instantly
noticable, as I knew what all the local machines did as far
as strength before the switch.
BTW, my comparison was mainly just receive on
various repeaters...Being things are reciprical, I never
really worried about transmit tests...MK

3771. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 22:14:55 UTC
From: "aunwin@insightbb.com"
Message-ID: <z7JZd.72810$Ze3.18628@attbi_s51>
Source record: 80663

Thats interesting Mac I am going to look at that to see what he did.
I modelled a wierd 20 metre antenna today and it finished up with four lobes
in aq vertical direction at the front and the same number of vertical lobes
at the rear.
Need to find out what causes extra lobes. The extra lobes did drop the TOA
down
however to around 8 to 9 degrees
Regards
Art

"J. Mc Laughlin" <jcm@power-net.net> wrote in message
news:113em7uh35clq24@corp.supernews.com...
> While looking for something else, I came across two interesting antennas
> in
> the USPTO data base. Sixty years separates their filing dates.
>
> Patent 2,268,640 shows an antenna invented by the famous George H. Brown.
> It may be the first use of nested Yagi type antennas.
>
> Patent 6,411,264 shows a supposed improvement on the 8JK antenna such that
> efficiency is preserved and a large F/B is effected. The inventor is
> N7CL.
>
> Http://www.uspto.gov/ is a place to start. Go to Patents and then to
> Patent Searches.
>
> Enjoy, Mac N8TT
>
> --
> J. Mc Laughlin; Michigan U.S.A.
> Home: JCM@Power-Net.Net
>
>

3772. Re: Single wire aerial - what do I do?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 23:02:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113eqd5h992hk03@corp.supernews.com>
Source record: 80664

Bob Bob wrote:
> . . .

> A coax line will radiate (if its a transmitting circuit) and receive
> signal (as a receiving cct) if it isnt terminated into the (same)
> impedence at both ends of the cable that is the same as the cable
> itself. In other words the shield wire isnt always an effective screen.

This is a common misconception, but it's not true -- the presence of current on the outside of a coax line (which is the cause of radiation and signal pickup) has nothing to do with the impedance match at either end of the line.

> What is also an issue is if the symmetry of the source and load isnt
> preserved. ie if you feed a dipole direct with coax the "balanced"
> aerial and "unbalanced" coax will add up to an amount of line radiation.

That's not entirely correct, either. A coax line can be just as "balanced" as twinlead, and twinlead can be just as "unbalanced" as coax. Imbalance is caused by other factors besides physical symmetry -- see "Baluns: What They Do and How They Do It" in the ARRL Antenna Compendium, Vol. 2, for example.

>. . .

>
> You have to think of the antenna as a tuned AC circuit. In fact
> completely throw away any thoughts of a DC circuit havning any effect
> whatsoever. Same kind of logic as a power transformer not looking like a
> short circuit. Think of the antenna as being feed by an instantaneous
> voltage that takes a fixed time to get from the feedpoint to where there
> is a "short cicruit" in the wire. The signal from one side of the coax
> arrives "in phase" with the one from the other side so no current flows
> between them. The trick is in the length of the wire in question. . .

I don't quite follow this, so I might be misinterpreting what was said, but it doesn't sound quite right. A small loop has a small value of resistance but a moderate amount of inductance. So the impedance (composed of the resistance and inductive reactance), although low, is considerably higher than just the low-frequency value. Although the reactance provides the lion's share of the impedance, even the resistance is quite a bit higher than the low frequency value due to skin effect. As the antenna gets larger, the inductance increases and, due to capacitive effects, the antenna eventually becomes resonant. That's the frequency at which the inductive and capacitive reactances just cancel. A short dipole antenna, on the other hand, has a much lower

impedance at RF than its low frequency value, primarily due to the capacitance between the two conductors. Its impedance is composed of a small resistance and a large capacitive reactance.

The current on the center conductor of the coax isn't in phase with the current on the shield -- it's exactly out of phase with the current on the inside of the shield. So the same amount of current that flows out of the inner conductor flows back along the inside of the shield. In this way, an antenna behaves just like any other electric circuit.

> . . .

Roy Lewallen, W7EL

3773. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 23:44:43 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <jvqe31ptijmpo55slls216o3rsghdc2c7j@4ax.com>
Source record: 80665

On Tue, 15 Mar 2005 16:51:36 -0500, "J. Mc Laughlin"
<jcm@power-net.net> wrote:

>Patent 6,411,264 shows a supposed improvement on the 8JK antenna such that
>efficiency is preserved and a large F/B is effected. The inventor is N7CL.

Hey, I know Eric. See: http://www.cal-av.com/antennas.html

for the commercial version of his design.

3774. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 23:56:40 UTC
From: jgboyles@aol.com
Message-ID: <1110931000.046008.137150@g14g2000cwa.googlegroups.com>
Source record: 80666

Dave Platt wrote:
> In article <1110838928.281961.322100@o13g2000cwo.googlegroups.com>,
> <jgboyles@aol.com> wrote:

>
> On second reading of that QST article, I admit to being a bit
curious.

> I infer that in the W9WQ version, the stub wire is performing two
> functions at once - it's adding a series inductance, and it's also
> coupling the RF out onto the radiator in a capacitive fashion. This
> would imply that the stub needs to provide a bit more inductive
> reactance than in the K4LPQ shorted-coax version, with some of this
> reactance cancelling out the radiator's -j300 and the rest cancelling
> out whatever amount of capacitive reactance exists between the stub
> wire and the radiator.
>
> Am I reading this right, or am I missing something?

I took a look at the Smith Chart, and for impedances in this region
of the chart, series L and parallel C is not the way to get a match. In
my version, 80-j300, you need 4.7pf shunt C and .15uH series L. I have
no idea how Fig. 1C in the article managed to get a good match with the
single insulated wire up the middle of the radiator.
I seem to recall a tri-band beam (TA-33 jr.?) that used this type of
matching. Must work, so I guess I am missing something.
Gary N4AST

3775. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-15 23:57:37 UTC
From: john doe <john.doe@host.com>
Message-ID: <OJCdncWlRpTu66rfRVn-qQ@comcast.com>
Source record: 80667

Wow, I didn't even consider the pattern ....

Thanks for all the advice ... I'll have another go at it and let you know
how I make out.

--> ka2pbt

"Dave Platt" <dplatt@radagast.org> wrote in message
news:113eln62s497d2@corp.supernews.com...
> In article <pan.2005.03.15.20.14.27.292174@host.com>,
> john doe <john.doe@host.com> wrote:
>
>>> Is that 58.5 inch figure a typo? Your NEC model says 51 inches, and
>>> my quickie spreadsheet calculation says 50.9 inches for a 145 MHz
>>> center of band.
>>>
>>Actually, the 51 you're seeing in the NEC model is probably the number of
>>segments. One end is at 0,0,36 and the other is at 0,0,94.5; so yes it's
>>really 58.5 inches.
>
> Whups... my bad.
>
>> I came to this number by playing with the model until
>>the REAL component of the impedance got as close to 50 as I could get it.
>
> Hmmm. What did that do to the pattern? You no longer have a 5/8-wave
> antenna. Adding about 8 inches has brought it very close to being a
> 3/4-wave radiator. As such, it's going to have a substantially lower
> amount of towards-the-horizon energy in its pattern, and a big lobe
> aiming upwards at roughly 45 degrees above the horizon.
>
> This is the classic problem with running a 2-meter J-pole on 440 -
> it'll load up and radiate, but a lot of its radiation is aimed at
> airplanes rather than repeaters :-(
>
>>> I also wonder about the coil - it calculates out to be just over 1
>>> microHenry, or about j910 ohms at 145 MHz. That seems like quite a
>>> bit too much, based on jgboyles's posting earlier today indicating a
>>> feedpoint Z of about 80-j300.
>>
>>My model comes up with a feedpoint impedance of 5.4485E+01-j2.8560E+03
>>
>>So I tried to build a coil with an inductive reactance to cancel that .. I
>>came up with 3.13 microhenries.
>>

>>Is my model way off?????
>
> I think you might want to take two looks at it:
>
> - Check the radiation pattern. By lengthening it to get a 50-ohm
> resistive component in the feedpoint, I suspect you've given up
> much of the gain benefit of a true 5/8-wave radiator. You may
> actually have less towards-the-horizon power and sensitivity than
> you'd get with a 1/4-wave groundplane or a 1/2-wave J-pole.
>
> - Check the formula and actual inductance for your coil.
>
> With so much capacitive reactance from the radiator to cancel out with
> the coil, I suspect that you may also find that you've calculated out
> an antenna which is going to be rather narrow-banded. Even slight
> frequency shifts, or errors in the coil winding (a fraction of a turn)
> could leave you with a lot of residual reactance and an unacceptable
> SWR.
>
> --
> Dave Platt <dplatt@radagast.org> AE6EO
> Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

3776. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 00:31:12 UTC
From: jgboyles@aol.com
Message-ID: <1110933072.445852.99720@o13g2000cwo.googlegroups.com>
Source record: 80668

> Can the 5/8 wave antenna be matched with a tuning stub such as the
> J-Pole uses?
>
>
> --
> 73 for now
> Buck
> N4PGW

Yes, A 5/8 radiator with an input Z of 80-j300 with series 19cm of 450 ohm line will be about 55-j0 ohms. Of course all of this is highly dependent on the antenna environment on 2m.
Gary N4AST

3777. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 01:09:20 UTC
From: dplatt@radagast.org
Message-ID: <113f1q0ccuf2b7f@corp.supernews.com>
Source record: 80669

>> Am I reading this right, or am I missing something?
>
> I took a look at the Smith Chart, and for impedances in this region
>of the chart, series L and parallel C is not the way to get a match. In
>my version, 80-j300, you need 4.7pf shunt C and .15uH series L. I have
>no idea how Fig. 1C in the article managed to get a good match with the
>single insulated wire up the middle of the radiator.

It's possible he isn't creating a full match (with an L network) in this case. He might just be cancelling out the negative reactance, using a combination of (series L from the stub, and a bit of series C from the capacitive coupling between stub-feed and radiator), and not bothering with a shunt component at all. This would, perhaps, result in an 80+0j feedpoint impedance and about a 1.6 SWR at the feedpoint, which would probably end up significantly lower at the other end of the feedline due to feedline losses.

Or, there might be something stranger going on, with the stub giving a bit of shunt C to ground (in the PL-259), some parallel L/C inside the radiator, and six other bits of odd voodoo.

The author says that it ought to be possible to get down to below 1.5:1 on the repeater portion of the band... this suggests that the design isn't one which "tries" to achieve a true 1:1 match. The WA-2 and similar 5/8-wave antennas using a tapped coil seem to be able to get down arbitrarily close to 1:1 at their best.

Beats me. Almost makes me want to try building one just to measure it out and see how well it can work. On the other hand, given the comments by Cebik and others about the somewhat illusory nature of the gain advantage of a 5/8-wave, I may just stick with J-poles and quarterwave ground planes.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

3778. :: :: :: :: *post 1005* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3779. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 01:33:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ki2f319b45rivjdcutc226l424cu9v4ogg@4ax.com>
Source record: 80670

On Tue, 15 Mar 2005 12:53:33 -0500, clvrmnky
<clvrmnky-uunet@coldmail.com.invalid> wrote:
>I've had an epiphany of sorts, and I think you may be partially to
>blame! Well, that and "Basic Electronics" published by the US Navy.

Hi OM,

I was an Instructor at the Navy's Electronic Technician School at
Treasure Island. Get yourself a copy of Terman's "Electronic and
Radio Engineering" (the 1955 version) to find the level of coursework
that was offered at this school. It is very accessible reading and
noteworthy for being comprehensive without being a sleeping pill.

>However, last night I realized that I can think about a RX antenna as an
>HF AC current /generator/ running with a small voltage potential (i.e.,
>~1 uV), and that my receiver completes this AC circuit.

Good that you picked this up yourself. It is a useful metaphor.

>Then it follows that a longwire needs an RF ground (of some nature) to
>"complete" the circuit. Hence, the use of a counterpoise in some
>situations. My receiver is one part of an AC circuit that wants some
>kind of RF ground to see the voltage potential being generated by the
>antenna. Crystal radio sets seem less like magic now.

Quite so.

> It follows that all the ground I should need (for good
>operation) is a good chassis ground, even if that is only the neutral
>side of the wall-wart (is that where it is?).

Well, this is getting close to the mystery of your understanding. As
simple as ground is, it is so often taken for granted that many don't
really understand it at all.

As for the Neutral connection of the mains NO THAT IS NOT GROUND!

DO NOT PROCEED FURTHER with any wire work at that service until you
research this completely.

However, as a point of intuition, ground is so tightly coupled to this
wire (at RF) so as to be the missing half of the longwire system.
This is why I commented on the distinction of being completely battery
operated (hence no ground coupling).

>Other issues like ground
>loops, reduction of common-mode noise &etc. is a separate issue; these
>can *sometimes* be solved by different devices on the antenna system,

>but I see now how they could also add problems.

This goes again to the common misunderstanding. You won't suffer a ground loop until it occurs. Solving it will be one of life's greatest struggles, and the solution, if stumbled upon, will appear to be one of life's greatest mysteries. Again, battery operation creates its own bubble of isolation from these issues - however, adding a charger brings the prospects back into the equation.

>So, when people complain about balance/unbalanced situations, ...

Here you get into uncharted waters. Spend some more time here before you solo again.

73's
Richard Clark, KB7QHC

3780. Re: :: :: :: :: *post 1005* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3781. Re: Drill vs. MagMount ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 02:24:00 UTC
From: SBC News Server <w9wy@sbcglobal.net>
Message-ID: <4NMZd.20926$hU7.19036@newssvr33.news.prodigy.com>
Source record: 80674

The mag mount depends on capacitve coupling to ground while the "drill a whole in the roof" mount is directly connected to the ground plane.

Also, when using a hole in the roof antenna there is no problem withcoaxing being crimped in a door or window, etc. I have used the NMO (Motorola style) in the roof mounts for 2 meters and 450 MHz since 1978 with various vehicles. No problems. IMHO, it is the ONLY way to go.

John

3782. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 02:57:31 UTC
From: "aunwin@insightbb.com"
Message-ID: <vgNZd.136420$tl3.24122@attbi_s02>
Source record: 80673

I don't operate on 40 M so I may be missing something but exactly what is it
that stands
out with this antenna that would make it desirable to hams? Efficiency would
be reflected by the loads
used which is not necessarily "state of the art". He then states "a large
F/B is effected"
but it doesn't show before and after overlaid plots !
Would hams have an interest in a two element 20 M
antenna that have lower TOA than the norm, say 9 degrees instead of the
normal 14 degrees?
I think I can quickly put one together for the week end while putting the
present assembly aside.
Regards
Art

"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:jvqe31ptijmpo55slls216o3rsghdc2c7j@4ax.com...
> On Tue, 15 Mar 2005 16:51:36 -0500, "J. Mc Laughlin"
> <jcm@power-net.net> wrote:
>
>>Patent 6,411,264 shows a supposed improvement on the 8JK antenna such that
>>efficiency is preserved and a large F/B is effected. The inventor is
>>N7CL.
>
> Hey, I know Eric. See: http://www.cal-av.com/antennas.html
>
> for the commercial version of his design.

3783. Re: Drill vs. MagMount ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 03:03:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113f8g3thv42tac@corp.supernews.com>
Source record: 80677

All you say is true. I'm just having trouble envisioning what it is about the mag mount's effective capacitor that could cause it to dissipate 90% of the power being fed to the antenna. That's one outrageous ESR, even more so considering the size of the effective capacitor.

I personally find a mag mount to be convenient, since I use my two meter radio only a few times a year at most, and in two different cars. I'm perfectly willing to take a little hit in performance for the convenience, but not to the tune of 10 dB or more like MK reported. And if there really is any significant performance sacrifice at all, it means that there's something I don't understand and would like to. If there's a 10+ dB difference, there's something I *really* don't understand. The fact that I get a nearly 1:1 SWR with the mag mount makes it even more puzzling -- if the capacitor had an ESR of over 300 ohms (which it would have to in order to drop the signal 10 dB), the SWR would be terrible.

But "Korbin Dallas" said: "Yes a properly installed antenna will out perform a MagMount, always has alway will." That's a very positive statement, with no room for exceptions. But so far I haven't seen any reason why it should be true except for MK's single experience that doesn't make sense unless there was some other problem, like damaged coax, with his mag mount. (I can see the possibility for poor performance in an HF mag mount -- but like the OP, I'm talking only about VHF/UHF ones.)

I've used a VHF mag mount for over 20 years and have had to replace the coax only once. But then again, I use it very infrequently.

Roy Lewallen, W7EL

SBC News Server wrote:
> The mag mount depends on capacitve coupling to ground while the "drill a
> whole in the roof" mount is directly connected to the ground plane.
>
> Also, when using a hole in the roof antenna there is no problem withcoaxing
> being crimped in a door or window, etc. I have used the NMO (Motorola
> style) in the roof mounts for 2 meters and 450 MHz since 1978 with various
> vehicles. No problems. IMHO, it is the ONLY way to go.
>
> John
>
>

3784. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 03:09:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113f8r1sgt7efa2@corp.supernews.com>
Source record: 80675

I had to chuckle over this -- Art being critical of another antenna design because the designer doesn't produce adequate quantitative data or explain clearly what its advantages are.

Thanks for the entertainment. I need a break from reality once in a while.

Roy Lewallen, W7EL

aunwin@insightbb.com wrote:
> I don't operate on 40 M so I may be missing something but exactly what is it
> that stands
> out with this antenna that would make it desirable to hams? Efficiency would
> be reflected by the loads
> used which is not necessarily "state of the art". He then states "a large
> F/B is effected"
> but it doesn't show before and after overlaid plots !
> Would hams have an interest in a two element 20 M
> antenna that have lower TOA than the norm, say 9 degrees instead of the
> normal 14 degrees?
> I think I can quickly put one together for the week end while putting the
> present assembly aside.
> Regards
> Art

3785. :: :: :: :: *post 1005* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3786. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 03:26:35 UTC
From: Korbin Dallas <korbindallas@yahoo.com>
Message-ID: <pan.2005.03.16.03.26.21.738738@yahoo.com>
Source record: 80678

On Sun, 13 Mar 2005 16:30:07 +0000, Clarence_A wrote:

>
> "Korbin Dallas" <korbindallas@yahoo.com> wrote in message
> news:pan.2005.03.13.15.07.38.458717@yahoo.com...
>> On Thu, 03 Mar 2005 13:24:36 -0800, WA2SI wrote:
>>
>> > Hi folks,
>> >
>> > I just bought a batch of Amphenol PL-259 83-1SPs to assemble
> some
>> > jumpers. When did Amphenol shift from 'Made In USA' to
> 'Assembled In
>> > Mexico'? The whole reason for buying Amphenol was to:
>> >
>> > A) Enjoy that Amphenol quality. (BTW, they don't even look the
> same.
>> > The dielectric has a cheap milky recycled look and the name
> and model
>> > nr. are no longer stamped into the sleeve ring.)
>> >
>> > B) Support products 'Made In USA'.
>> >
>> > Ok, this was my two minute rant. Tnx fer listening.
>> >
>> > 73 de Bert
>> > WA2SI
>> > FISTS #9384
>> > QRP ARCI #11782
>>
>> If the product was built in the USA the price would be so High
> you
>> would not purchase it.
>>
>> Would you really pay %500 more for the same product just to have
> Made
>> in USA stamped on it? We always look for the bargain price and
> that
>> usually means foreign produced products.
>>
>> Moving production to Mexico where manufacturing cost are lower
> allows
>> Amphenol to remain in business.
>>

>> These days Mexico is being undersold by China where the cost are
> less than
>> that of Mexico.
>>
>
> BS!
>
> There are connector houses who assemble in the US on custom order
> and they are no more expensive than the assembled in Mexico parts.
>
> Amphenol went to Mexico to get away from the union that was
> breaking their back!

Exactly, the Unions demands were driving the labor cost to the point
where they were not able to compete, so the moved the operation to Mexico
where it was not an issue.

3787. Re: Marine band antenna for the Yaesu VX-7R

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 03:39:47 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <7UNZd.5381$qf2.2511@newsread2.news.atl.earthlink.net>
Source record: 80679

I had a VX7-r, I was not impressed with it's receive capabilities on HF.
Since it is SUPPOSED to be a VHF/UHF rig I wasn't too surprized.......

"Spam Fighter" <spamcollector@sympatico.ca> wrote in message
news:pan.2005.03.15.14.11.40.534074@sympatico.ca...
> On Tue, 15 Mar 2005 17:23:34 +0800, muskie wrote:
> Cool radio! How do you like it? Have you used it to work any ham radio
> satellites, or copy any weather satellite pictures? How is for cross
> talk? What do you think of the HF receiver? Have you copied any weather
> charts off of HF with it?

3788. Re: :: :: :: :: *post 1005* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3789. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 04:06:47 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <31cf31115cjbosfrl6ma7q8alvoqsegm7f@4ax.com>
Source record: 80681

On Wed, 16 Mar 2005 02:57:31 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>I don't operate on 40 M so I may be missing something but exactly what is it
>that stands
>out with this antenna that would make it desirable to hams? Efficiency would
>be reflected by the loads
>used which is not necessarily "state of the art". He then states "a large
>F/B is effected"
> but it doesn't show before and after overlaid plots !

Before and after what?

>Would hams have an interest in a two element 20 M
>antenna that have lower TOA than the norm, say 9 degrees instead of the
>normal 14 degrees?

>I think I can quickly put one together for the week end while putting the
>present assembly aside.
>Regards
>Art
>
>
>"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
>news:jvqe31ptijmpo55slls216o3rsghdc2c7j@4ax.com...
>> On Tue, 15 Mar 2005 16:51:36 -0500, "J. Mc Laughlin"
>> <jcm@power-net.net> wrote:
>>
>>>Patent 6,411,264 shows a supposed improvement on the 8JK antenna such that
>>>efficiency is preserved and a large F/B is effected. The inventor is
>>>N7CL.
>>
>> Hey, I know Eric. See: http://www.cal-av.com/antennas.html
>>
>> for the commercial version of his design.
>

3790. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 04:16:36 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <vbcf319r850qcjiak6b20k1cmr4t4baau6@4ax.com>
Source record: 80682

On Wed, 16 Mar 2005 02:57:31 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>I don't operate on 40 M so I may be missing something but exactly what is it
>that stands
>out with this antenna that would make it desirable to hams? Efficiency would
>be reflected by the loads
>used which is not necessarily "state of the art". He then states "a large
>F/B is effected"
> but it doesn't show before and after overlaid plots !
>Would hams have an interest in a two element 20 M
>antenna that have lower TOA than the norm, say 9 degrees instead of the
>normal 14 degrees?

That last post got away from me too soon. Yes, I'd like a "TOA" of 9
degrees. Unfortunately, I don't have room for a 110' tower. Now what
do I do?

3791. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 04:17:50 UTC
From: "aunwin@insightbb.com"
Message-ID: <OrOZd.136931$tl3.29727@attbi_s02>
Source record: 80683

The gentleman has his patent.
If I disclosed how this could be beat on this forum would I still be able to get a patent for myself if I so desire? Or would it be best to not disclose it at all?
I could not see or define the advantages from what I read which is why I placed the posting.
Absolutely nothing wrong with that Roy, you must be losing it.
Actually I have heard the same thing said of your computor program instructions
Regards
Art

"Roy Lewallen" <w7el@eznec.com> wrote in message news:113f8r1sgt7efa2@corp.supernews.com...
>I had to chuckle over this -- Art being critical of another antenna design
>because the designer doesn't produce adequate quantitative data or explain
>clearly what its advantages are.
>
> Thanks for the entertainment. I need a break from reality once in a while.
>
> Roy Lewallen, W7EL
>
> aunwin@insightbb.com wrote:
>> I don't operate on 40 M so I may be missing something but exactly what is
>> it that stands
>> out with this antenna that would make it desirable to hams? Efficiency
>> would be reflected by the loads
>> used which is not necessarily "state of the art". He then states "a
>> large F/B is effected"
>> but it doesn't show before and after overlaid plots !
>> Would hams have an interest in a two element 20 M
>> antenna that have lower TOA than the norm, say 9 degrees instead of the
>> normal 14 degrees?
>> I think I can quickly put one together for the week end while putting the
>> present assembly aside.
>> Regards
>> Art

3792. Re: Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 05:15:44 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d18fe0qfp1@sparta.btinternet.com>
Source record: 80685

> I replaced a conventional 66' doublet with a Carolina Windom 40 LP.
It was
> put up in exactly the same place the doublet was. I immediately
noticed that
> I worked stations that I'd previously worked easier and their
received sigs
> were stronger as well. I also worked many stations that I'd not
heard
> before.
>
> Does this mean the Windom is superior? No way! It just happened to
work out
> that way for my particular set of variables.
>
==========

Yes. It may have been nothing to do with your antennas. By chance it could have been a different time of day. Plus a different set of distant amateur stations, in different locations, at different distances, using different power and antennas, which you can't rustle up to order. As the days and weeks go by ionospheric conditions change.

Reg.

3793. :: :: :: :: *post 1007* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3794. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 05:21:29 UTC
From: "aunwin@insightbb.com"
Message-ID: <snPZd.73346$Ze3.15870@attbi_s51>
Source record: 80686

"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:31cf31115cjbosfrl6ma7q8alvoqsegm7f@4ax.com...
> On Wed, 16 Mar 2005 02:57:31 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>>I don't operate on 40 M so I may be missing something but exactly what is
>>it
>>that stands
>>out with this antenna that would make it desirable to hams? Efficiency
>>would
>>be reflected by the loads
>>used which is not necessarily "state of the art". He then states "a large
>>F/B is effected"
>> but it doesn't show before and after overlaid plots !
>
> Before and after what?

The original design is 50 years old.
He infers that he has improved the design,
specifically with respect to F/B
What was it before and to what amount was it improved ?
Art

,

>
>
>>Would hams have an interest in a two element 20 M
>>antenna that have lower TOA than the norm, say 9 degrees instead of the
>>normal 14 degrees?
>
>
>>I think I can quickly put one together for the week end while putting the
>>present assembly aside.
>>Regards
>>Art
>>
>>
>>"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
>>news:jvqe31ptijmpo55slls216o3rsghdc2c7j@4ax.com...
>>> On Tue, 15 Mar 2005 16:51:36 -0500, "J. Mc Laughlin"
>>> <jcm@power-net.net> wrote:
>>>
>>>>Patent 6,411,264 shows a supposed improvement on the 8JK antenna such
>>>>that

>>>>efficiency is preserved and a large F/B is effected. The inventor is
>>>>N7CL.
>>>
>>> Hey, I know Eric. See: http://www.cal-av.com/antennas.html
>>>
>>> for the commercial version of his design.
>>
>

3795. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 05:25:07 UTC
From: "aunwin@insightbb.com"
Message-ID: <TqPZd.73351$Ze3.3881@attbi_s51>
Source record: 80687

"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:vbcf319r850qcjiak6b20k1cmr4t4baau6@4ax.com...
> On Wed, 16 Mar 2005 02:57:31 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>snip
>
> That last post got away from me too soon. Yes, I'd like a "TOA" of 9
> degrees. Unfortunately, I don't have room for a 110' tower. Now what
> do I do?
>
Use a cell phone
Art

3796. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 05:36:51 UTC
From: John Doe <JohnDoe@0.0.0.0>
Message-ID: <4237c5a7$0$22221$afc38c87@news.optusnet.com.au>
Source record: 80688

Ok,

I have not followed all of this thread.

One of the pdf's shows a shunt tapped inductor
as the base loading.

This is an auto-transformer match.

The entire inductor is set to cancel the capacitive reactance
of the aerial, then the coax feed is tapped to the 50R point,
The result is 50R J0.

For 5/8 aerials you may want to look at a physical short radiator
with a capacity hat to lower the angle of radiation.

<jgboyles@aol.com> wrote in message
news:1110933072.445852.99720@o13g2000cwo.googlegroups.com...
>
>
>
>
> > Can the 5/8 wave antenna be matched with a tuning stub such as the
> > J-Pole uses?
> >
> >
> > --
> > 73 for now
> > Buck
> > N4PGW
>
> Yes, A 5/8 radiator with an input Z of 80-j300 with series 19cm of 450
> ohm line will be about 55-j0 ohms. Of course all of this is highly
> dependent on the antenna environment on 2m.
> Gary N4AST
>

3797. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 06:35:18 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7rkf31p725v45lrc45ciqc0ngs2btbmjrd@4ax.com>
Source record: 80689

On Wed, 16 Mar 2005 05:21:29 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>He infers that he has improved the design,
>specifically with respect to F/B
>What was it before and to what amount was it improved ?

Hi Art,

What are the answers to these same questions applied to your design?

73's
Richard Clark, KB7QHC

3798. :: :: :: :: *post 1007* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3799. :: :: :: :: *post 1007* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3800. :: :: :: :: *post 1007* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3801. Re: Single wire aerial - what do I do?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 10:34:14 UTC
From: (unknown)
Message-ID: <42380809.2729430@news.dial.pipex.com>
Source record: 80693

Yes Bob, what you're saying does make some sense and will make even more after I've read it a few times. So does Roy's.

I've got a pretty good handle on the basics, having a physics degree and a long interest in hobby electronics. But as black arts go, the workings of antennae and tuned circuits come pretty high on the list!

Some experimentation is obviously needed. I'll start with a simple dipole and a run of coax, the outer screen attached to chassis. How does that sound? Is it worth buying a proper aerial or, being in the loft, would a home-made rig suffice? What would you suggest design-wise?

Money isn't really an issue - just that there's no point in buying kit that turns out to be unnecessary. As I said, the signal is already improved by hooking up the flying aerial lead to the wire in the duct.

Meanwhile I'll let you guys fight out the theory!

Many thanks for your advice

Paul

3802. :: :: :: :: *post 1007* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3803. Re: Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 13:38:09 UTC
From: Bert Craig <wa2si@optonline.netNOSPAM>
Message-ID: <7FWZd.2030$ld5.1161@fe08.lga>
Source record: 80695

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:d18fe0qfp1@sparta.btinternet.com...
>> I replaced a conventional 66' doublet with a Carolina Windom 40 LP.
> It was
>> put up in exactly the same place the doublet was. I immediately
> noticed that
>> I worked stations that I'd previously worked easier and their
> received sigs
>> were stronger as well. I also worked many stations that I'd not
> heard
>> before.
>>
>> Does this mean the Windom is superior? No way! It just happened to
> work out
>> that way for my particular set of variables.
>>
> ================================
>
> Yes. It may have been nothing to do with your antennas. By chance it
> could have been a different time of day. Plus a different set of
> distant amateur stations, in different locations, at different
> distances, using different power and antennas, which you can't rustle
> up to order. As the days and weeks go by ionospheric conditions
> change.
> ----
> Reg.

Absolutely Reg, however, to be fair to the Windom, I have had them both up
for extended periods of time with the same results. Personally, I really
don't attribute the difference to the time of day or condx in this case.
More like orientation.

--
Vy 73 de Bert
WA2SI
FISTS #9384
QRP ARCI #11782

3804. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 14:25:41 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <d19fl4$t1o$1@f04n12.cac.psu.edu>
Source record: 80696

"Korbin Dallas" <korbindallas@yahoo.com> wrote in message
news:pan.2005.03.16.03.26.21.738738@yahoo.com...
> On Sun, 13 Mar 2005 16:30:07 +0000, Clarence_A wrote:
>
> >
> > "Korbin Dallas" <korbindallas@yahoo.com> wrote in message
> > news:pan.2005.03.13.15.07.38.458717@yahoo.com...
> >> On Thu, 03 Mar 2005 13:24:36 -0800, WA2SI wrote:
> >>
> >> > Hi folks,
> >> >
> >> > I just bought a batch of Amphenol PL-259 83-1SPs to assemble
> > some
> >> > jumpers. When did Amphenol shift from 'Made In USA' to
> > 'Assembled In
> >> > Mexico'? The whole reason for buying Amphenol was to:
> >> >
> >> > A) Enjoy that Amphenol quality. (BTW, they don't even look the
> > same.
> >> > The dielectric has a cheap milky recycled look and the name
> > and model
> >> > nr. are no longer stamped into the sleeve ring.)
> >> >
> >> > B) Support products 'Made In USA'.
> >> >
> >> > Ok, this was my two minute rant. Tnx fer listening.
> >> >
> >> > 73 de Bert
> >> > WA2SI
> >> > FISTS #9384
> >> > QRP ARCI #11782
> >>
> >> If the product was built in the USA the price would be so High
> > you
> >> would not purchase it.
> >>
> >> Would you really pay %500 more for the same product just to have
> > Made
> >> in USA stamped on it? We always look for the bargain price and
> > that
> >> usually means foreign produced products.
> >>
> >> Moving production to Mexico where manufacturing cost are lower
> > allows

> >> Amphenol to remain in business.
> >>
> >> These days Mexico is being undersold by China where the cost are
> > less than
> >> that of Mexico.
> >>
> >
> > BS!
> >
> > There are connector houses who assemble in the US on custom order
> > and they are no more expensive than the assembled in Mexico parts.
> >
> > Amphenol went to Mexico to get away from the union that was
> > breaking their back!
>
> Exactly, the Unions demands were driving the labor cost to the point
> where they were not able to compete, so the moved the operation to Mexico
> where it was not an issue.
>
>

It's a fact that most of the things that we take for granted where we work, like vacations, sick pay, overtime pay, the 40 hour week, retirement programs, and much else came into being because of unions. Somehow wanting a pay level and benefits that allow a decent standard of living has morphed into a bad thing. It's not unions that are the problem, it's wall street that forces management to live for the next quarter and expects un-reasonable results that is the problem. Innless of course you want our workers to live like they do in Mexico or China.

--
John Passaneau, W3JXP
Penn State University
w3jxp@arrl.net

3805. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 14:50:34 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4238480e$1_2@newsfeed.slurp.net>
Source record: 80697

"Dave Platt"
>... On the other hand, given the comments by Cebik and others
> about the somewhat illusory nature of the gain advantage
> of a 5/8-wave, I may just stick with J-poles and quarterwave
> ground planes.

Just to note that for AM broadcast verticals, the FCC requires a certain antenna "efficiency" for various classes of stations, in terms of the minimum ground wave field strength produced per kilowatt of input power to the radiator.

The FCC field strength minimum cannot be met by "Class A" stations (basically the 50kW-ers) using a 1/4-wave vertical radiator. At least a 1/2-wave radiator is needed in most cases.

The most common radiator height for Class A non-directional AM broadcast stations operating at 50kW day and night is 195ï¿½. A radiator height of 225ï¿½ (5/8 wave) maximizes ground wave field strength at a given power, but also produces a high-angle lobe that can interfere with the ground wave during night-time operation -- so rarely is used by AM broadcast stations. The ground wave field strength difference between 195ï¿½ and 225ï¿½ radiators is fairly small.

RF
Former staff engineer, WJR Detroit -- (Class A, 760kHz)

3806. Re: Single wire aerial - what do I do?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 14:59:59 UTC
From: richardharrison@webtv.net
Message-ID: <9620-423849EF-505@storefull-3257.bay.webtv.net>
Source record: 80698

Paul Davies has bad FM reception in his kitchen and would like to try an external antenna. Problem is that transmission lines require 2 wires or else they become part of the antenna themselves. The FM set has only a lone antenna wire and no ground connection.

Note that many FM sets have no antenna wire but use a clamp on the power cord to capacitively couple signal from the powerline.

Since Paul has an antenna wire, he can use the same sort of capacitive connection but to connect with the chassis (ground) that many other sets use for the "signal" connection to the set.

The clamp Paul adds around his power cord near the set chassis should connect to the inside of his coax cable shield, directly or indirectly. The antenna wire of his set can be shortened to insignificance and connected to the inner conductor of his coax.

In the loft, Paul can make a ground plane antenna to connect with his coax to the radio. The wavelength is 3 meters or about 10 feet. He could spread1/4-wave radials in a balanced and symmetrical manner to construct the horizontal part of his antenna. This would screen the vertical part of his antenna from interference and provide a terminal for the ground plane`s circulating capacitive current. Paul`s coax shield would connect with all the radial wires (2, 4, 6, or 8). Odd numbers work too so long as symmetry is preserved.

The vertical part of his antenna is a 2.5 ft. length of wire above the center of the ground plane. The center conductor of his coax connects to the vertical wire.

Paul could wind a half dozen turns in his coax directly beneath his ground plane to discourage signal on the outside of the coax. A W2DU ferrite choke could also be used. Chokes at both ends of the coax might be better. But operation may be entirely satisfactory with no chokes at all. It depends on local conditions.

Paul would have connections at both ends of his coax so it could operate as a proper transmission line,

Best regards, Richard Harrison, KB5WZI

3807. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 15:24:59 UTC
From: john doe <john.doe@host.com>
Message-ID: <F8udnVciWbJX0qXfRVn-qA@comcast.com>
Source record: 80699

Interesting .... I changed my number of segments in NEC from 51 to 501 and I
got an impedance more in line with 80-j300 ..... I'll go re-work my coil
now :)

de ka2pbt

"Dave Platt" <dplatt@radagast.org> wrote in message
news:113eln62s497d2@corp.supernews.com...
> In article <pan.2005.03.15.20.14.27.292174@host.com>,
> john doe <john.doe@host.com> wrote:
>
>>> Is that 58.5 inch figure a typo? Your NEC model says 51 inches, and
>>> my quickie spreadsheet calculation says 50.9 inches for a 145 MHz
>>> center of band.
>>>
>>Actually, the 51 you're seeing in the NEC model is probably the number of
>>segments. One end is at 0,0,36 and the other is at 0,0,94.5; so yes it's
>>really 58.5 inches.
>
> Whups... my bad.
>
>> I came to this number by playing with the model until
>>the REAL component of the impedance got as close to 50 as I could get it.
>
> Hmmm. What did that do to the pattern? You no longer have a 5/8-wave
> antenna. Adding about 8 inches has brought it very close to being a
> 3/4-wave radiator. As such, it's going to have a substantially lower
> amount of towards-the-horizon energy in its pattern, and a big lobe
> aiming upwards at roughly 45 degrees above the horizon.
>
> This is the classic problem with running a 2-meter J-pole on 440 -
> it'll load up and radiate, but a lot of its radiation is aimed at
> airplanes rather than repeaters :-(
>
>>> I also wonder about the coil - it calculates out to be just over 1
>>> microHenry, or about j910 ohms at 145 MHz. That seems like quite a
>>> bit too much, based on jgboyles's posting earlier today indicating a
>>> feedpoint Z of about 80-j300.
>>
>>My model comes up with a feedpoint impedance of 5.4485E+01-j2.8560E+03
>>
>>So I tried to build a coil with an inductive reactance to cancel that .. I
>>came up with 3.13 microhenries.
>>
>>Is my model way off?????

>
> I think you might want to take two looks at it:
>
> - Check the radiation pattern. By lengthening it to get a 50-ohm
> resistive component in the feedpoint, I suspect you've given up
> much of the gain benefit of a true 5/8-wave radiator. You may
> actually have less towards-the-horizon power and sensitivity than
> you'd get with a 1/4-wave groundplane or a 1/2-wave J-pole.
>
> - Check the formula and actual inductance for your coil.
>
> With so much capacitive reactance from the radiator to cancel out with
> the coil, I suspect that you may also find that you've calculated out
> an antenna which is going to be rather narrow-banded. Even slight
> frequency shifts, or errors in the coil winding (a fraction of a turn)
> could leave you with a lot of residual reactance and an unacceptable
> SWR.
>
> --
> Dave Platt <dplatt@radagast.org> AE6EO
> Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

3808. Re: :: :: :: :: *post 1005* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3809. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 16:20:50 UTC
From: clvrmnky <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <D1ZZd.94222$vO1.585751@nnrp1.uunet.ca>
Source record: 80700

On 15/03/2005 8:33 PM, Richard Clark wrote:
> On Tue, 15 Mar 2005 12:53:33 -0500, clvrmnky
> <clvrmnky-uunet@coldmail.com.invalid> wrote:

[...]

> I was an Instructor at the Navy's Electronic Technician School at
> Treasure Island. Get yourself a copy of Terman's "Electronic and
> Radio Engineering" (the 1955 version) to find the level of coursework
> that was offered at this school. It is very accessible reading and
> noteworthy for being comprehensive without being a sleeping pill.
>
I'll look for that title. I'm finding some of the older technical
instruction books very useful.

[...]

>>It follows that all the ground I should need (for good
>>operation) is a good chassis ground, even if that is only the neutral
>>side of the wall-wart (is that where it is?).
>
> Well, this is getting close to the mystery of your understanding. As
> simple as ground is, it is so often taken for granted that many don't
> really understand it at all.
>
> As for the Neutral connection of the mains NO THAT IS NOT GROUND!
>
> DO NOT PROCEED FURTHER with any wire work at that service until you
> research this completely.
>
Absolutely. I actually have home wiring experience (I don't have my
electrician's ticket, but I could wire my own home, and it would pass
inspection.) I'm surmising that the ground my receiver is seeing (at
least the DC components within it) is the neutral wire. My comment was
more of a rhetorical comment, not a threat to use the white wire on my
AC outlet as ground!

> However, as a point of intuition, ground is so tightly coupled to this
> wire (at RF) so as to be the missing half of the longwire system.
> This is why I commented on the distinction of being completely battery
> operated (hence no ground coupling).
>
>>Other issues like ground
>>loops, reduction of common-mode noise &etc. is a separate issue; these
>>can *sometimes* be solved by different devices on the antenna system,
>>but I see now how they could also add problems.

>
> This goes again to the common misunderstanding. You won't suffer a
> ground loop until it occurs. Solving it will be one of life's
> greatest struggles, and the solution, if stumbled upon, will appear to
> be one of life's greatest mysteries. Again, battery operation creates
> its own bubble of isolation from these issues - however, adding a
> charger brings the prospects back into the equation.
>
Fair enough.

I get a bit of a boost in signal running off the wall-wart, but it is
actually more convenient for me to run off batteries. I end up moving
the receiver around quite a bit. I can pick the big blowtorches and the
relays from Sackville quite nicely off the whip, so I often listen to
them in the kitchen or when doing chores around the house. For "DXing"
I settle in near the door where I've got my antenna experiments going.

This month I'm going to rig up that big loop and see how things change
from the random wire.

3810. Re: EZNEC Model of 88ft doublet

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 16:41:19 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <41og311vcdar9r87n6k29218q3oo0bipuu@4ax.com>
Source record: 80702

On 13 Mar 2005 04:48:43 -0800, "Jim Miller" <jim@jtmiller.com> wrote:
> If I'm
>not able to get the tuner to match this setup I'll try the 450 ladder
>and and 18awg and risk the visibility.

I have an 88 ft doublet of 26 ga. wire and 300 ohm twinlead approx 25
ft up. My MFJ-971 tuner lets me tune to SWR=1.0 at every ham
frequency from 80M to 10M. 160M not so good.

Some of the minima are very sharp and easily missed, especially on
60M. I know it is working because I am copied 60M NVIS phone 300
miles away using my 5-watt FT-817 with DYC-817 compressor.

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

3811. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 16:42:09 UTC
From: Buck <iam@this.site>
Message-ID: <bumg315dat522voj2o6d83ibt2keirg8q3@4ax.com>
Source record: 80703

On Wed, 16 Mar 2005 04:17:50 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>The gentleman has his patent.
>If I disclosed how this could be beat on this forum would I still be able to
>get a patent for myself if I so desire? Or would it be best to not disclose
>it at all?

I am no lawyer, but from what I have always heard, if you express a
general idea, that isn't a problem. However, if you are specific, or
offer enough information that someone else can reproduce your idea,
you could lose it.

i.e. 'Modifying the antenna so the angle of radiation shifts several
degrees will improve it considerably' wouldn't hurt your patent idea,
but 'Add a coil at the end with three cw turns overlapping twelve ccw
turns to improve the gain' could jeopardize your patent, or at lease
risk someone racing you to the patent office with an application.

--
73 for now
Buck
N4PGW

3812. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 17:02:48 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <YEZZd.64244$7z6.64083@lakeread04>
Source record: 80704

"clvrmnky" wrote
> On 15/03/2005 8:33 PM, Richard Clark wrote:
> > As for the Neutral connection of the mains NO THAT IS NOT GROUND!

> Absolutely. I actually have home wiring experience (I don't have my
> electrician's ticket, but I could wire my own home, and it would pass
> inspection.) I'm surmising that the ground my receiver is seeing (at
> least the DC components within it) is the neutral wire. My comment was
> more of a rhetorical comment, not a threat to use the white wire on my
> AC outlet as ground!

Hi OM, it's clear you understand that wal-warts have only two connectors to AC (hot and neutral), and neutral is bonded to ground at the mains.

My question to Richard (and group) is whether there is any RF or DC link to ground via a radio's DC-power connection to a wal-wart? I have never examined the internal components of a sealed wal-wart, only seen the results of surge voltages from lightning that exploded them and damaged radios they were connected to. Nothwithstanding the forces of lightning that made that connection, isn't there isolation from ground when a DC converter is used?

Cheap DC converters can add noise to an electrical system and affect radio reception, but I didn't think there was any DC coulping across the transformer wiring, and probably limited if any rf-coupling there either. Can anyone comment on this?

> > This goes again to the common misunderstanding. You won't suffer a
> > ground loop until it occurs. Solving it will be one of life's
> > greatest struggles, and the solution, if stumbled upon, will appear to
> > be one of life's greatest mysteries. Again, battery operation creates
> > its own bubble of isolation from these issues - however, adding a
> > charger brings the prospects back into the equation.

It's my understanding that ground loops are most common from having serial v. parallel connections to ground from various equipments. Daisy-chaining a series of radios to the common ground would thus allow radios to exhibit feedback through each other instead of only to ground. When a properly bonded system is connected (each unit indivdually connected to the single point ground) there is no ground loop. Others often ask what about multiple bonding-points of the external ground system and it's connection to the AC mains? Answer: These are not ground loops and are not the cause of equipment interference from the series-connections of equipments described above.

> I get a bit of a boost in signal running off the wall-wart, but it is
> actually more convenient for me to run off batteries. I end up moving
> the receiver around quite a bit. I can pick the big blowtorches and the

> relays from Sackville quite nicely off the whip, so I often listen to
> them in the kitchen or when doing chores around the house. For "DXing"
> I settle in near the door where I've got my antenna experiments going.

That's interesting OM, as it implies you are seeing a counterpoise effect of rf-coupling across the windings of the dc transformer, or perhaps just the secondary side? If a wal-wart helps complete an antenna, it would seem there may be a design component missing from the antenna somewhere ;-)

Best regards,

Jack
(fmr navy instructor of strategic weapons systems electronics, now a plug-n-play operator for the uscg)

3813. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 17:13:00 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <0jpg319964b3qjf0tcpveor4k92hvuuac8@4ax.com>
Source record: 80705

On Wed, 16 Mar 2005 02:57:31 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>I don't operate on 40 M so I may be missing something but exactly what is it
>that stands
>out with this antenna that would make it desirable to hams?

From the title: "Two-Element Driven Array *With Improved Tuning and
Matching* (emphasis added)"

The major claim is that the antenna is more easily adjusted than the
alternatives. This would seem to make it "desirable."

>Efficiency would
>be reflected by the loads
>used which is not necessarily "state of the art".

What "loads"?

>He then states "a large
>F/B is effected"
> but it doesn't show before and after overlaid plots !

He doesn't claim "improved" F/B, only "comparable to that which is
available from a three element Yagi of similar electromagnetic
properties."

So what before and after do you expect to see?

>Would hams have an interest in a two element 20 M
>antenna that have lower TOA than the norm, say 9 degrees instead of the
>normal 14 degrees?

Yeah, I'm still interested in seeing how you can lower the "TOA"
without changing the antenna height, or is that the "secret"?

3814. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 17:14:11 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <4aqg31dacfrigitrfed1q1j97b66bljllu@4ax.com>
Source record: 80706

On Wed, 16 Mar 2005 05:21:29 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>
>The original design is 50 years old.
>He infers that he has improved the design,
>specifically with respect to F/B

He makes no such claim.

3815. Re: Radio Shack chokes?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 17:28:29 UTC
From: DAVID BROWNE <david.browne7@ntlworld.com>
Message-ID: <11_Zd.747$AK.246@newsfe6-gui.ntli.net>
Source record: 80707

TRY YAHOO LDG FORUM
"Ken Bessler" <kg0wx@NOSPAMyahoo.com> wrote in message
news:G4mZd.10694$Fy.725@okepread04...
>I was having a problem with my new LDG AT-100PRO
> autotuner - If I went above 50w FM on 10 meters, The
> tuner's CPU would "crash". Powering the tuner off and on
> again would usually fix it but sometimes I'd have to re-
> program some of the settings.
>
> I am trying to tune a 40m dipole that has this feed arraingment:
>
> Rig/SWR Bridge/Switch/Tuner/RG58 (25')/RG58 coil (12
> turns @ 5-1/2" dia/450 ohm ladder line (50')/antenna
>
> Thinking I had RF in the shack, I went to Radio Shack &
> bought $21 worth of ferrite chokes. I put a coaxial choke
> on the input to the tuner and another on the output. I put a
> snap on (square) choke on the feedline going from the rig to
> the swr bridge and another on the power cable to the rig.
>
> I tried many setups including putting chokes on the tuner's
> power cable and ended up with the above setup working
> the best.
>
> Now (finally!) to my questions:
>
> 1) How good are radio shack chokes?
> 2) I was only able to get 4 turns around the feedline's choke
> - is that enough?
> 3) Am I just messing too much around trying to get a 40m
> dipole to tune on 10m?
> 4) Would I do better to add a balun and run the 450 ohm
> ladder line direct to the tuner?
>
> --
> 73's es gd dx de Ken KGWX
> Grid EM17ip, Flying Pigs #1055,
> List Owner, Yahoo! E-groups:
> VX-2R & FT-857
>

3816. Re: Single wire aerial - what do I do?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 17:31:46 UTC
From: (unknown)
Message-ID: <4238680f.27275558@news.dial.pipex.com>
Source record: 80709

Egads, you blokes are helpful.

So let me get this right. I am trying to picture Richard's 1/4 wave radial arrangement. I visualise an upturned umbrella. The spokes are each 2.5ft long, joined at the middle to the coax shield. The umbella's handle is also 2.5ft long, connected to the coax inner.

(Does it matter that the local transmitters, so I gather, use horizontal polarization?)

At the other end the inner is conected to the stub of aerial wire, the shield to a clamp around the mains cable.

Does the umbrella analogy work for you?

Questions:
How big would the clamp be?
Why not connect shield to chassis?

Not quite clear on two other things, Richard
> the inside of his coax cable shield,
Contradiction in terms?

> but to connect with the chassis (ground) that many other sets
>use for the "signal" connection to the set.
Why should anyone want to connect the signal to ground?

Thanks again
Paul

3817. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 17:48:29 UTC
From: clvrmnky <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <Nj_Zd.94236$vO1.585539@nnrp1.uunet.ca>
Source record: 80708

On 16/03/2005 12:02 PM, Jack Painter wrote:
> "clvrmnky" wrote

[...]

>>I get a bit of a boost in signal running off the wall-wart, but it is
>>actually more convenient for me to run off batteries. I end up moving
>>the receiver around quite a bit. I can pick the big blowtorches and the
>>relays from Sackville quite nicely off the whip, so I often listen to
>>them in the kitchen or when doing chores around the house. For "DXing"
>>I settle in near the door where I've got my antenna experiments going.
>
> That's interesting OM, as it implies you are seeing a counterpoise effect of
> rf-coupling across the windings of the dc transformer, or perhaps just the
> secondary side? If a wal-wart helps complete an antenna, it would seem
> there may be a design component missing from the antenna somewhere ;-)
>
I realized that my nomenclature was wrong. I should have said "bit of a boost in amplitude" because this is what I'm /really/ hearing. I'm guessing here that when running of the wall-wart we just have more available current to draw on for RF and AF amplification, heterodyning &etc. I have no proof that the signal coming into the set is any better/stronger or that my antenna is more sensitive or selective.

That is, I don't recall the signal meter changing much when I switch back and forth between battery and wall-wart. Although, quieter signals will be uniformly attenuated (along with the noise) slightly when I switch to battery.

Currently (with a random-wire antenna) the radio seems to not care what is on the "ground" side. This is hardly scientific, but when I attach a good number of feet (i.e., more than the length of the antenna) of copper wire to the ground side of the antenna input (or touch it with my hand) I get no noticeable change to tuned stations or between-station noise. I may hear the slightest bit "tick" of noise when my finger makes first contact with the case of the plug that goes to chassis ground. Nothing obvious, however.

3818. Re: Antenna design breakthru

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 18:16:48 UTC
From: "aunwin@insightbb.com"
Message-ID: <kK_Zd.73579$r55.32477@attbi_s52>
Source record: 80710

They don't mention the speaker. Could it be that
design on the east coast that was debunked on this newsgroup?
Believe that was a vertical.
Surely Dayton would not play games with the hams,
or would they?
Art

"Bill" <k4wge@arrl.net> wrote in message
news:1110993695.913906.219360@l41g2000cwc.googlegroups.com...
>
> aunwin@insightbb.com wrote:
>> Dayton Hamfest Forums
>> Subgect;Antenna design breakthu
>> All is not known about antennas apparently!
>> Regards
>> Art
>
> There is a typo on the forum page.
>
> from http://www.hamvention.org/forums.html
>
> 10:15 - 11:15 Antenna Design Break-Through
> moderator: Ken Glanzer, K7GCO [callsign corrected)
>

3819. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 18:31:00 UTC
From: dplatt@radagast.org
Message-ID: <113gur48ompeq84@corp.supernews.com>
Source record: 80711

In article <bumg315dat522voj2o6d83ibt2keirg8q3@4ax.com>,
Buck <iam@this.site> wrote:

>I am no lawyer, but from what I have always heard, if you express a
>general idea, that isn't a problem. However, if you are specific, or
>offer enough information that someone else can reproduce your idea,
>you could lose it.
>
>i.e. 'Modifying the antenna so the angle of radiation shifts several
>degrees will improve it considerably' wouldn't hurt your patent idea,
>but 'Add a coil at the end with three cw turns overlapping twelve ccw
>turns to improve the gain' could jeopardize your patent, or at lease
>risk someone racing you to the patent office with an application.

The rules vary somewhat, it seems (I'm not a lawyer either).

Most of the world uses a "first to file" priority rule. Disclosing an invention before you file, would give someone else the ability to file for the patent first, and you'd lose.

The United States uses a "first to invent" rule, so in theory the original inventor has priority even if the invention is disclosed before filing. Winning the first-to-invent battle can be difficult, I gather... to prove priority the original inventor would need to have proof of the date of the discovery. The usual way to do that is to keep an engineering notebook, date and sign each page and have the signatures witnessed and/or notarized.

If I recall correctly, there's a limit to the amount of time that the "first to invent" rule can protect you... one year from the first public disclosure, I think.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3820. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 18:34:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113gv2jm2ffeg0e@corp.supernews.com>
Source record: 80712

You have up to one year to file for a U.S. patent after you publicly disclose the invention. (This isn't generally true in other countries.) I assume that Art would be aware of this since he's been through the process several times in the past. It's also easy to find at the USPTO website.

Roy Lewallen, W7EL

Buck wrote:
> On Wed, 16 Mar 2005 04:17:50 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>
>>The gentleman has his patent.
>>If I disclosed how this could be beat on this forum would I still be able to
>>get a patent for myself if I so desire? Or would it be best to not disclose
>>it at all?
>
>
> I am no lawyer, but from what I have always heard, if you express a
> general idea, that isn't a problem. However, if you are specific, or
> offer enough information that someone else can reproduce your idea,
> you could lose it.
>
> i.e. 'Modifying the antenna so the angle of radiation shifts several
> degrees will improve it considerably' wouldn't hurt your patent idea,
> but 'Add a coil at the end with three cw turns overlapping twelve ccw
> turns to improve the gain' could jeopardize your patent, or at lease
> risk someone racing you to the patent office with an application.
>
>

3821. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 18:40:24 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <s4%Zd.142616$Th1.120009@bgtnsc04-news.ops.worldnet.att.net>
Source record: 80713

Jack,

The classic ground loop can occur even when individual components are perfectly bonded to a single point ground. The "loop" is formed when a signal cable connects the bonded components together along an alternate path. There are many proper fixes for this problem, but one popular quick and dirty fix is to disconnect the bonding by removing the third pin on the power plugs. Not a good idea, but it happens a lot.

If correcting ground loops was simply a matter of properly bonding the components to a single point then nobody would ever bother mentioning ground loops.

73,
Gene
W4SZ

Jack Painter wrote:

[snip]

>
> It's my understanding that ground loops are most common from having serial
> v. parallel connections to ground from various equipments. Daisy-chaining a
> series of radios to the common ground would thus allow radios to exhibit
> feedback through each other instead of only to ground. When a properly
> bonded system is connected (each unit indivdually connected to the single
> point ground) there is no ground loop. Others often ask what about multiple
> bonding-points of the external ground system and it's connection to the AC
> mains? Answer: These are not ground loops and are not the cause of equipment
> interference from the series-connections of equipments described above.
>

3822. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 18:40:26 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <u4%Zd.64250$7z6.58894@lakeread04>
Source record: 80714

"clvrmnky" wrote
> Currently (with a random-wire antenna) the radio seems to not care what
> is on the "ground" side. This is hardly scientific, but when I attach a
> good number of feet (i.e., more than the length of the antenna) of
> copper wire to the ground side of the antenna input (or touch it with my
> hand) I get no noticeable change to tuned stations or between-station
> noise. I may hear the slightest bit "tick" of noise when my finger
> makes first contact with the case of the plug that goes to chassis
> ground. Nothing obvious, however.

that's normal - wait until you discover "the paper clip principle"...

Or, "when a paper clip attached to the back of the radio receives as much as your just erected antenna", LOL. Stranger things happen, and it helps if you record in a log what your antenna experiments have yielded. If you use the S-meter to help relate signal strength (including noise levels), remember to measure it against at least three frequencies in your intended listening range (lowest, mid-range, and highest). No antenna treats the whole hf spectrum the same and you may develop favorite arrangements for particular listening desires.

Good luck,

Jack Painter
Virginia Beach, Virginia

3823. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 18:40:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dhqg31hb5sn6rs4k6oh6ioaj8efd9d2u2e@4ax.com>
Source record: 80715

On Wed, 16 Mar 2005 09:25:41 -0500, "John Passaneau" <jxp16@psu.edu>
wrote:
> it's wall street
>that forces management to live for the next quarter and expects
>un-reasonable results that is the problem.

Hi John,

Actually the driving force of that focus is called the economic policy. In other words, for years the Republican party has been intoning its mantra that taxing dividends (Capital Gains) is a bad thing. What is left is to trade shares in the expectation of their price rise (which is the strategy you describe above). So let's put the blame where it belongs, on the Administration and the current power in the House and Senate.

You will see a ban on Gay marriage before you see movement on changing Capital Gains taxes. Talk about gutless.

Just what has been the Economic Policy for the past decade? A simple revue of the Producer Price Index (this is the equivalent of the Consumer Price Index, except for how much it costs to make something) reveals that the Republican Party in Congress has consistently overseen the highest rates of business inflation. In the last four years alone many industry's Producer Prices have doubled. A simple enumeration by Industry is quite revealing where the bleeding is found:

Oil and gas extraction, the cost had been stable for 14 years before 2000, it now is up 250% Who woulda thought an oil man could be so feeble to aid his fellow wildcatters.

Total Mining, the cost had been stable for 14 years before 2000, it now is up 196% This gives meaning to Red states where Mining dominates - what has the Red Party done to stop this massive bleeding?

Petroleum and coal products mfg, the cost had been stable for 14 years before 2000, it now is up 195%. It's like this industry is off the map in Washington. Why is going to Mars a public priority?

Primary metal mfg, the cost had seen mild fluctuations for 14 years before 2000, it now is up 20%

Fabricated metal product mfg saw a cost jump of 8.5%

Gasoline stations saw a 30% plunge.

Air transportation now sees a flattening after a 60% rise over a decade. They are significantly in the hands of a Judge at Bankruptcy court.

Over the same period for Air, Rail transportation has seen only 15% cost rise. Time for Congress to kick in another bail out for Air transportation and cut Rail subsidies.

The Postal service, serving as a common denominator, has exhibited a steady increase across 30 years for a total 430% (14% annualized).

Hospitals saw a relatively flat period during the 90s and then after 2000 costs rose 22%.

Heavy construction has shown a general rise over the decade before 2000 to then find after a spike of 10% (observe in all constructions, highways, streets, maintenance, repair, new construction, residential and non-residential).

Food mfg, the cost over the past 4 year has climbed 13%

Chemical mfg, the cost over the past 4 year has climbed 10%

Plastics and rubber products mfg, the cost over the past 4 years has climbed 10%

Across the board for those industries not noted above (only because those above showed accelerating costs for the past 4 years), industry has been in a forced march of unrelenting, growing cost to produce. The ONLY exception, also noted above, has been in Gasoline sales. It would be painfully ironic to point out that this is the economic turnaround that has been the boon of invading Iraq.

So, regardless of what has caused this steady rise, what action have you seen on the hill that suggests anything is being done about it? Taxes have been rolled back from a 70% rate to less than 28% and that was DECADES ago. The cost to produce has steamrollered right over that logic.

Passing an amendment to criminalize burning the flag might do it. Outlaw abortion? There is possibly a golden bullet there for the economy. Enforce national school laws over the objections of States' Rights (who cares about States' Rights?). Criminalizing doctors whose states allow them to practice Death with Dignity? Repeal gun laws?

Where stands:
Eliminating the deficit?
Turning around the Trade Imbalance?
Bolstering the Dollar?
Simplifying the Tax Code?
Reducing the Budget?
Reducing the size of Government?

Is there any discussion of the 1994 Contract with America?
Where stands:

A comprehensive audit of Congress for waste, fraud or abuse?
Cut the number of House committees, and cut committee staff?
Require committee meetings to be open to the public?
A guarantee for an honest accounting of our Federal Budget by implementing zero base-line budgeting?
All of these cherished goals have been lost in the rush of politicians to stuff their pockets with money. Talk about gutless losers.

What significant packages are being hefted onto the table? Cut Medicare is being muttered. That will fix Hospital costs. What about fixing the $Trillion loss of Social Security? Easy, spend $Trillion for a new system, and -um- another $Trillion to keep the old system going. The new system will bring the boon of half the benefits (a new form of math that revealed in the numbers above used to be called cost inflation). What pathetic, gutless, losers.

73's
Richard Clark, KB7QHC

3824. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 18:50:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ijvg31pl2aq9mpn25oc9nh5vb8bc3u5vd7@4ax.com>
Source record: 80716

On Wed, 16 Mar 2005 12:02:48 -0500, "Jack Painter" <223bthp@cox.net>
wrote:

>My question to Richard (and group) is whether there is any RF or DC link to
>ground via a radio's DC-power connection to a wal-wart?

Hi Jack,

The simple boding of neutral to ground, as you offered elsewhere,
suits the RF ground path. If there's an isolation transformer, such
as may be found in the common wall wart, you may be assured that the
interwinding capacitance is suitably high enough to overcome any
notion of being isolated at RF. Precision and low noise applications
that demand higher quality isolation between primary and secondary
mandate a faraday shield between them. This shield only insures an RF
path to ground that is optimized for tight coupling - it has no other
purpose.

73's
Richard Clark, KB7QHC

3825. Re: Long/random-wire balun and grounding Q (longish)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 19:06:49 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <dt%Zd.64252$7z6.55831@lakeread04>
Source record: 80717

Good points Gene, and thanks for your reply. The AC connections could certainly be responsible for a ground loop. But it has been my experience that so few stations actually bond properly that the preponderance of possibilities would occur foremost with the direct connection from improper bonding, not the indirect connection from electrical wiring, which usually has distance and other connections before circling back to the offending/receiving equipment. All things need to be considered, and is a good reason for Richard's comment that "Solving it will be one of life's greatest struggles, and the solution, if stumbled upon, will appear to be one of life's greatest mysteries." ;-)

I once had a ground loop from a yagi-rotor that resisted all manners of alternative grounding, wiring, routing, rf-chokes, etc. You either put up with it or remove it in that case!

If removing the third plug from the power cord isolated a ground loop problem, then safer alternatives could be accomplished such as an isolated ground and separate neutral for a particular power supply, as is common in sensitive computer systems.

Best regards,

Jack

"Gene Fuller" <W4SZzzzzzz@att.net> wrote
> Jack,
>
> The classic ground loop can occur even when individual components are
> perfectly bonded to a single point ground. The "loop" is formed when a
> signal cable connects the bonded components together along an alternate
> path. There are many proper fixes for this problem, but one popular
> quick and dirty fix is to disconnect the bonding by removing the third
> pin on the power plugs. Not a good idea, but it happens a lot.
>
> If correcting ground loops was simply a matter of properly bonding the
> components to a single point then nobody would ever bother mentioning
> ground loops.
>
> 73,
> Gene
> W4SZ
>
> Jack Painter wrote:
>
> [snip]
>

> >
> > It's my understanding that ground loops are most common from having
serial
> > v. parallel connections to ground from various equipments.
Daisy-chaining a
> > series of radios to the common ground would thus allow radios to exhibit
> > feedback through each other instead of only to ground. When a properly
> > bonded system is connected (each unit indivdually connected to the
single
> > point ground) there is no ground loop. Others often ask what about
multiple
> > bonding-points of the external ground system and it's connection to the
AC
> > mains? Answer: These are not ground loops and are not the cause of
equipment
> > interference from the series-connections of equipments described above.
> >

3826. Re: Single wire aerial - what do I do?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 19:24:10 UTC
From: richardharrison@webtv.net
Message-ID: <10282-423887DA-572@storefull-3252.bay.webtv.net>
Source record: 80718

Paul wrote:
"Does it matter that the local transmitters, so I gather, use horizontal polarization?"

Good question. Since FM reception became popular in vehicles, broadcasters have had to add vertical transmission to their broadcasts to better serve the mobiles.

Best regards, Richard Harrison, KB5WZI

3827. " BIG BUCKS" WITH ONLY A $6.00 INVESTMENT "NO BULL"!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 19:56:29 UTC
From: bscruggins2000@yahoo.com
Message-ID: <1111002989.642717.22660@o13g2000cwo.googlegroups.com>
Source record: 80719

HOW TO TURN $6 INTO $6,000!!!!!! READING THIS COULD CHANGE YOUR LIFE!

I found this on a bulletin board and decided to try it. A little while back, I was browsing through newsgroups, just like you are now, and came across an article similar to this that said you could make thousands of dollars within weeks with only an initial investment of $6.00! So I thought, Yeah right, this must be a scam,but like most of us, I was curious, so I kept reading. Anyway, it said that you send $1.00 to each of the 6 names and address stated in the article. You then place your own name and address in the bottom of the list at #6, and post the article in at least 200 newsgroups. (There are thousands) No catch, that was it. So after thinking it over, and talking to a few people first, I thought about trying it. I figured: what have I got to lose except 6 stamps and $6.00, right? Then I invested the measly $6.00. Well GUESS WHAT!!... within 7 days, I started getting money in the mail! I was shocked! I figured it would end soon, but the money just kept coming in. In my first week, I made about $25.00. By the end of the second week I had made a total of over $1,000.00! In the third week I had over $10,000.00 and it`s still growing. This is now my fourth week and I have made a total of just over $42,000.00 and it`s still coming in rapidly. It`s certainly worth $6.00, and 6 stamps, I have spent more than that on the lottery!! Let me tell you how this works and most importantly, why it works....Also, make sure you print a copy of this article NOW, so you can get the information off of it as you need it. I promise you that if you follow the directions exactly, that you will start making more money than you thought possible by doing something so easy!
Suggestion: Read this entire message carefully! (Print it out or download it.) Follow the simple directions and watch the money come in! It`s easy. It`s legal. And, your investment is only $6.00 (Plus postage)

IMPORTANT: This is not a scam; it is not indecent; it is not illegal; and it is virtually no risk - it really works!!!! If all of the following instructions are followed exactly, you will receive extraordinary dividends.

PLEASE NOTE: Please follow these directions PERCISELY, and $50,000 or more can be yours in 20 to 60 days. This program remains successful because of the honesty and integrity of the participants. Please continue its success by carefully adhering to the instructions. You will now become part of the Mail Order business. In this business your product is not solid and tangible, it`s a service. You are in the business of developing Mailing Lists. Many large corporations are happy to pay big bucks for quality lists. However, the money made from the

mailing lists is secondary to the income which is made from people like you and me asking to be included in that list. Here are the 4 easy steps to success:

STEP 1: Get 6 separate pieces of paper and write the following on each piece of paper; PLEASE PUT ME ON YOUR MAILING LIST. Now get 6 US $1.00 bills and place ONE inside EACH of the 6 pieces of paper so the bill will not be seen through the envelope (to prevent thievery). Next, place one paper in each of the 6 envelopes and seal them. You should now have 6 sealed envelopes, each with a piece of paper stating the above phrase, your name and address, and a $1.00 bill. What you are doing is creating a service. THIS IS ABSOLUTELY LEGAL! You are requesting a legitimate service and you are paying for it! Like most of us I was a little skeptical and a little worried about the legal aspects of it all. So I checked it out with the U.S. Post Office (1-800-725-2161) and they confirmed that it is indeed legal! Mail the 6 envelopes to the following addresses:

Mailing Addresses

1. P. FREY, 4577 W. PONDS CIR, LITTLETON, CO 80123
2. E. DE LEON, 14014 Rosecrest, Houston,TX 77045
3. A. Lopez, 810 Ave.J, South Houston TX 77587
4. L. Pacheco, 812 Ave.J, South Houston, TX 77587
5. K. Bat, 9335 Alcona Street, Lanham, MD 20706
6. B. Scruggins, P.O. Box 845 Port Barre, LA 70577

STEP 2: Now take the #1 name off the list that you see above, move the other names up (6 becomes 5, 5 becomes 4, etc...) and add YOUR Name as number 6 on the list.

STEP 3: Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups. (I think there are close to 24,000 groups) All you need is 200, but remember, the more you post, the more money you make! This is perfectly legal! If you have any doubts, refer to Title 18 Sec. 1302 & 1341 of the Postal lottery laws.
Keep a copy of these steps for yourself and, whenever you need money, you can use it again, and again.

PLEASE REMEMBER that this program remains successful because of the honesty and integrity of the participants and by their carefully adhering to the directions. Look at it this way. If you are of integrity, the program will continue and the money that so many others have received will come your way.

NOTE: You may want to retain every name and address sent to you, either on a computer or hard copy and keep the notes people send you. This VERIFIES that you are truly providing a service. (Also, it might be a good idea to wrap the $1 bill in dark paper to reduce the risk of mail theft.)
So, as each post is downloaded and the directions carefully followed,

six members will be reimbursed for their participation as a List Developer with one dollar each. Your name will move up the list geometrically so that when your name reaches the #1 position you will be receiving thousands of dollars in CASH!!! What an opportunity for only $6.00 ($1.00 for each of the first six people listed above) Send it now, add your own name to the list and you`re in business!
---DIRECTIONS ----- FOR HOW TO POST TO NEWSGROUPS---------- Step 1) You do not need to re-type this entire letter to do your own posting. Simply put your cursor at the beginning of this letter and drag your cursor to the bottom of this document, and select `copy` from the edit menu. This will copy the entire letter into the computer`s memory.

Step 2) Open a blank `notepad` file and place your cursor at the top of the blank page. From the `edit` menu select `paste`. This will paste a copy of the letter into notepad so that you can add your name to the list.
Step 3) Save your new notepad file as a .txt file. If you want to do your postings in different settings, you`ll always have this file to go back to.

Step 4) Use Netscape or Internet explorer and try searching for various newsgroups (on-line forums, message boards, chat sites, discussions.) Just example you log on any search engine like, yahoo.com,google.com, altavista.com,excite.com then you search with this subject millionaire message board? or money making message
board? or employment message board? or money making discussions? or money making forum? or business message board? etc. You will find thousand & thousand message board. Click one by one then you will find the option post a new message.
Step 5) Visit these message boards and post this article as a new message by highlighting the text of this letter and selecting paste from the edit menu. Fill in the Subject, this will be the header that everyone sees as they scroll through the list of postings in a particular group, click the post message button. You`re done with your first one! Congratulations...THAT`S IT! All you have to do is jump to different newsgroups and post away, after you get the hang of it, it will take about 30 seconds for each newsgroup!

REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200
That`s it! You will begin receiving money from around the world within days! You may eventually want to rent a P.O.Box due to the large amount of mail you will receive. If you wish to stay anonymous, you can invent a name to use, as long as the postman will deliver it.
JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT.

Now the WHY part: Out of 200 postings, say I receive only 5 replies (a very low example). So then I made $5.00 with my name at #6 on the letter. Now, each of the 5 persons who just sent me $1.00 make the MINIMUM 200 postings, each with my name at #5 and only 5 persons respond to each of the original 5, that is another $25.00 for me, now

those 25 each make 200 MINIMUM posts with my name at #4 and only 5 replies each, I will bring in an additional $125.00! Now, those 125 persons turn around and post the MINIMUM 200 with my name at #3 and only receive 5 replies each, I will make an additional $626.00! OK, now here is the fun part, each of those 625 persons post a MINIMUM 200 letters with my name at #2 and they each only receive 5 replies, that just made me $3,125.00!!! Those 3,125 persons will all deliver this message to 200 newsgroups with my name at #1 and if still 5 persons per 200 newsgroups react I will receive $15,625,00! With an original investment of only $6.00! AMAZING! When your name is no longer on the list, you just take the latest posting in the newsgroups, and send out another $6.00 to names on the list, putting your name at number 6 again. And start posting again. The thing to remember is: do you realize that thousands of people all over the world are joining the internet and reading these articles everyday?, JUST LIKE YOU are now!! So, can you afford $6.00 and see if it really works?? I think so... People have said, "What if the plan is played out and no one sends you the money? So what! What are the chances of that happening when there are tons of new honest users and new honest people who are joining the internet and newsgroups everyday and are willing to give it a try? Estimates are at 20,000 to 50,000 new users, every day, with thousands of those joining the actual internet.

Remember: Play FAIRLY and HONESTLY and this will really work. Do The Math !!!!

3828. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 20:07:51 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <d1a3mmvoe1@f04n12.cac.psu.edu>
Source record: 80720

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:dhqg31hb5sn6rs4k6oh6ioaj8efd9d2u2e@4ax.com...
> On Wed, 16 Mar 2005 09:25:41 -0500, "John Passaneau" <jxp16@psu.edu>
> wrote:
> > it's wall street
> >that forces management to live for the next quarter and expects
> >un-reasonable results that is the problem.
>
> Hi John,
>
> Actually the driving force of that focus is called the economic
> policy. In other words, for years the Republican party has been
> intoning its mantra that taxing dividends (Capital Gains) is a bad
> thing. What is left is to trade shares in the expectation of their
> price rise (which is the strategy you describe above). So let's put
> the blame where it belongs, on the Administration and the current
> power in the House and Senate.
> Talk about gutless losers.

good stuff sniped
>
> What significant packages are being hefted onto the table? Cut
> Medicare is being muttered. That will fix Hospital costs. What about
> fixing the $Trillion loss of Social Security? Easy, spend $Trillion
> for a new system, and -um- another $Trillion to keep the old system
> going. The new system will bring the boon of half the benefits (a new
> form of math that revealed in the numbers above used to be called cost
> inflation). What pathetic, gutless, losers.
>
> 73's
> Richard Clark, KB7QHC

Hi Richard

Your right of course, but I'm not sure who is leading who in this case. I
can't tell Wall Street or the administration apart. It gets me is so many
that are being or will be hurt by the current administration, are so sure it
will not happen to them that they still vote for the current administration.
I like the headline in an European paper when Bush was reelected, "How could
250000 people be so stupid" or something close to that, I ask myself the
same thing.

--
John Passaneau, W3JXP
Penn State University

w3jxp@arrl.net

3829. Re: :: :: :: :: *post 1005* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3830. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 21:48:45 UTC
From: richardharrison@webtv.net
Message-ID: <8029-4238A9BD-191@storefull-3253.bay.webtv.net>
Source record: 80575

Richard Fry wrote:
"The most common radiator height for Class A non-directional AM
broadcast stations operating at 50kW day and night is 195-degrees."

I won`t challenge that as I have conducted no survey. WJR Detroit is shown on the broadcast allocations map book as an unlimited (day and night) 50 kilowatt Class 1 station.

Class 1 stations operate in a clear channel (this does not mean alone on the channel) with an assigned power between 10kW and 50kW

A Class 2 station operates in a clear channel with an assigned power between 250W and 50kW. They must operate so as to not cause interference to the Class 1 stations. There are 29 clear channels which permit class 2 station operation.

Class 3 stations share regional channels and operate with assigned powers between 500W and 5kW. Thyere are 41 regional channels and more than 2000 Class 3 stations. These numbers were taken before expansion of the AM broadcast band which has grown the totals.
Class 4 stations operate in assigned local channels with no more than 1kW day and 250W night assignments. There are 6 local channels with 150 or more Class 4 stations on each channel.

Primary service area is the statiob`s groundwave coverage. Secondary service is uninterfered skywave coverage. Intermittent service lies between the primary and secondary service areas.

A clear channel has one or more high-powered stations which serve wide areas. All primary service areas and a substantial portion of their secondary service areas are cleared of objectional interference.

A regional channel has stations not exceeding 5kW which have coverage contours which limit the primary service interference between these stations.

A local channel has stations not exceeding 1 kW daytime and 250 watts at night. Primary coverage is limited by interference. Assignments are made to limit interference.

Radio waves are radiated into a hemisphere as space below the antenna is hidden by the surface of the earth. This results in a formula for the field power at one mile from a perfect radiator emitting 1 kilowatt:
P = 1000 / 16266419 = 0.00006 watts/sq mtr
E = sq rt (PR)
and R=377 ohms

Volts/mtr=152 at 1 mile from a perfect infinitely short uniform hemispherical radiator.

From a 1/4-wave vertical, it`s about 195 millivolts per mtr at 1 mile.

From a 1/2-wave vertical, it`s about 236 millivolts per mtr at 1 mile.

From a 5/8-wave vertical, it`s about 267 millivolts per mtr at 1 mile.

Volts vary as the square root of the power. So, for 50 killowatts, multiply the 1 kilowatt values by 7.07.

The field strengths are the inverse distance or lossless values. Real earth has losses.

Best regards, Richard Harrison, KB5WZI

3831. Down Tilt on Slot Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 22:49:57 UTC
From: Matt <nospam_ng@fileholder.net>
Message-ID: <113he0pjln68d3c@corp.supernews.com>
Source record: 80576

Is there anyway to down tilt the signal on horizontally polarized omni slot antenna? I would like to add 1-3 degrees of downtilt.

Matt

3832. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 23:19:35 UTC
From: jgboyles@aol.com
Message-ID: <1111015175.143845.53170@l41g2000cwc.googlegroups.com>
Source record: 80577

I found that increasing the number of segments had a significant change in the input Z. The material I read on 5/8 antennas indicated the real part of the Z was near 50 ohms. I could not get that result until I increased the number of segments. Guess it is cause 146 MHZ antennas are a good bit shorter than 3.5 MHZ antennas, and any small deviation such as lenght, or # of segments will change the end results.
Gary N4AST

3833. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 23:53:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113hhoo8v7j45a2@corp.supernews.com>
Source record: 80578

A source is spread out over an entire segment. So when you change the number of segments, you change both the length and the effective position of the source. When the source is at the bottom of a quarter wavelength radiator, small changes in source position don't make much difference in the impedance seen by the source. However, when the antenna approaches a half wavelength, the source impedance changes quite dramatically with source position. Consequently, you'll see substantial changes in reported source impedance with segmentation in that case. This might or might not be the cause of what you're seeing. As an experiment, you might try moving the source up one segment and see how big a difference it makes.

Whenever the result is very sensitive to small changes in the model, you shouldn't expect a real antenna to come out exactly like the model predicts, since small differences between the model and real antenna will likewise cause significant differences.

The absolute length doesn't matter -- a 146 MHz antenna will be no more or less sensitive to the same amount of change (in terms of percentage of the antenna size or of the wavelength) than a 3.5 MHz antenna if both are proportioned the same. In fact, 146 MHz antennas are typically considerably fatter in terms of wavelength than 3.5 MHz antennas, and this makes them less sensitive to small changes.

Roy Lewallen, W7EL

jgboyles@aol.com wrote:
> I found that increasing the number of segments had a significant change
> in the input Z. The material I read on 5/8 antennas indicated the real
> part of the Z was near 50 ohms. I could not get that result until I
> increased the number of segments. Guess it is cause 146 MHZ antennas
> are a good bit shorter than 3.5 MHZ antennas, and any small deviation
> such as lenght, or # of segments will change the end results.
> Gary N4AST
>

3834. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 23:55:38 UTC
From: Harold Burton <hwburton@cableone.net>
Message-ID: <113hhrs2a4ikl14@corp.supernews.com>
Source record: 80579

"John Passaneau" <jxp16@psu.edu> wrote in message
news:d1a3mmvoe1@f04n12.cac.psu.edu...
>
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:dhqg31hb5sn6rs4k6oh6ioaj8efd9d2u2e@4ax.com...
>> On Wed, 16 Mar 2005 09:25:41 -0500, "John Passaneau" <jxp16@psu.edu>
>> wrote:
> I like the headline in an European paper when Bush was reelected, "How
> could
> 250000 people be so stupid" or something close to that, I ask myself the
> same thing.
>
>
Probably they meant 250,000,000 (our approximate national population) rather
than 250,000. They were wrong again, as usual.
Total votes cast were approx 114,000,000 Since we were split so evenly,
politically, there were only half the total that were stupid and that gets
it down to approx. 57,000,000. Unfortunately, we probably won't be able to
agree on which half was the stupid half.

HWB

3835. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-16 23:57:00 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4238c822_3@newsfeed.slurp.net>
Source record: 80580

>Richard Fry wrote:
>>"The most common radiator height for Class A non-directional AM
>>broadcast stations operating at 50kW day and night is 195-degrees."

"Richard Harrison" responded (in part)
>I won`t challenge that as I have conducted no survey. WJR Detroit is
>shown on the broadcast allocations map book as an unlimited (day and
>night) 50 kilowatt Class 1 station.

Your text is referenced to out-of-date versions of applicable FCC Rules. The FCC adopted the metric standard over 15 years ago, and the classification of AM broadcast stations no longer is defined as Class 1 to 4 but Classes A, B, C & D. The current versions of the applicable Rules are contained in 47CFR Part 73, and for this topic are dated October 1, 2004.

Minimum radiator heights in meters for Class A, B and C AM broadcast stations are shown in Figure 7 of 47CFR73.190. Radiator efficiency for Class A stations (other than in Alaska) must be such as to produce a ground wave of least 362 mV/m at 1km for 1kW of antenna input power. A 90ï¿½ omni radiator cannot do that.

RF

3836. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 00:04:15 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <7qqdnd7isJziVKXfRVn-tA@adelphia.com>
Source record: 80581

Korbin Dallas wrote:
> On Sun, 13 Mar 2005 16:30:07 +0000, Clarence_A wrote:
>
>
>>"Korbin Dallas" <korbindallas@yahoo.com> wrote in message
>>news:pan.2005.03.13.15.07.38.458717@yahoo.com...
>>
>>>On Thu, 03 Mar 2005 13:24:36 -0800, WA2SI wrote:
>>>
>>>
>>>>Hi folks,
>>>>
>>>>I just bought a batch of Amphenol PL-259 83-1SPs to assemble
>>
>>some
>>
>>>>jumpers. When did Amphenol shift from 'Made In USA' to
>>
>>'Assembled In
>>
>>>>Mexico'? The whole reason for buying Amphenol was to:
>>>>
>>>>A) Enjoy that Amphenol quality. (BTW, they don't even look the
>>
>>same.
>>
>>>>The dielectric has a cheap milky recycled look and the name
>>
>>and model
>>
>>>>nr. are no longer stamped into the sleeve ring.)
>>>>
>>>>B) Support products 'Made In USA'.
>>>>
>>>>Ok, this was my two minute rant. Tnx fer listening.
>>>>
>>>>73 de Bert
>>>>WA2SI
>>>>FISTS #9384
>>>>QRP ARCI #11782
>>>
>>>If the product was built in the USA the price would be so High
>>
>>you

>>
>>>would not purchase it.
>>>
>>>Would you really pay %500 more for the same product just to have
>>
>>Made
>>
>>>in USA stamped on it? We always look for the bargain price and
>>
>>that
>>
>>>usually means foreign produced products.
>>>
>>>Moving production to Mexico where manufacturing cost are lower
>>
>>allows
>>
>>>Amphenol to remain in business.
>>>
>>>These days Mexico is being undersold by China where the cost are
>>
>>less than
>>
>>>that of Mexico.
>>>
>>
>>BS!
>>
>>There are connector houses who assemble in the US on custom order
>>and they are no more expensive than the assembled in Mexico parts.
>>
>>Amphenol went to Mexico to get away from the union that was
>>breaking their back!
>
>
> Exactly, the Unions demands were driving the labor cost to the point
> where they were not able to compete, so the moved the operation to Mexico
> where it was not an issue.

Which matters no one whit any more. The Commies in Red China have
discovered that by massivley subsidizing their industries, they can
undercut the Mexicans or whoever else wants to compete with them.
Eventually there is a bill to be paid, but will we survive it?

Will they build our tanks for us when we are a total service economy?

Ya know, *they* don't like those demanding unions either!

- Mike KB3EIA -

3837. Iron Horse 17m antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 00:08:50 UTC
From: W4WNT <w4wnt@carolina.rr.com>
Message-ID: <mU3_d.34837$_i3.1523346@twister.southeast.rr.com>
Source record: 80582

I just purchased an Iron Horse 17m mobile vertical. Great design, I like the ferrule to position the "stinger". My problem is that I can't find the proper length for the stinger. If we ever get an amateur band at 16.5 MHz, I'm all set, but can't seem to find the 18.1 MHz length. Does anyone know what is the starting length for the stinger for 17m? The excess length does not seem to run into a cross wire as in the Hamstick, is it possible there is something missing here?

Thanks,
Bill, W4WNT

3838. Diplexer with transition frequency between 108 and 144 MHz

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 00:48:36 UTC
From: wb0gaz <wb0gaz@hotmail.com>
Message-ID: <1111020516.036467.279660@o13g2000cwo.googlegroups.com>
Source record: 80583
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I am going to use the same car antenna for AM/FM and 2M. This means I need a diplexer that transitions somewhere between 108 and 144 MHz. I haven't seen something like this offered commercially. Has anyone seen a product like this, or failing that, a design I could duplicate? The antenna will be a 1/4 wave on 2M, and would also be used as a (not quite ideal) AM/FM antenna.

73 Dave WB0GAZ wb0gaz@hotmail.com

3839. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 01:05:42 UTC
From: richardharrison@webtv.net
Message-ID: <8030-4238D7E6-64@storefull-3253.bay.webtv.net>
Source record: 80586

Richard Fry wrote:
"Radiator efficiency for Class A stations (other than in Alaska) must be such as to produce a groundwave of at least 352 mV/m at 1 km for 1kW of antenna input power. A 90-degree omni radiator cannot do that."

Most such antennas have long been in place. Surely they are grandfathered until the station is modified.

Best regards, Richard Harrison, KB5WZI

3840. Balun article now on line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 01:08:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113hm4b47h3je95@corp.supernews.com>
Source record: 80584

"Baluns: What They Do and How They Do It", from the _ARRL Antenna Compendium_, Vol. 1 is now available on line at http://eznec.com/Amateur/Articles/Baluns.pdf.

Roy Lewallen, W7EL

3841. Johnson Matchbox on 30 Mtrs?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 01:10:07 UTC
From: Carter Grabarczyk <k8vt@ameritech.net>
Message-ID: <PN4_d.6100$ZB6.5859@newssvr19.news.prodigy.com>
Source record: 80585

I am using a Johnson KW Matchbox antenna tuner with a 130 foot long, 30 foot high dipole fed with about 40 feet of ladder (window) line. It works well on all bands including the WARC bands *except* for 30 meters. (it doesn't make any difference if the band switch is on 20 or 40--it will not tune 30 in either case).

The question is, does anyone have any tips/suggestions/modifications to make this also operate on 30 meters?

By the way, modifying the antenna is not an option--lucky to have it up at all with city and subdivision restrictions. Maybe could add extra ladder line in the basement shack, but would have to loop it around the basement ceiling???

73,
Carter
K8VT

3842. :: :: :: :: *post 1009* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3843. Re: :: :: :: :: *post 1009* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3844. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 03:29:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <c8uh31dq4fv37lcjeofp0oer99uvlqf881@4ax.com>
Source record: 80589

On Tue, 15 Mar 2005 22:35:18 -0800, Richard Clark <kb7qhc@comcast.net>
wrote:
>On Wed, 16 Mar 2005 05:21:29 GMT, "aunwin@insightbb.com"
><aunwin@insightbb.com@insightbb.com> wrote:
>>specifically with respect to F/B
>>What was it before and to what amount was it improved ?
>Hi Art,
>
>What are the answers to these same questions applied to your design?

Tuff question. No doubt, not all is known about antennas....

3845. Re: Marine band antenna for the Yaesu VX-7R

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 03:38:36 UTC
From: Jon <jon@portlandbill.co.uk>
Message-ID: <d1au3l$3lb$1@newsg4.svr.pol.co.uk>
Source record: 80590

Muskie

The answer to this is a simple one. Simply make a Slim Jim antenna using 300 Ohm feeder. Design it for 145MHz and then cut a 1" strip if metal from a drinks can and wrap it around the antenna just above the coax feed point. By sliding the metal strip up or down the antenna the resonant point will move by 10 - 20MHz. I have used this design many times, you can mark the correct point for marine band and for 2M the move the metal tuning thingy depending on where you wish to Tx. The dimensions are not critical, I have built several of these antennas for use on the marine band (ie too small for use on 2m) but by sliding the tuning strip down the antenna it works great on 2m.

The antenna can be rolled up and put in your pocket when not in use and hung from a tree any other suitable support when required. OK, it's going to be bigger than 12" but so is a 1/4W antenna at this frequency.

Jon G2FHF

"muskie" <muskie@muskie.com> wrote in message
news:d16b5b$53c$1@news.hgc.com.hk...
> Hi,
>
> I'm thinkinig to make an antenna for the marine band (156mhz) and hooked
> to
> my vx-7r portable.
>
> 1. How could I make it to a reasonable carrying size (perhaps less than 12
> inches)?
>
> 2. Is it possible to use the steel wire and put the heat shrink tube
> outside?
>
> 3. Is the wire solder to the SMA core and no ground need?
>
> Thanks,
>
> Muskie
>
>
>

3846. Re: :: :: :: :: *post 1007* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3847. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 04:09:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113i0o8d2kr5hc0@corp.supernews.com>
Source record: 80592

Yes, as the wire diameter goes to zero, the current distribution approaches the same on all elements. But in some cases (where the element height is in the vicinity of a half wavelength) the wires have to get impossibly thin to achieve good f/b with equal magnitude and correctly phased base currents. I guess you could categorize needing a finite diameter wire as a "real world effect" and a zero diameter wire as "theoretically perfect". As I mentioned, it's not hard to do well at a quarter wavelength height, but much harder at heights approaching a half wavelength. For example, I took the EZNEC Cardioid.ez example file and increased the element heights to 0.4 meter (0.4 wavelength) using 25 segments/element. With wire diameter of 10^-15 mm, the front/back ratio was still 32 dB. With the original wire diameter of about 0.24 mm, the front/back was less than 15 dB. And things get worse yet as the elements get closer to a half wavelength high. But in practice, even at a quarter wavelength height, people using phased towers might encounter an unexpectedly low f/b ratio.

For anyone who's interested, I've posted the Technical Correspondence piece on my web site. You can get it at http://eznec.com/Amateur/Articles/Current_Dist.pdf.

Roy Lewallen, W7EL

Gene Fuller wrote:
> Hi Roy,
>
> I have read many of your articles, and I have no doubt you are correct.
>
> However, in the ideal case, specifically in the limit as the wire
> diameter goes to zero, the current perturbation from mutual inductance
> vanishes. (The mutual inductance does not vanish, only its impact on
> current distribution.)
>
> I just spent a few minutes playing around with EZNEC 3, and I was able
> to achieve a null of -52 dBi (-57 dBmax) for two half-wave elements,
> with nominal 90 degree spacing and 90 degree phasing. The wire size was
> as small as possible. This null was in the symmetry plane and directly
> in the anti-end-fire direction of course. I expect with more
> computational precision, and perhaps fine tuning frequencies and
> dimensions this null could be driven farther. The reported current
> imbalance was a maximum of 0.2%, mid-way between the center and the ends
> of the wires. The phase imbalance between the wires was a maximum of 0.2
> degrees.
>
> I am not trying to say this is practical. I was just pointing out the

> Art's use of polygons and canceling phasors was not particularly unique.
>
> We have since learned that what Art is trying to accomplish is to
> eliminate all radiation in the back hemisphere. The cardioid example is
> obviously moot for his quest.
>
> 73,
> Gene
> W4SZ
>
> Roy Lewallen wrote:
>
>> Gene Fuller wrote:
>>
>>> Art,
>>>
>>> Why not?
>>>
>>> The cardioid pattern from a two-element array was reported back as
>>> least as far as 1937, by the famous George H. Brown. In the ideal
>>> case (free space, no losses, etc.) the radiation directly to the rear
>>> is precisely zero.
>>>
>>> If you add various real world effects then the back lobe is not
>>> precisely zero, and this is shown in the ARRL Antenna Book referenced
>>> by Cecil.
>>> . . .
>>
>>
>>
>> Actually, this isn't quite true. If you manage to get perfectly phased
>> and equal magnitude currents in two identical elements where the phase
>> angle equals 180 degrees minus the element spacing (such as the
>> classic 90-degree fed, 90-degree spaced cardioid), you don't get an
>> infinite front-back ratio. In the case of the cardioid with typical
>> diameter quarter wavelength elements, you end up with around a 35 dB
>> front/back ratio. With longer elements, close to a half wavelength,
>> the front/back ratio can deteriorate to less than 10 dB when base
>> currents are identical in magnitude and correctly phased. The reason
>> is that the mutual coupling between elements alters the current
>> distribution on the elements. The mutual coupling from element 1 to
>> element 2 isn't the same as the coupling from element 2 to element 1
>> (the mutual Z is the same, but the coupled voltage and coupled
>> impedance aren't). The net result is that the two elements have
>> different current distributions, so despite having identical magnitude
>> base currents the two elements don't generate equal magnitude fields.
>> The overall fields from the two elements end up being imperfectly
>> phased, also.
>>
>> This occurs for theoretically perfect and perfectly fed elements, and

>> isn't due to "real world" effects.
>>
>> I published some comments about this effect in "Technical
>> Correspondence" in July 1990 QST ("The Impact of Current Distribution
>> on Array Patterns"). I'm certainly not the first to have observed it
>> -- some papers published as early as the '40s are referenced in my
>> article. But I had never seen its effect on front/back ratio of
>> cardioids mentioned before. Modern versions of the ARRL Antenna Book
>> clearly show the small reverse lobe of a typical antenna with quarter
>> wavelength elements.
>>
>> I stumbled across it when doing some modeling with ELNEC, the
>> predecessor of EZNEC, and originally thought it was an error in the
>> program. You'll see it in a plot from the Cardioid.EZ EZNEC example
>> file (which is also included with the demo program), and a brief
>> explanation in the corresponding Antenna Notes file.
>>
>> A theoretically infinite front/back ratio can be achieved by
>> modification of the base currents. The amount of modification required
>> depends on the length and diameter of the elements. Only a small
>> modification is needed if elements are a quarter wavelength high and
>> small diameter, but in that case, real world effects will probably
>> have at least as much and likely more of an effect on the front/back
>> than the current distribution phenomenon. Rather drastic modification
>> is required of the base currents of elements approaching a half
>> wavelength high, however, as elaborated in the "Technical
>> Correspondence" piece.
>>
>> Roy Lewallen, W7EL

3848. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 04:13:02 UTC
From: "aunwin@insightbb.com"
Message-ID: <it7_d.74626$r55.2282@attbi_s52>
Source record: 80593

If I remember correctly the worst point to the rear 180 degrees
was more than 40 db down. But I must point out that nobody
accepted my theoretical analysis regarding the phase/ current magnitude
theory and even tho my models show an INCREASE in lobe width because
it reflected a circle on the gain side one should certainly question what I
say.
There are many better educated people than I on this group and if not one
came forward and blest the theory then it would appear that my theory is
flawed,
my vector diagram is flawed and also my modelling is flawed. My only
disapointment was that none came forward to point out the flaw or just
assumed without mathematical reason that it must be flawed.
Yet at the same time many are anxious to find out how I managed
to lower the TOA. even in the face of presumed flawed analysis.
Weird. very weird yet again none declared it impossible
Regards
Art

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:c8uh31dq4fv37lcjeofp0oer99uvlqf881@4ax.com...
> On Tue, 15 Mar 2005 22:35:18 -0800, Richard Clark <kb7qhc@comcast.net>
> wrote:
>>On Wed, 16 Mar 2005 05:21:29 GMT, "aunwin@insightbb.com"
>><aunwin@insightbb.com@insightbb.com> wrote:
>>>specifically with respect to F/B
>>>What was it before and to what amount was it improved ?
>>Hi Art,
>>
>>What are the answers to these same questions applied to your design?
>
> Tuff question. No doubt, not all is known about antennas....

3849. :: :: :: :: *post 1010* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3850. Copper tubing on UHF

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 05:01:17 UTC
From: "pdrunen@aol.com" <pdrunen@aol.com>
Message-ID: <1111033799.036382.10660@g14g2000cwa.googlegroups.com>
Source record: 80595

Hi Antenna Masters...

I am going to use a plumber 1/2 copper tubing for a antenna on
372.5MHz.

Using 468/F, I get about 7.5 inches per leg of dipole.

How can I readjust the formula for the 1/2 inch copper?

I read someone that diameter of the tube starts playing a row in the
UHF band.

de KJ4UO

3851. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 06:29:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ae5i31p4tj72hmveq1k23rgqqgchjbhco7@4ax.com>
Source record: 80596

On Thu, 17 Mar 2005 04:13:02 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:
>If I remember correctly

Hi Art,

No notes? No model? No data?

>But I must point out that nobody
>accepted my theoretical analysis regarding the phase/ current magnitude

What theory? You simply described a trivial draughting exercise.

>My only
>disapointment was that none came forward to point out the flaw or just
> assumed without mathematical reason that it must be flawed.

Let's see, I gave you the rationale that supported your results, I
named the mathematical curve, and then pointed out the necessary
premise to arrive at the results.

>Yet at the same time many are anxious to find out how I managed
>to lower the TOA. even in the face of presumed flawed analysis.
>Weird. very weird yet again none declared it impossible

This is more flawed remembrance.

73's
Richard Clark, KB7QHC

3852. Re: Single wire aerial - what do I do?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 07:36:58 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <qlong2-i68.ln1@p400bob.lse.com.au>
Source record: 80597

Hi Roy

Mmmmm, yet another base belief falls screaming from the sky! <grin>

It would be interesting to know how it happened (the misconception that is). The low level thinking (for me) on a transmission line is that for a pair of wires, the signal on one side is always 180 degrees out of phase with the other. Any noise induced by a magnetic field would be in the same phase hence common mode rejection means it isnt "seen" by a RX. I cant help thinking that unbalanced line is somewhat asymetrical in that the diameter of the outer conductor would *somehow* have a non trivial width when it comes to the wavelength of the frequency in use. Needless to say I havent gone to the extent of plotting magnetic lines and rereading my base theory stuff. Some things one just has to accept!

I get the *feeling* that balanced feeder is less likely to radiate than unbalanced.

Why does one use triax in some situations? (cable damage and inadvertent DC supply grounding aside)

One hopes it is a fair statement to say that any inbalance in the current on either side of the transmission line (or phase shift ne 180 deg) will result in line radiation.. (However one gets it)

I have grabbed the ARRL balun PDF from the Eznec site and will see how I go... Have to pay some bills first!

I was trying to explain why an antenna (folded dipole or qaud) isnt really a short circuit at the operating frequency, without referring to terms like Xc, Xl, and resonance. I see I failed! What I was trying to portray was that for the amount of time and distance (aka wavelength) that the electrons had to travel around the antenna any instant in time and at any specifc place would never see a short circuit. Or of you like AC is very different to DC.

What I really want to know is whether Paul's FM RX is now working!

Cheers Bob

Roy Lewallen wrote:
-----snips----
>>
>> You have to think of the antenna as a tuned AC circuit. In fact
>> completely throw away any thoughts of a DC circuit havning any effect
>> whatsoever. Same kind of logic as a power transformer not looking like
>> a short circuit. Think of the antenna as being feed by an

>> instantaneous voltage that takes a fixed time to get from the
>> feedpoint to where there is a "short cicruit" in the wire. The signal
>> from one side of the coax arrives "in phase" with the one from the
>> other side so no current flows between them. The trick is in the
>> length of the wire in question. . .
>
>
> I don't quite follow this, so I might be misinterpreting what was said,
> but it doesn't sound quite right.

3853. :: :: :: :: *post 1010* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3854. Re: Diplexer with transition frequency between 108 and 144 MHz

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 09:14:40 UTC
From: nana <nana@netscape.net>
Message-ID: <39t044F65a5rcU1@individual.net>
Source record: 80599
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I think it was made by Antenna Specialist years ago for covert antennas.

Brad.

"wb0gaz" <wb0gaz@hotmail.com> wrote in message
news:1111020516.036467.279660@o13g2000cwo.googlegroups.com...
>I am going to use the same car antenna for AM/FM and 2M. This means I
> need a diplexer that transitions somewhere between 108 and 144 MHz. I
> haven't seen something like this offered commercially. Has anyone seen
> a product like this, or failing that, a design I could duplicate? The
> antenna will be a 1/4 wave on 2M, and would also be used as a (not
> quite ideal) AM/FM antenna.
>
> 73 Dave WB0GAZ wb0gaz@hotmail.com
>

3855. Re: Single wire aerial - what do I do?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 10:06:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113illhaa0nuk37@corp.supernews.com>
Source record: 80600

Bob Bob wrote:
> Hi Roy
>
> Mmmmm, yet another base belief falls screaming from the sky! <grin>
>
> It would be interesting to know how it happened (the misconception that
> is). The low level thinking (for me) on a transmission line is that for
> a pair of wires, the signal on one side is always 180 degrees out of
> phase with the other.

And why would that be? Unfortunately, there's nothing that forces this to be true. There *is* something that forces it to be true *inside* a coaxial cable -- the fact that the shield confines the fields created by the wires. But then there's the outside to worry about. And there's no such restriction on a twinlead transmission line.

I won't even try to deal with votages on a transmission line, because you lose any hope of a "ground" reference when you get more than a fraction of a wavelength away from the Earth. As far as the currents go, though, there's no reason at all that the currents on the two wires of a transmission line can't have any possible amplitude and phase relationship. These are often separated into "common mode" and "differential mode" or "odd mode" and "even mode" components for analytical and mathematical convenience. But there are, at the end of the day, two different currents on the two wires. In a coaxial cable, the common and differential mode currents are actually physically separated, the the former being entirely on the outside and the latter on the inside. If you consider the sum of the current on the outside of the shield and the current on the inside of the shield to be the "shield current", you have exactly the same situtation with coax as for twinlead -- two conductors with two currents that can have any possible relationship.

> Any noise induced by a magnetic field would be in
> the same phase hence common mode rejection means it isnt "seen" by a RX.

True only if the receiver inherently has common mode rejection, which most don't. Take a look at fig. 4 in the balun article. Imagine the "output stage" being turned around so it's the input stage of a receiver. Then suppose a noise source comes along and adds 1 mA downward to both conductors of the cable, which would represent a perfectly common mode pickup. The radio connector center conductor current would increase by 1 mA -- which would be delivered directly to the the receiver. The current on the inside of the radio chassis would increase by 1 mA, and the current on the outside of the rig would increase by 2

mA (which, not coincidentally, is the total current resulting from the noise source). The receiver would have a larger input signal as a result of that noise.

> I cant help thinking that unbalanced line is somewhat asymetrical in
> that the diameter of the outer conductor would *somehow* have a non
> trivial width when it comes to the wavelength of the frequency in use.
> Needless to say I havent gone to the extent of plotting magnetic lines
> and rereading my base theory stuff. Some things one just has to accept!
>
> I get the *feeling* that balanced feeder is less likely to radiate than
> unbalanced.

This becomes a factor only when the dimensions of the transmission line become a significant part of a wavelength. At that point, you have other problems maintaining transmission line operation, and up to that point, other factors are much more important.

>
> Why does one use triax in some situations? (cable damage and inadvertent
> DC supply grounding aside)

There are situations in metrology and low level signal work where noise rejection on the order of 100 dB and better is required. Those require special shielding and techniques, but only after exceptional balance has been achieved by other means. The problems most amateurs have with current imbalance is orders of magnitude greater, and adding another shield won't help.

You can put a shield around a twinlead line which will guarantee that the sum of the currents on the two twinlead conductors and the inside of the shield is zero. But there can be a separate current on the outside, just like ordinary coax, which can radiate. You don't generally cure balance problems by adding a shield.

>
> One hopes it is a fair statement to say that any inbalance in the
> current on either side of the transmission line (or phase shift ne 180
> deg) will result in line radiation.. (However one gets it)

Yes. That's absolutely correct. A line(*), either twinlead or coax, with equal magnitude and oppositely phased currents won't radiate significantly. If the currents have any other relationship, they will. The common mode current is often defined as (I1 + I2)/2, where I1 and I2 are the currents on the two conductors defined as positive in the same physical direction. The radiation will be the same as if you had two parallel conductors each carrying this amount of current, both in phase and in the same direction -- or a single conductor carrrying (I1 + I2) and no other current. If the currents are equal in magnitude and opposite in phase, the common mode current is zero and there's no radiation.

(*) The line is assumed to have spacing very small in terms of wavelength.

>
> I have grabbed the ARRL balun PDF from the Eznec site and will see how I
> go... Have to pay some bills first!
>
> I was trying to explain why an antenna (folded dipole or qaud) isnt
> really a short circuit at the operating frequency, without referring to
> terms like Xc, Xl, and resonance. I see I failed! What I was trying to
> portray was that for the amount of time and distance (aka wavelength)
> that the electrons had to travel around the antenna any instant in time
> and at any specifc place would never see a short circuit. Or of you like
> AC is very different to DC.

The problem with extremely simplistic analogies is that a thoughtful
person is bound to try and extrapolate to gain further understanding --
just as you're doing here. And the simpler the analogy, the less he can
extrapolate before the analogy falls apart. I don't think any
explanation of AC phenomena can get very far at all without at least a
rudimentary understanding of capacitance and inductance. If there is,
you'd have to be very careful in applying it.

>
> What I really want to know is whether Paul's FM RX is now working!
>
> Cheers Bob

3856. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 11:04:45 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <423964a1_5@newsfeed.slurp.net>
Source record: 80601

Richard Harrison"
> Richard Fry wrote:
> "Radiator efficiency for Class A stations (other than in Alaska) must be
> such as to produce a groundwave of at least 352 mV/m at 1 km for 1kW of
> antenna input power. A 90-degree omni radiator cannot do that."
>
> Most such antennas have long been in place. Surely they are
> grandfathered until the station is modified.

The minimum efficiency for Class A is 362mV/m as I posted, not 352mV/m as you "quoted me" above.

As far as the 50kW / non-D / 24-hr operations are concerned, their facilities have avoided the use of 90ï¿½ radiators nearly from their start, due to the commercial/competitive need to generate a very strong groundwave while avoiding self interference to that groundwave at night from their own high-angle radiation. The advantages of using greater fractional wavelength radiators to accomplish this has long been known and confirmed by field measurements.

RF

3857. OCF dipole ON4BAA

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 11:06:01 UTC
From: Krzysztof <kryho@mitr.p.lodz.pl>
Message-ID: <d1bobq$9jb$1@kujawiak.man.lodz.pl>
Source record: 80602

Hi,
Has anybody tested ON4BAA 300 ohm fed windom antenna
http://salsawaves.com/antennas/windom/index.html
with total wire length 41 mtrs and shorter leg length 8,1 mtrs ?

73 Chris SP7ICE

3858. :: :: :: :: *post 1010* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3859. Re: Diplexer with transition frequency between 108 and 144 MHz

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 11:30:39 UTC
From: nitespark <nitespark@cox.net>
Message-ID: <dTd_d.64710$7z6.59735@lakeread04>
Source record: 80604
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

wb0gaz wrote:
> I am going to use the same car antenna for AM/FM and 2M. This means I
> need a diplexer that transitions somewhere between 108 and 144 MHz. I
> haven't seen something like this offered commercially. Has anyone seen
> a product like this, or failing that, a design I could duplicate? The
> antenna will be a 1/4 wave on 2M, and would also be used as a (not
> quite ideal) AM/FM antenna.
>
> 73 Dave WB0GAZ wb0gaz@hotmail.com
>

Antenna Specialist makes/made them. I may have a few laying around.
A/S also made one for VHF low, which I do use for my 6m mobile.

Andy
WD4KDN

--
I have never met a liberal street cop.

3860. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 12:41:46 UTC
From: john doe <john.doe@host.com>
Message-ID: <pan.2005.03.17.12.41.46.92754@host.com>
Source record: 80605

I'm trying to understand the shunt tapped inductor as a circuit.

How does it work??? As long as the inductor cancels out the reactance of the radiator you just need to find the 50 ohm point on the coil ... or for that matter any feedline impedance???

Pardon my lack of knowledge.

de ka2pbt

3861. Re: Johnson Matchbox on 30 Mtrs?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 12:54:23 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <36f_d.21681$hU7.7168@newssvr33.news.prodigy.com>
Source record: 80606

Carter,
Have you tried the other band selections?
'Doc

3862. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 13:04:03 UTC
From: "aunwin@insightbb.com"
Message-ID: <7ff_d.77348$r55.2107@attbi_s52>
Source record: 80607

All understood so now we can put the thread aside
Art
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:ae5i31p4tj72hmveq1k23rgqqgchjbhco7@4ax.com...
> On Thu, 17 Mar 2005 04:13:02 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>>If I remember correctly
>
> Hi Art,
>
> No notes? No model? No data?
>
>>But I must point out that nobody
>>accepted my theoretical analysis regarding the phase/ current magnitude
>
> What theory? You simply described a trivial draughting exercise.
>
>>My only
>>disapointment was that none came forward to point out the flaw or just
>> assumed without mathematical reason that it must be flawed.
>
> Let's see, I gave you the rationale that supported your results, I
> named the mathematical curve, and then pointed out the necessary
> premise to arrive at the results.
>
>>Yet at the same time many are anxious to find out how I managed
>>to lower the TOA. even in the face of presumed flawed analysis.
>>Weird. very weird yet again none declared it impossible
>
> This is more flawed remembrance.
>
> 73's
> Richard Clark, KB7QHC

3863. Re: :: :: :: :: *post 1009* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3864. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 13:52:58 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <42398c10_3@newsfeed.slurp.net>
Source record: 80609

"Richard Fry" wrote
> As far as the 50kW / non-D / 24-hr operations are concerned, their
> facilities have avoided the use of 90ï¿½ radiators...

The list below illustrates my statement above. This data for most of the 50kW, 24-hr stations with the same radiation pattern day and night was taken from a secondary source linked to the FCC database, current as of October 2004 (typos, if any, excepted).

The average height of these radiators is 188.8ï¿½, not including WFAN and KDKA.

Data Format =
Freq, Call Letters, Tower Height in Degrees, Notation
640 KFI 175.7
650 WSM 190.3
660 WFAN 155.3 (top loaded)
670 WSCR 181.5
700 WLW 189.3
710 WOR 177
720 WGN 195
750 WSB 179.3
760 WJR 194.7
770 WABC 180.3
780 WBBM 194.1
810 WGY 182.9
820 WBAP 192.1
830 WCCO 194.4
840 WHAS 201.1
850 KOA 207.8
870 WWL 182.1
880 WCBS 207.1
890 WLS 189.3
1020 KDKA 280.28 (sectionalized)
1030 WBZ 188.5
1050 WEPN 186
1060 KYW 180
1070 KNX 193.5
1100 WTAM 185.2
1120 KMOX 192.7
1140 WRVA 185
1160 KSL 193.2
1180 WHAM 177.1
1200 WOAI 193.2

1210 WPHT 186

RF

3865. Re: Balun article now on line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 14:06:10 UTC
From: -XC- <nobody@home.net>
Message-ID: <PdWdnWvV-6tJE6TfRVn-1g@comcast.com>
Source record: 80610

Thanks Roy, your article is a keeper. I'm gonna fire up the soldering iron, grab some #43 cores, and build me up a current balun or two for my listening setup.

73,
John

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:113hm4b47h3je95@corp.supernews.com...
> "Baluns: What They Do and How They Do It", from the _ARRL Antenna
> Compendium_, Vol. 1 is now available on line at
> http://eznec.com/Amateur/Articles/Baluns.pdf.
>
> Roy Lewallen, W7EL

3866. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 14:37:56 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <qv4j31tj9bhi5u41efm8b1u0b18fgjptvq@4ax.com>
Source record: 80611

On Thu, 17 Mar 2005 04:13:02 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>Yet at the same time many are anxious to find out how I managed
>to lower the TOA. even in the face of presumed flawed analysis.
>Weird. very weird yet again none declared it impossible

Perhaps my pestering you for the "secret" to lower "TOA" without
changing the antenna height was too oblique to qualify as "declaring
it impossible."

Therefore, let me as my congressman would say (actually not *my*
congressman, he's not that bright), "I would like to revise and expand
my remarks: It's impossible."

3867. Re: Johnson Matchbox on 30 Mtrs?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 14:58:43 UTC
From: denton <denton@oregontrail.net>
Message-ID: <113j6rjha3og8be@corp.supernews.com>
Source record: 80612

There are several options you can take..
Install a new set of taps on the coil for 30 meters (probably the best way to go)
Add additional caps across the matching cap
Add a variable cap on the input link
Install taps on the input link
Add a variable cap across the output where the twin lead is attached
Except for the input link, lift all other cap ties to ground
And you can add another tap on the matching capacitor..on the other side of the random wire tap and use these two together for the twin lead.

"Carter Grabarczyk" <k8vt@ameritech.net> wrote in message news:PN4_d.6100$ZB6.5859@newssvr19.news.prodigy.com...
>I am using a Johnson KW Matchbox antenna tuner with a 130 foot long, 30
> foot high dipole fed with about 40 feet of ladder (window) line. It
> works well on all bands including the WARC bands *except* for 30 meters.
> (it doesn't make any difference if the band switch is on 20 or 40--it will
> not tune 30 in either case).
>
> The question is, does anyone have any tips/suggestions/modifications to
> make this also operate on 30 meters?
>
> By the way, modifying the antenna is not an option--lucky to have it up at
> all with city and subdivision restrictions. Maybe could add extra ladder
> line in the basement shack, but would have to loop it around the basement
> ceiling???
>
> 73,
> Carter
> K8VT
>

3868. Re: 5/8 wave 2 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 15:44:15 UTC
From: richardharrison@webtv.net
Message-ID: <8754-4239A5CF-668@storefull-3258.bay.webtv.net>
Source record: 80613

Richard Fry wrote:
"The list below illustrates my statement above."

Yes, and it proves your point that non-directional 50 KW broadcast stations in the U.S. use tall towers in terms of wavelength.

The r-f is precious and it makes sense to make the most of it. Thank you for the list of high-powered stations which can be heard far and wide. I still regret the end of WLW`s 500 KW days.

Best regards, Richard Harrison, KB5WZI

3869. Low Power AM Radio Broadcasting

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 16:24:49 UTC
From: WCRV@webtv.net
Message-ID: <10699-4239AF51-500@storefull-3317.bay.webtv.net>
Source record: 80615

The Low-Power AM station hobby has become more popular over the past 2 years.
In the U.S, it is legal to broadcast over the AM band 540kHz-1700kHz using a 3
meter antenna and a 100mW transmitter.
Until recently, building a small AM radio station was very complicated and very expensive, until now.
Using a SSTRAN AMT-3000 transmitter, which comes as a kit for under $100.00US, or a built version which comes assembled and tested for under $200.00 US, and a 3 meter, coil loaded and tunable antenna for around $225.00 US, anyone can get on the air right now!
I get questions about range: the system I am describing has had reports from 1/2 mile to over 4 miles! Range totally depends on these factors: location, scope of the land, conductivity, choice of frequency/adjacencies, and use of this antenna.
If the transmitter and antenna are installed correctly in a proper area, several miles are possible. Many people are interested in a good, solid local signal and this system does it for a fraction of the amount of money you will spend for a comparable system.
If you are interested in low power AM Broadcasting, I invite you to visit this site:
http://antenna18431.tripod.com/antenna.htm
In this site you will find information on the 3 meter antenna, pictures of it, information and pictures of the transmitter and a link to email questions, comments and inquiries to.
If you would like to be on the air, this is an excellent choice to do it well, and at a very affordable price!

3870. Re: Balun article now on line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 16:33:21 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <lji_d.10154$Z07.3924@trnddc02>
Source record: 80614

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:113hm4b47h3je95@corp.supernews.com...
> "Baluns: What They Do and How They Do It", from the _ARRL Antenna
> Compendium_, Vol. 1 is now available on line at
> http://eznec.com/Amateur/Articles/Baluns.pdf.
>
> Roy Lewallen, W7EL

Thanks Roy

You are a truely helpfull guy and I appreciate your efforts.

Jerry

3871. Re: Copper tubing on UHF

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 18:11:40 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1111083100.215500.310220@f14g2000cwb.googlegroups.com>
Source record: 80616

Large diameter elements make the antenna resonant at a lower frequency. Shorten the elements to resonate at the desired frequency. You'll probably find that about 7.1" will work well in your case, though without some test equipment you're likely never going to notice the difference! Resonance is NOT required for proper operation as an antenna. An advantage of larger diameter elements is that the useable bandwidth increases, though again if you're using it on a single frequency with narrow bandwidth, you'll never notice the effect.

Cheers,
Tom

3872. Re: Down Tilt on Slot Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 18:12:02 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-90434D.09121117032005@netnews.worldnet.att.net>
Source record: 80617

In article <113he0pjln68d3c@corp.supernews.com>,
"Matt" <nospam_ng@fileholder.net> wrote:

> Is there anyway to down tilt the signal on horizontally polarized omni slot
> antenna? I would like to add 1-3 degrees of downtilt.
>
> Matt
>
>

Mount the antenna upside down.......

Me

3873. Re: Down Tilt on Slot Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 18:22:10 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1111083730.499669.270930@f14g2000cwb.googlegroups.com>
Source record: 80618

If it's a single element, how in the world will you ever measure it accurately enough to KNOW what the up-or-down tilt is? That is, the directionality of a simple half-wave dipole just isn't enough to matter when you get down to a couple of degrees. In freespace you MIGHT be able to measure things that closely if you were extremely careful, but over practical ground, I don't believe you have any hope.

If it's multiple vertically-stacked elements, then arrange the feed so their currents are shifted in phase a small amount from element to element. A back-of-the-envelope picture and some simple trig should tell you just how much phase shift you should have between adjacent elements.

Cheers,
Tom

3874. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 18:54:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113jkjt3u2jraca@corp.supernews.com>
Source record: 80619

Actually, it is possible to lower the takeoff angle (the elevation angle at which the pattern is maximum) without changing the antenna height. The method is to narrow the free-space elevation radiation pattern. For example, modify the EZNEC example file W8JK.ez by changing the height (Z coordinates) to 0.5 wavelength. The takeoff angle is 25 degrees. Delete one of the elements to make a dipole and note that the dipole's takeoff angle is 28 degrees. The lowering is due to the substantially greater elevation directivity of the W8JK. There aren't too many modestly sized horizontal arrays that have enough elevation directivity to make much of a difference in takeoff angle, however, so the difference is generally small at best. It's also interesting to note that the takeoff angle of this dipole over real ground is 2 degrees lower than the takeoff angle of the dipole over perfect ground.

But as we and others have pointed out before, lowering the "takeoff angle" (as the term is used by modeling programs) doesn't guarantee better DX performance, and really doesn't mean much at all. For example, the modified W8JK has a gain of 5.66 dBi at an elevation angle of 10 degrees and 0.31 dBi at 5 degrees. If we change source 2 phasing to -144 degrees for a nominally unidirectional pattern (see the recent discussion about the impact of current distribution on front/back ratio), the takeoff angle rises slightly to 26 degrees. But the gain at 10 degrees elevation is now 6.55 dBi and at 5 degrees 1.15 dBi, both greater than the W8JK with its lower takeoff angle. And at very low elevation angles, the gain of the dipole over real ground is very nearly the same as the gain of the dipole over perfect ground, despite the difference in takeoff angles. At higher angles, the dipole over perfect ground is better, despite its higher takeoff angle.

Actual gain at elevation angles of around 2 to 10 or 12 degrees is a valid and useful measure of DX performance; "takeoff angle" isn't. But based on past performance, I'm not holding my breath that we'll be seeing any actual numbers from Art about his innovations.

Roy Lewallen, W7EL

Wes Stewart wrote:
> On Thu, 17 Mar 2005 04:13:02 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>
>
>
>>Yet at the same time many are anxious to find out how I managed
>>to lower the TOA. even in the face of presumed flawed analysis.

>>Weird. very weird yet again none declared it impossible
>
>
>
> Perhaps my pestering you for the "secret" to lower "TOA" without
> changing the antenna height was too oblique to qualify as "declaring
> it impossible."
>
> Therefore, let me as my congressman would say (actually not *my*
> congressman, he's not that bright), "I would like to revise and expand
> my remarks: It's impossible."

3875. Re: Balun article now on line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 19:06:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113jla0hnkrgl86@corp.supernews.com>
Source record: 80620

Thanks, but I want to thank the ARRL. I recently enquired and discovered they generously grant blanket permission for authors of articles in their publications to reproduce the articles on their own web sites. So I'll be adding more to my web site as I have time to scan them in. I hope the articles will prompt some readers to buy some of the publications to see some of the other interesting and informative things which have been and are being written. And to support the League's ability to continue publishing. Contrary to growing popular belief, only a tiny fraction of the good information that exists is on the web.

Roy Lewallen, W7EL

Jerry Martes wrote:
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:113hm4b47h3je95@corp.supernews.com...
>
>>"Baluns: What They Do and How They Do It", from the _ARRL Antenna
>>Compendium_, Vol. 1 is now available on line at
>>http://eznec.com/Amateur/Articles/Baluns.pdf.
>>
>>Roy Lewallen, W7EL
>
>
> Thanks Roy
>
> You are a truely helpfull guy and I appreciate your efforts.
>
> Jerry
>
>

3876. Re: Single wire aerial - what do I do?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 19:30:10 UTC
From: richardharrison@webtv.net
Message-ID: <10282-4239DAC2-758@storefull-3252.bay.webtv.net>
Source record: 80622

Bob bob wrote:
"The low level thinking (for me) on a transmission line is that for a pair of wires, the signal on one side is always 180 degrees out of phase with the other."

That follows for me from the action of the simplest phase inverter, the center-tapped coil. Feed one end against the center. The other end is out-of-phase.

The current in opposite wires of a transmission line is flowing in opposite directions. Hence, the wires are out of phase.

I think a parallel-wire transmission line has a self-balancing tendency.

Two parallel wires form the simplest transmission line, with the power source at one end and a load at the other.

Distributed along the wires are series resistance, series inductance, shunt capacitance, and shunt conductance.

Power travels from the source toward the load in the incident wave. Velocity of the wave and voltage to current ratio in the wires depend on construction of the line.

The destributed inductance in one parallel wire couples with its mate to form a mutual reactance. The two wires are inductively coupled. They`re also capacitively coupled.

With inductive coupling, Lenz`s law says, "the induced current is in such direction that it opposes the change that produced it". It`s reactive, pushing back at the imposed current. It flows in the opposite direction. This is evident in self induction and secondary currents. Induced current is out of phase.

With current in one wire inducing our of phase current in the opposite wire of a long transmission line of closely coupled wires, balance between the wires is enhanced.

Best regards, Richard Harrison, KB5WZI

3877. Re: Down Tilt on Slot Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 19:35:28 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113jn041m6vp04f@corp.supernews.com>
Source record: 80621

I'd also think that physically tilting the antenna that much might not be too much of a trick, and it should give you the tilt you need. As Tom says, it must have a tremendously narrow elevation pattern if you're going to see any significant change with that small amount of tilt.

Roy Lewallen, W7EL

K7ITM wrote:
> If it's a single element, how in the world will you ever measure it
> accurately enough to KNOW what the up-or-down tilt is? That is, the
> directionality of a simple half-wave dipole just isn't enough to matter
> when you get down to a couple of degrees. In freespace you MIGHT be
> able to measure things that closely if you were extremely careful, but
> over practical ground, I don't believe you have any hope.
>
> If it's multiple vertically-stacked elements, then arrange the feed so
> their currents are shifted in phase a small amount from element to
> element. A back-of-the-envelope picture and some simple trig should
> tell you just how much phase shift you should have between adjacent
> elements.
>
> Cheers,
> Tom
>

3878. :: :: :: :: *post 1013* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3879. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 20:44:34 UTC
From: "aunwin@insightbb.com"
Message-ID: <S_I_d.145306$4q6.47339@attbi_s01>
Source record: 80624

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:113jkjt3u2jraca@corp.supernews.com...
> Actually, it is possible to lower the takeoff angle (the elevation angle
> at which the pattern is maximum) without changing the antenna height. The
> method is to narrow the free-space elevation radiation pattern. For
> example, modify the EZNEC example file W8JK.ez by changing the height (Z
> coordinates) to 0.5 wavelength. The takeoff angle is 25 degrees. Delete
> one of the elements to make a dipole and note that the dipole's takeoff
> angle is 28 degrees. The lowering is due to the substantially greater
> elevation directivity of the W8JK. There aren't too many modestly sized
> horizontal arrays that have enough elevation directivity to make much of a
> difference in takeoff angle, however, so the difference is generally small
> at best. It's also interesting to note that the takeoff angle of this
> dipole over real ground is 2 degrees lower than the takeoff angle of the
> dipole over perfect ground.
>
> But as we and others have pointed out before, lowering the "takeoff angle"
> (as the term is used by modeling programs) doesn't guarantee better DX
> performance, and really doesn't mean much at all. For example, the
> modified W8JK has a gain of 5.66 dBi at an elevation angle of 10 degrees
> and 0.31 dBi at 5 degrees. If we change source 2 phasing to -144 degrees
> for a nominally unidirectional pattern (see the recent discussion about
> the impact of current distribution on front/back ratio), the takeoff angle
> rises slightly to 26 degrees. But the gain at 10 degrees elevation is now
> 6.55 dBi and at 5 degrees 1.15 dBi, both greater than the W8JK with its
> lower takeoff angle. And at very low elevation angles, the gain of the
> dipole over real ground is very nearly the same as the gain of the dipole
> over perfect ground, despite the difference in takeoff angles. At higher
> angles, the dipole over perfect ground is better, despite its higher
> takeoff angle.

> Actual gain at elevation angles of around 2 to 10 or 12 degrees is a valid
> and useful measure of DX performance; "takeoff angle" isn't.

That is exactly what I pointed to in the discussion. The top half of the
forward
lobe of a directive array is of no use say for opening a band. The important
point
is the underside contour of the main lobe where there is useful gain at the
angles
that Roy stated. For instance; a 60 foot + boom yagi with a gain of around
16 dbi
will have a TOA at say 13 degrees but it is also possible to construct a
directive array
of 10 degrees TOA that has the same underside contour as the yagi design and

thus equal
in performance. The difference is that a yagi design has a fat lobe with
narrow beam width,
where asyou can construct a radiator or an array that has a larger beam
width,
but with a thinner lobe that covers the aforementioned degrees of coverage
required.
Another point of mention is that many associate low TOA with antenna height
but
without specificity with respect to feed point height or as in other cases
such as a top hat or "unused" array as with stacked antennas
For me it is a question of phase angle provided by a transmitting point
where its optimum angle is directly opposite the earths surface and
supplimented
by a secondary radiation of a similar phase, but to explain why
would be impossible with respect to this group so don't ask

One particular poster hit things right on the head when he referred to
resistive impedance
THRU OUT the length of any radiator./s, he obviously knows his stuff tho I
question
the thin wire aproach to accomplish this i.e. negate reactance

But
> based on past performance, I'm not holding my breath that we'll be seeing
> any actual numbers from Art about his innovations.

Just for me, try to hold your breath for ten minuits.
You well know that no figures are accepted by the know
alls on this group. Even observed tests undertaken are not accepted unless
the so called guru is actually present which would be impossible , since the
gurus
wish is to preserve their perceived stations and not subject to ridicule
On this actual thread I have given explanations and figures and only
ommited how I achieve it ,which I will save until I have completed pertinent
studies.
As a former engineer which apparently you say that you are one also, it is
important
to review and check your work several times to ensure that it is in
presentable state
to fellow engineers for review. One says that it is impossible, another
somehow
turns his responses to unfounded gibberish and another declares the whole
thing as hillarious and so on, such that any comment made, even when made
in approval,
is meaningless as comments made are emotional and without any technical
depth.
Art Unwin KB9MZ.....XG

>
> Roy Lewallen, W7EL

>
> Wes Stewart wrote:
>> On Thu, 17 Mar 2005 04:13:02 GMT, "aunwin@insightbb.com"
>> <aunwin@insightbb.com@insightbb.com> wrote:
>>
>>
>>
>>
>>>Yet at the same time many are anxious to find out how I managed
>>>to lower the TOA. even in the face of presumed flawed analysis.
>>>Weird. very weird yet again none declared it impossible
>>
>>
>>
>> Perhaps my pestering you for the "secret" to lower "TOA" without
>> changing the antenna height was too oblique to qualify as "declaring
>> it impossible."
>>
>> Therefore, let me as my congressman would say (actually not *my*
>> congressman, he's not that bright), "I would like to revise and expand
>> my remarks: It's impossible."

3880. Re: :: :: :: :: *post 1013* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3881. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 21:18:21 UTC
From: jgboyles@aol.com
Message-ID: <1111094301.752512.260960@f14g2000cwb.googlegroups.com>
Source record: 80526

john doe wrote:
> I'm trying to understand the shunt tapped inductor as a circuit.
>
> How does it work??? As long as the inductor cancels out the reactance
of
> the radiator you just need to find the 50 ohm point on the coil ...
or for
> that matter any feedline impedance???
>
> Pardon my lack of knowledge.
>
> de ka2pbt

Hi John, Is the shunt tapped inductor you are refering to is a coil with one end connected to the 5/8 radiator, the other end to the radials, the coax shield to the radials, and the center conductor tapped up the coil from the radials? If this is the case, according to the Smith Chart, you can only get a perfect 50 ohm match if the real part of the impedance you are trying to match less than 50 ohms. Our models indicate this is not the case with a 5/8 radiator.
The shunt tapped inductor is actually a 2 element matching system, with both elements being inductors. As you stated, the inductor in series with the radiator cancels the reactance, and the tapped shunt inductor provides a 50+j0 point. Works only if the real part of the impedance is <50 ohms.
Gary N4AST

3882. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 21:41:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <07tj31dceehr20615kulbtstb1gr5mh0r0@4ax.com>
Source record: 80527

On Thu, 17 Mar 2005 20:44:34 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

> For me it is a question of phase angle provided by a transmitting point
>where its optimum angle is directly opposite the earths surface and
>supplimented
>by a secondary radiation of a similar phase,

My design is simpler and does it better.

>but to explain why
>would be impossible with respect to this group so don't ask

Hi Art,

Time has proven when we do ask, you can't answer - so your advice is
commendable on two counts.

>You well know that no figures are accepted by the know
>alls on this group.

You haven't offered any
1. Data;
2. Notes;
3. Models
and certainly no
4. Figures.

>Even observed tests undertaken are not accepted unless
>the so called guru is actually present which would be impossible

Then they are not "observed tests."

73's
Richard Clark, KB7QHC

3883. Re: Johnson Matchbox on 30 Mtrs?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 22:38:36 UTC
From: jgboyles@aol.com
Message-ID: <1111099116.233327.176530@o13g2000cwo.googlegroups.com>
Source record: 80528

Carter Grabarczyk wrote:
> I am using a Johnson KW Matchbox antenna tuner with a 130 foot long,
30
> foot high dipole fed with about 40 feet of ladder (window) line. It
> works well on all bands including the WARC bands *except* for 30
meters.
> (it doesn't make any difference if the band switch is on 20 or
40--it
> will not tune 30 in either case).
>
> The question is, does anyone have any tips/suggestions/modifications
to
> make this also operate on 30 meters?
>
> By the way, modifying the antenna is not an option--lucky to have it
up
> at all with city and subdivision restrictions. Maybe could add extra
> ladder line in the basement shack, but would have to loop it around
the
> basement ceiling???
>
> 73,
> Carter
> K8VT
Hi Carter, That's a very high impedance you are trying to match on
30m. Looks like the only options you have are modifying the Matchbox
or changing the Feedline lenght. Another poster gave some good ideas
on modifying your tuner. If you don't want to modify the tuner, then
feed the 130' dipole with 11.3' of 450 ohm line and then go 50 ohm coax
to the transmitter. Don't need a tuner. Or if you could lenghten to
ladder line to 56' that would give a good 50 ohm match, no tuner
needed.
This is a guess but I think you would need to lenghten or shorten the
ladder line 8-10' to get within range of the Matchbox.
Gary N4AST

3884. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 22:59:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113k2v6themc1e2@corp.supernews.com>
Source record: 80529

Let's suppose you have a vertical antenna with a base feedpoint impedance of, say, 75 - j300 ohms (75 ohms resistance in series with 300 ohms of capacitive reactance), typical of a thin 5/8 wave vertical. A network consisting of 1275 ohms in *parallel* with 319 ohms of capacitive reactance has the same impedance. (Note how the Xc isn't much different from the Xc of the series circuit in this case.) If we put an inductor with 319 ohms of inductive reactance in parallel with the antenna (that is, from the base feedpoint to ground), the reactance of the inductor cancels out the capacitive reactance of the antenna, and we're left with 1275 ohms of pure resistance from the antenna base to ground (that is, across the inductor).

We can use the inductor as an autotransformer. If we tap up on the inductor some fraction k of the whole way up, the impedance we'll see at that tap will be very nearly 1275 * k^2, and it'll be purely resistive (no reactance) because the impedance across the whole coil is purely resistive. For example, half way up the coil we'll see 1275 * (.5)^2 = 1275 / 4 = 319 ohms. So to get 50 ohms, we tap up sqrt(50/1275) = 20% of the way up the coil.

Roy Lewallen, W7EL

john doe wrote:
> I'm trying to understand the shunt tapped inductor as a circuit.
>
> How does it work??? As long as the inductor cancels out the reactance of
> the radiator you just need to find the 50 ohm point on the coil ... or for
> that matter any feedline impedance???
>
> Pardon my lack of knowledge.
>
> de ka2pbt
>
>
>

3885. Re: Johnson Matchbox on 30 Mtrs?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-17 23:32:49 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <Bso_d.1260$cC6.100@fe2.columbus.rr.com>
Source record: 80530

If you put a 500pF cap in a box, with a couple of SO239 connectors so that it's in series with the coax to the tuner, you'll probably be able to tune 30M.

Adjusting feedline length is another approach.
Hth.

73, Dave, N3HE
Cincinnati OH

"Carter Grabarczyk" <k8vt@ameritech.net> wrote in message news:PN4_d.6100$ZB6.5859@newssvr19.news.prodigy.com...
>I am using a Johnson KW Matchbox antenna tuner with a 130 foot long, 30
> foot high dipole fed with about 40 feet of ladder (window) line. It
> works well on all bands including the WARC bands *except* for 30 meters.

3886. Re: Johnson Matchbox on 30 Mtrs?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 00:10:06 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <s7oj3112dqtgdcbp8k48f09nm8ttfudirq@4ax.com>
Source record: 80531

On Thu, 17 Mar 2005 01:10:07 GMT, Carter Grabarczyk
<k8vt@ameritech.net> wrote:

>I am using a Johnson KW Matchbox antenna tuner with a 130 foot long, 30
>foot high dipole fed with about 40 feet of ladder (window) line. It
>works well on all bands including the WARC bands *except* for 30 meters.
> (it doesn't make any difference if the band switch is on 20 or 40--it
>will not tune 30 in either case).
>
>The question is, does anyone have any tips/suggestions/modifications to
>make this also operate on 30 meters?
>
>By the way, modifying the antenna is not an option--lucky to have it up
>at all with city and subdivision restrictions. Maybe could add extra
>ladder line in the basement shack, but would have to loop it around the
>basement ceiling???
>
>73,
>Carter
>K8VT

I also have a 130 foot low dipole fed with ladderline. My feedline is
47 feet, going to an mfj tuner. I can tune 30 meters easily. You might
try adjusting the length of your feedline. You're using a different
tuner, so what you do may not match what I do, but playing with the
length of your feedline may help. Then again, it may not :-(Guess
that's why they call it amateur radio...

bob
k5qwg

3887. Re: Johnson Matchbox on 30 Mtrs?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 00:37:10 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <Wop_d.12388$qf2.729@newsread2.news.atl.earthlink.net>
Source record: 80532

"'Doc" <w5lz@cwis.net> wrote in message
news:36f_d.21681$hU7.7168@newssvr33.news.prodigy.com...
> Carter,
> Have you tried the other band selections?
>
'Doc

For what it's worth department;

I use my LP version of the Johnson Matchbox in conjunction with a 40 meter Delta loop feed with ladder-line. I tune it on 30 with the tap in the 20 meter position.

I also tune this same loop on the AF MARS frequency, way up the band from the top of 75 ham band by 500 khz. It tunes it down to 3 to 1, using the 80 meter tap.

Just for info....your results may vary depending on millions of factors.

Dan/W4NTI

3888. Re: :: :: :: :: *post 1007* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3889. Re: Low Power AM Radio Broadcasting

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 01:01:10 UTC
From: Dan/W4NTI <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <qLp_d.12403$qf2.8107@newsread2.news.atl.earthlink.net>
Source record: 80535

"WCRV WCRV" <WCRV@webtv.net> wrote in message
news:10699-4239AF51-500@storefull-3317.bay.webtv.net...
> The Low-Power AM station hobby has become more popular over the past 2
> years.
> In the U.S, it is legal to broadcast over the AM band 540kHz-1700kHz
> using a 3
> meter antenna and a 100mW transmitter.
> Until recently, building a small AM radio station was very complicated
> and very expensive, until now.
> Using a SSTRAN AMT-3000 transmitter, which comes as a kit for under
> $100.00US, or a built version which comes assembled and tested for under
> $200.00 US, and a 3 meter, coil loaded and tunable antenna for around
> $225.00 US, anyone can get on the air right now!
> I get questions about range: the system I am describing has had reports
> from 1/2 mile to over 4 miles! Range totally depends on these factors:
> location, scope of the land, conductivity, choice of
> frequency/adjacencies, and use of this antenna.
> If the transmitter and antenna are installed correctly in a proper area,
> several miles are possible. Many people are interested in a good, solid
> local signal and this system does it for a fraction of the amount of
> money you will spend for a comparable system.
> If you are interested in low power AM Broadcasting, I invite you to
> visit this site:
> http://antenna18431.tripod.com/antenna.htm
> In this site you will find information on the 3 meter antenna, pictures
> of it, information and pictures of the transmitter and a link to email
> questions, comments and inquiries to.
> If you would like to be on the air, this is an excellent choice to do it
> well, and at a very affordable price!
>

Boy what a rip off. 160 bux of hardware worth...MAYBE 5 bux. Gawd there
sure are a lot of fools out there.

Dan/W4NTI

3890. Re: :: :: :: :: *post 1005* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

3891. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 01:34:02 UTC
From: john doe <john.doe@host.com>
Message-ID: <H7OdnXuumZCaraffRVn-jw@comcast.com>
Source record: 80536

Thanks Roy!!!

Is it possible to cancel the capacitive reactance of the antenna by placing
an inductor in series with the radiator??

i.e center of coax connected to one end of a coil with the other end of the
coil connected to the radiator. Coax shield connected to ground plane
radials.

de ka2pbt

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:113k2v6themc1e2@corp.supernews.com...
> Let's suppose you have a vertical antenna with a base feedpoint impedance
> of, say, 75 - j300 ohms (75 ohms resistance in series with 300 ohms of
> capacitive reactance), typical of a thin 5/8 wave vertical. A network
> consisting of 1275 ohms in *parallel* with 319 ohms of capacitive
> reactance has the same impedance. (Note how the Xc isn't much different
> from the Xc of the series circuit in this case.) If we put an inductor
> with 319 ohms of inductive reactance in parallel with the antenna (that
> is, from the base feedpoint to ground), the reactance of the inductor
> cancels out the capacitive reactance of the antenna, and we're left with
> 1275 ohms of pure resistance from the antenna base to ground (that is,
> across the inductor).
>
> We can use the inductor as an autotransformer. If we tap up on the
> inductor some fraction k of the whole way up, the impedance we'll see at
> that tap will be very nearly 1275 * k^2, and it'll be purely resistive (no
> reactance) because the impedance across the whole coil is purely
> resistive. For example, half way up the coil we'll see 1275 * (.5)^2 =
> 1275 / 4 = 319 ohms. So to get 50 ohms, we tap up sqrt(50/1275) = 20% of
> the way up the coil.
>
> Roy Lewallen, W7EL
>
> john doe wrote:
>> I'm trying to understand the shunt tapped inductor as a circuit.
>>
>> How does it work??? As long as the inductor cancels out the reactance of
>> the radiator you just need to find the 50 ohm point on the coil ... or
>> for
>> that matter any feedline impedance???
>>
>> Pardon my lack of knowledge.
>>

>> de ka2pbt
>>
>>

3892. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 02:02:31 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <XEq_d.6028$b_6.481@trnddc01>
Source record: 80537

"john doe" <john.doe@host.com> wrote in message
news:H7OdnXuumZCaraffRVn-jw@comcast.com...
> Thanks Roy!!!
>
> Is it possible to cancel the capacitive reactance of the antenna by
> placing an inductor in series with the radiator??
>
> i.e center of coax connected to one end of a coil with the other end of
> the coil connected to the radiator. Coax shield connected to ground plane
> radials.
>
> de ka2pbt

John DK2 PBT

I'm no Roy. But, I have thought about Smith Charts alot. I wonder if
you'd consider trying to identify where the antenna's input impedance must
be located so that it might be matched with a series inductor. I'd be way
out of line to assume that you want to look at a Smith Chart for knowledge
about the effectiveness of that series inductance. But, the Smith Chart
can be a real big aid in estimating 'what it takes' to match any antenna's
input impedance.

Jerry

>
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:113k2v6themc1e2@corp.supernews.com...
>> Let's suppose you have a vertical antenna with a base feedpoint impedance
>> of, say, 75 - j300 ohms (75 ohms resistance in series with 300 ohms of
>> capacitive reactance), typical of a thin 5/8 wave vertical. A network
>> consisting of 1275 ohms in *parallel* with 319 ohms of capacitive
>> reactance has the same impedance. (Note how the Xc isn't much different
>> from the Xc of the series circuit in this case.) If we put an inductor
>> with 319 ohms of inductive reactance in parallel with the antenna (that
>> is, from the base feedpoint to ground), the reactance of the inductor
>> cancels out the capacitive reactance of the antenna, and we're left with
>> 1275 ohms of pure resistance from the antenna base to ground (that is,
>> across the inductor).
>>
>> We can use the inductor as an autotransformer. If we tap up on the
>> inductor some fraction k of the whole way up, the impedance we'll see at
>> that tap will be very nearly 1275 * k^2, and it'll be purely resistive
>> (no reactance) because the impedance across the whole coil is purely

>> resistive. For example, half way up the coil we'll see 1275 * (.5)^2 =
>> 1275 / 4 = 319 ohms. So to get 50 ohms, we tap up sqrt(50/1275) = 20% of
>> the way up the coil.
>>
>> Roy Lewallen, W7EL
>>
>> john doe wrote:
>>> I'm trying to understand the shunt tapped inductor as a circuit.
>>>
>>> How does it work??? As long as the inductor cancels out the reactance of
>>> the radiator you just need to find the 50 ohm point on the coil ... or
>>> for
>>> that matter any feedline impedance???
>>>
>>> Pardon my lack of knowledge.
>>>
>>> de ka2pbt
>>>
>>>
>

3893. Re: Low Power AM Radio Broadcasting

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 02:05:28 UTC
From: Randall J <capt_avatar@yahoo.com>
Message-ID: <IHq_d.908$hg.252@news01.roc.ny>
Source record: 80538

Well duh "Mr. Ham radio operator". I built my own for $15 using spare parts and a few hardware store items. He's hawking something for the lazy bones who can't or don't want to roll their own. Compare his setup to a Hamilton Rangemaster for $995 which uses a 102" CB whip. If you are an Appliance Operator then his pitch may appeal to you.

Dan/W4NTI wrote:
> "WCRV WCRV" <WCRV@webtv.net> wrote in message
> news:10699-4239AF51-500@storefull-3317.bay.webtv.net...
>
>>The Low-Power AM station hobby has become more popular over the past 2
>>years.
>>In the U.S, it is legal to broadcast over the AM band 540kHz-1700kHz
>>using a 3
>>meter antenna and a 100mW transmitter.
>>Until recently, building a small AM radio station was very complicated
>>and very expensive, until now.
>>Using a SSTRAN AMT-3000 transmitter, which comes as a kit for under
>>$100.00US, or a built version which comes assembled and tested for under
>>$200.00 US, and a 3 meter, coil loaded and tunable antenna for around
>>$225.00 US, anyone can get on the air right now!
>>I get questions about range: the system I am describing has had reports
>>from 1/2 mile to over 4 miles! Range totally depends on these factors:
>>location, scope of the land, conductivity, choice of
>>frequency/adjacencies, and use of this antenna.
>>If the transmitter and antenna are installed correctly in a proper area,
>>several miles are possible. Many people are interested in a good, solid
>>local signal and this system does it for a fraction of the amount of
>>money you will spend for a comparable system.
>>If you are interested in low power AM Broadcasting, I invite you to
>>visit this site:
>>http://antenna18431.tripod.com/antenna.htm
>>In this site you will find information on the 3 meter antenna, pictures
>>of it, information and pictures of the transmitter and a link to email
>>questions, comments and inquiries to.
>>If you would like to be on the air, this is an excellent choice to do it
>>well, and at a very affordable price!
>>
>
>
> Boy what a rip off. 160 bux of hardware worth...MAYBE 5 bux. Gawd there
> sure are a lot of fools out there.
>
> Dan/W4NTI

>
>

3894. Re: Low Power AM Radio Broadcasting

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 02:16:05 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <FRq_d.13443$cN6.8060@newsread1.news.pas.earthlink.net>
Source record: 80539

WCRV WCRV wrote:
> The Low-Power AM station hobby has become more popular over the past 2
> years.
> In the U.S, it is legal to broadcast over the AM band 540kHz-1700kHz
> using a 3
> meter antenna and a 100mW transmitter.
> Until recently, building a small AM radio station was very complicated
> and very expensive, until now.
> Using a SSTRAN AMT-3000 transmitter, which comes as a kit for under
> $100.00US, or a built version which comes assembled and tested for under
> $200.00 US, and a 3 meter, coil loaded and tunable antenna for around
> $225.00 US, anyone can get on the air right now!
> I get questions about range: the system I am describing has had reports
> from 1/2 mile to over 4 miles! Range totally depends on these factors:
> location, scope of the land, conductivity, choice of
> frequency/adjacencies, and use of this antenna.
> If the transmitter and antenna are installed correctly in a proper area,
> several miles are possible. Many people are interested in a good, solid
> local signal and this system does it for a fraction of the amount of
> money you will spend for a comparable system.
> If you are interested in low power AM Broadcasting, I invite you to
> visit this site:
> http://antenna18431.tripod.com/antenna.htm
> In this site you will find information on the 3 meter antenna, pictures
> of it, information and pictures of the transmitter and a link to email
> questions, comments and inquiries to.
> If you would like to be on the air, this is an excellent choice to do it
> well, and at a very affordable price!
>

The antenna mentioned is most likely illegal. If you have a 3 meter antenna, it must be connected to the transmitter without the benefit of a transmission line and ground lead. Don't take my word for it, ask the FCC. I did. Here is my question and their reply (note the 3 meters includes antenna, connecting lead (transmission line) and ground lead):

"Question:

Concerning the 3 meters maximum length for antenna, transmission, and ground, would a capacitance hat at the top of a vertical radiator be included in the 3 meter limit?

For clarification: Suppose I put a 3 meter vertical monopole on top of an existing structure which has a metal roof. The transmitter would be located at the base of the monopole, so it would require no transmission

line. Would I be allowed to install a 3 meter diameter (or more) top hat? The top hat would be shaped like a spoked wheel and would serve the purpose of increasing the current in the monopole through capacitive coupling to the metal roof ground.

Answer:

The intent of Section 15.219 is for a maximum 3 meter wire antenna.

The total length of the antenna plus ground lead plus connecting lead must not exceed 3 meters. The rule doesn't permit a 3 meter diameter "top hat" but should be applied to the combined length of each radial. If the combined length of each radial added to the length of the antenna vertical structure added to the length of the ground wire exceeds 3 meters, it would not be permitted."

John

3895. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 02:39:47 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <tlfk3159kb2aqrtjlrn5p19v2nep0k121e@4ax.com>
Source record: 80540

On Wed, 16 Mar 2005 17:55:38 -0600, "Harold Burton"
<hwburton@cableone.net> wrote:

>
>"John Passaneau" <jxp16@psu.edu> wrote in message
>news:d1a3mmvoe1@f04n12.cac.psu.edu...
>>
>> "Richard Clark" <kb7qhc@comcast.net> wrote in message
>> news:dhqg31hb5sn6rs4k6oh6ioaj8efd9d2u2e@4ax.com...
>>> On Wed, 16 Mar 2005 09:25:41 -0500, "John Passaneau" <jxp16@psu.edu>
>>> wrote:
>> I like the headline in an European paper when Bush was reelected, "How
>> could
>> 250000 people be so stupid" or something close to that, I ask myself the
>> same thing.
>>
>>
>Probably they meant 250,000,000 (our approximate national population) rather
>than 250,000. They were wrong again, as usual.
>Total votes cast were approx 114,000,000 Since we were split so evenly,
>politically, there were only half the total that were stupid and that gets
>it down to approx. 57,000,000. Unfortunately, we probably won't be able to
>agree on which half was the stupid half.
>
>HWB
>

I believe it was a British paper, "How can 59-million people be so
dumb?"

Well, just check the folks who show up at Bush's so-called Town Hall
Meetings. Amazing...

bob
k5qwg

3896. Re: Amphenol PL-259s

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 02:47:35 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <423a40b1$0$3707$39cecf19@news.twtelecom.net>
Source record: 80541

Bob Miller wrote:

> On Wed, 16 Mar 2005 17:55:38 -0600, "Harold Burton"
> <hwburton@cableone.net> wrote:
>
>
>>"John Passaneau" <jxp16@psu.edu> wrote in message
>>news:d1a3mmvoe1@f04n12.cac.psu.edu...
>>
>>>"Richard Clark" <kb7qhc@comcast.net> wrote in message
>>>news:dhqg31hb5sn6rs4k6oh6ioaj8efd9d2u2e@4ax.com...
>>>
>>>>On Wed, 16 Mar 2005 09:25:41 -0500, "John Passaneau" <jxp16@psu.edu>
>>>>wrote:
>>>
>>>I like the headline in an European paper when Bush was reelected, "How
>>>could
>>>250000 people be so stupid" or something close to that, I ask myself the
>>>same thing.
>>>
>>>
>>
>>Probably they meant 250,000,000 (our approximate national population) rather
>>than 250,000. They were wrong again, as usual.
>>Total votes cast were approx 114,000,000 Since we were split so evenly,
>>politically, there were only half the total that were stupid and that gets
>>it down to approx. 57,000,000. Unfortunately, we probably won't be able to
>>agree on which half was the stupid half.
>>
>>HWB
>>
>
>
> I believe it was a British paper, "How can 59-million people be so
> dumb?"
>
> Well, just check the folks who show up at Bush's so-called Town Hall
> Meetings. Amazing...
>
> bob
> k5qwg
>
>

Actually, the problem is that people think the "other side" that disagrees with them is stupid. No, they disagree, often for very good reasons.

The people who are stupid, or at least ignorant, are the ones who think that there is no room for disagreement.

tom
K0TAR

3897. Feeding Ladderline thru window

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 03:41:27 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns961CC8BA26CE5spectrumhogstarbandn@207.106.92.175>
Source record: 80542

I have a vertical slide window in my ham shack. In order to feed my coax fed antenna systems through it, I have made a 3/4" thick piece of partical board, about 6" tall amd ,mounted a couple BNC feedthru adapters in it. This works quite well for coax. The window frame itself is plastic.

I would like to use a balanced tuner in my shack, about 2 feet from the window, and feed ladderline to my antenna.

Question: What is recommended to feed the ladderline through the particle board? Could I just drill and mount a couple #6 brass bolts with solder eyes on each side of the board and use it to connect ladder line, or is something else recommended? Will this have any measurable effect on efficiency?

Thanks.

Ed K7AAT

3898. Re: Feeding Ladderline thru window

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 03:48:13 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <423a507c_2@127.0.0.1>
Source record: 80547

Ed wrote:
> Question: What is recommended to feed the ladderline through the
> particle board? Could I just drill and mount a couple #6 brass bolts with
> solder eyes on each side of the board and use it to connect ladder line, or
> is something else recommended? Will this have any measurable effect on
> efficiency?

I use plexiglas instead of particle board. Banana plugs/sockets
mounted on the plexiglas work for me. As a benefit, when the
wind blows during a thunderstorm, the antenna unplugs itself.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

3899. Re: Feeding Ladderline thru window

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 04:13:10 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <9hkk311qj9uf0lfit4nfhis87eafu9l0he@4ax.com>
Source record: 80543

On Fri, 18 Mar 2005 03:41:27 GMT, Ed
<Huckleberry_REMOVE_@bigvalley.net> wrote:

>
>
> I have a vertical slide window in my ham shack. In order to feed my coax
>fed antenna systems through it, I have made a 3/4" thick piece of partical
>board, about 6" tall amd ,mounted a couple BNC feedthru adapters in it.
>This works quite well for coax. The window frame itself is plastic.
>
> I would like to use a balanced tuner in my shack, about 2 feet from the
>window, and feed ladderline to my antenna.
>
> Question: What is recommended to feed the ladderline through the
>particle board? Could I just drill and mount a couple #6 brass bolts with
>solder eyes on each side of the board and use it to connect ladder line, or
>is something else recommended? Will this have any measurable effect on
>efficiency?
>
>Thanks.
>
>
>Ed K7AAT

I use a couple of big ceramic feedthrough insulators from Surplus
Sales of Nebraska. They're mounted on a board in the bottom of my
window. The slight impedance bump from the feedthrough bolts seems to
have no effect on the ladderline. The settings on the tuner were the
same before and after installing the feedthroughs.

In another recent thread some recommended using two pieces of coax to
feed ladderline through a wall or whatever.

Another idea would be two double-female so-239 feedthrough's, plugging
the ladderline into each center hole with banana plugs (banana plugs
fit the center hole in an so-239 just fine).

Bob
k5qwg

Bob
k5qwg

3900. Help ID'ing QRM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 05:04:09 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <djt_d.14823$Fy.7702@okepread04>
Source record: 80544
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

The following website has a <1M .mp3 file of some QRM
I'm getting on 160 meters. A little background is in order:

My station has my PC about 3' away from my FT-857D's.
I've eliminated all cables except video so I'm pretty sure it's
not coming from them. I've powered off my monitor and
adjusted the refresh rate to no avail. I grounded the PC's
metal case and tried it with/without the side covers. No
difference in the signal.

Tonight I looked at my CPU temp and it was a tad higher
(127 deg F) than normal so I decided to turn on a box
fan pointed at the left side of the tower case. To my shock,
the QRM faded away! I switched the fan on and off several
times to prove my theroy. Then I made the mp3 recording you
can download here:

http://members.cox.net/kg0wx/index.html

Listen closely to the sound - at 2.2 seconds into the rec-
ording, you can hear the "tick" that is me turning on the
fan to "low". Within a few seconds, the QRM is gone!

Anybody know where I should look to find this and kill
it?

--
73's es gd dx de Ken KG&#65533;WX
Grid EM17ip, Flying Pigs #1055,
List Owner, Yahoo! E-groups:
VX-2R & FT-857

3901. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 05:30:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113kpr21oe0oq0a@corp.supernews.com>
Source record: 80545

john doe wrote:
> Thanks Roy!!!
>
> Is it possible to cancel the capacitive reactance of the antenna by placing
> an inductor in series with the radiator??
>
> i.e center of coax connected to one end of a coil with the other end of the
> coil connected to the radiator. Coax shield connected to ground plane
> radials.
>
> de ka2pbt

Sure. In the example I gave, where the antenna has a 75 - j300 ohm feedpoint impedance, you'd just need an inductor with 300 ohms of reactance. Then you'd have a feedpoint impedance of 75 ohms resistive. Of course, this would be useful in feeding an antenna only if the resistive part of the feedpoint resistance is close to 50 ohms or some other value your system can conveniently feed. Unlike the tapped coil method, it doesn't give you any way of transforming the resistance.

If you need to match any arbitrary impedance, say 250 - j85 or something, to 50 ohms or some other impedance, you need two things you can adjust or choose, since you have two things (R and X or magnitude and phase) which you need to transform. We could get 50 ohms resistive using the tapped inductor scheme because we could choose the capacitor and the tap position. Another very common solution is an L network, which of course has two components. In theory, we can match (or transform) anything to anything with an L network of some sort. In some special cases, one of the elements of the L network is zero or infinite, such as if we're transforming 50 - j200 to 50 + j0, where all we need is a single inductor. But this isn't generally so.

A 5/8 wave radiator conveniently has a feedpoint resistance in the neighborhood of 50 ohms, so it can often be matched well enough by simply adding a series inductor as you suggest.

Roy Lewallen, W7EL

3902. Re: Help ID'ing QRM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 05:33:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2kok31p6hv2rkl4r9oqidj1on11qcm6n00@4ax.com>
Source record: 80546
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

On Thu, 17 Mar 2005 23:04:09 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:
>Tonight I looked at my CPU temp and it was a tad higher
>(127 deg F) than normal so I decided to turn on a box
>fan pointed at the left side of the tower case. To my shock,
>the QRM faded away! I switched the fan on and off several
>times to prove my theroy.

Hi Ken,

You convinced me - CPU.

73's
Richard Clark, KB7QHC

3903. Re: Feeding Ladderline thru window

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 06:31:52 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d1dsko$qd3$1@titan.btinternet.com>
Source record: 80548

> I use plexiglas instead of particle board. Banana plugs/sockets
> mounted on the plexiglas work for me. As a benefit, when the
> wind blows during a thunderstorm, the antenna unplugs itself.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
==========

Cec, don't you feel disappointed you weren't struck by lightning after
the storm drifts away?

Reg.

3904. Re: Feeding Ladderline thru window

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 12:07:20 UTC
From: Buck <iam@this.site>
Message-ID: <g1hl31tn5lqv3p0jv75uarlmmhcvt7bchj@4ax.com>
Source record: 80549

On Thu, 17 Mar 2005 21:48:13 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

>I use plexiglas instead of particle board. Banana plugs/sockets
>mounted on the plexiglas work for me. As a benefit, when the
>wind blows during a thunderstorm, the antenna unplugs itself.
>--
>73, Cecil http://www.qsl.net/w5dxp

That is clever. I wonder how well that would work using them in a
cobra head....hmmm.

lol,
--
73 for now
Buck
N4PGW

3905. Insulating antenna wire for safety?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 14:32:44 UTC
From: tf3kx@simnet.is
Message-ID: <cc4f4620.0503180632.7408d15c@posting.google.com>
Source record: 80550

I am contemplating running a wire, a part of a 160m antenna, along the surface of my house where it may be touched by people and animals. To prevent accidental burning or shocks from RF the wire would at least need to be insulated and preferably even enclosed in a plastic conduit, or tube, with sufficient spacing from the wire to the conduit surface. This would have to be safe for all types of weather, including rainy days when moist creeps everywhere. I am currently running only 100W, but may upgrade to a KW in the next few months.

Are there any comments or advice on the safety of having an antenna wire in a reachable position and how to prevent accidents? Minimum spacing, insulating material? Would the RF result "only" in RF burns on the surface of the skin, or worse? A similar problem comes up with above-ground radials. My antenna wires will not be visible from my operating position in the shack.

73 - Kristinn, TF3KX

3906. Re: Feeding Ladderline thru window

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 14:39:12 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <423ae910$1_1@127.0.0.1>
Source record: 80551

Reg Edwards wrote:
> Cec, don't you feel disappointed you weren't struck by lightning after
> the storm drifts away?

To the best of my knowledge, the only thing around my house
struck by lightning is a five foot tall live oak tree. With
antennas, towers, telephone poles, birdhouses, and 40 foot
tall trees all around, why did lightning choose to hit a
five foot tall tree? Killed half of it but the other half
is surviving.
--
73, Cecil http://www.qsl.net/w5dxp

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---= East/West-Coast Server Farms - Total Privacy via Encryption =---

3907. Re: Help ID'ing QRM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 15:17:05 UTC
From: JB <ac6tk@cybertime.net>
Message-ID: <d1euvc$1n89$1@madmax.keyway.net>
Source record: 80557
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Could it be a dc fan in the case?

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:2kok31p6hv2rkl4r9oqidj1on11qcm6n00@4ax.com...
> On Thu, 17 Mar 2005 23:04:09 -0600, "Ken Bessler"
> <kg0wx@NOSPAMyahoo.com> wrote:
> >Tonight I looked at my CPU temp and it was a tad higher
> >(127 deg F) than normal so I decided to turn on a box
> >fan pointed at the left side of the tower case. To my shock,
> >the QRM faded away! I switched the fan on and off several
> >times to prove my theroy.
>
> Hi Ken,
>
> You convinced me - CPU.
>
> 73's
> Richard Clark, KB7QHC

3908. Re: Johnson Matchbox on 30 Mtrs?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 15:47:53 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <423afa0c$1_1@127.0.0.1>
Source record: 80553

jgboyles@aol.com wrote:
> If you don't want to modify the tuner, then
> feed the 130' dipole with 11.3' of 450 ohm line and then go 50 ohm coax
> to the transmitter. Don't need a tuner. Or if you could lenghten to
> ladder line to 56' that would give a good 50 ohm match, no tuner
> needed.

There's a DOS BASIC program on my web page that allows one
to enter frequency, dipole length, and type of ladder-line
to obtain the length of feedline that will resonate the
entire antenna system. Your 56' is pretty close to what my
BASIC program says (54' for 10.125 MHz, 130' dipole, 450 ohm
VF = 0.9). As you say, this length gives a virtually perfect
SWR of 1:1 on 30m - no matchbox required.

The DOS BASIC program can be downloaded from:

http://www.qsl.net/w5dxp/imax.exe
--
73, Cecil, W5DXP

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3909. Re: Help ID'ing QRM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 15:51:47 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <nOC_d.411828$w62.86397@bgtnsc05-news.ops.worldnet.att.net>
Source record: 80552

Ken,

Some computers have variable speed fans for cooling. The typical fan
motor is brushless and noiseless, but the variable speed controller may
operate in a pulse mode.

73,
Gene
W4SZ

Ken Bessler wrote:
> The following website has a <1M .mp3 file of some QRM
> I'm getting on 160 meters. A little background is in order:
>
> My station has my PC about 3' away from my FT-857D's.
> I've eliminated all cables except video so I'm pretty sure it's
> not coming from them. I've powered off my monitor and
> adjusted the refresh rate to no avail. I grounded the PC's
> metal case and tried it with/without the side covers. No
> difference in the signal.
>
> Tonight I looked at my CPU temp and it was a tad higher
> (127 deg F) than normal so I decided to turn on a box
> fan pointed at the left side of the tower case. To my shock,
> the QRM faded away! I switched the fan on and off several
> times to prove my theroy. Then I made the mp3 recording you
> can download here:
>
> http://members.cox.net/kg0wx/index.html
>
> Listen closely to the sound - at 2.2 seconds into the rec-
> ording, you can hear the "tick" that is me turning on the
> fan to "low". Within a few seconds, the QRM is gone!
>
> Anybody know where I should look to find this and kill
> it?
>

3910. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 15:55:21 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <423afbcc$1_1@127.0.0.1>
Source record: 80554

Roy Lewallen wrote:
> We can use the inductor as an autotransformer.

Someone should tell that to Kurt N. Sterba. This
month he says: "But for a half-wave or 5/8 wave
vertical you need a parallel tuned circuit at the
base if you want to feed it there with coaxial
cable."

He also says: "A reader is irate because Kurt has
stated that coaxial cable does not radiate. Actually,
Kurt is just quoting from textbooks."

He apparently forgot what he wrote previously: "The
Resonant Feedline Dipole takes advantage of the fact
that coaxial cable acts like a three conductor cable
for RF. There is the inner conductor, the inside of
the shield, and the outside of the shield. RF signals
travel down the inside of the cable with equal currents
on the inner conductor and the shield. The current on
the shield does not penetrate the shield."
--
73, Cecil http://www.qsl.net/w5dxp

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3911. Re: Johnson Matchbox on 30 Mtrs?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 16:01:01 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <423afd20$1_1@127.0.0.1>
Source record: 80555

Bob Miller wrote:
> I also have a 130 foot low dipole fed with ladderline. My feedline is
> 47 feet, going to an mfj tuner. I can tune 30 meters easily. You might
> try adjusting the length of your feedline. You're using a different
> tuner, so what you do may not match what I do, but playing with the
> length of your feedline may help. Then again, it may not :-(Guess
> that's why they call it amateur radio...

"Playing" with the length of feedline may not help but
making it about 54 feet long will solve the problem. A
little cut-and-tryin' will eliminate the need for a
tuner altogether. Of course, 54 feet of window-line may
put the impedance out of bounds on some other band.
--
73, Cecil http://www.qsl.net/w5dxp

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3912. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 16:05:32 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <423afe30$1_1@127.0.0.1>
Source record: 80556

john doe wrote:
> Is it possible to cancel the capacitive reactance of the antenna by placing
> an inductor in series with the radiator??

That's exactly what happens with the 5/8WL vertical and
base coil.

coil 5/8 WL
GND---/////////--------------------------------------
^
|
50 ohm tap

The coil and 5/8 WL whip form a series-resonant circuit.
--
73, Cecil http://www.qsl.net/w5dxp

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3913. Re: Help ID'ing QRM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 16:27:36 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <YjD_d.14830$Fy.9867@okepread04>
Source record: 80558
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:2kok31p6hv2rkl4r9oqidj1on11qcm6n00@4ax.com...
> On Thu, 17 Mar 2005 23:04:09 -0600, "Ken Bessler"
> <kg0wx@NOSPAMyahoo.com> wrote:
>>Tonight I looked at my CPU temp and it was a tad higher
>>(127 deg F) than normal so I decided to turn on a box
>>fan pointed at the left side of the tower case. To my shock,
>>the QRM faded away! I switched the fan on and off several
>>times to prove my theroy.
>
> Hi Ken,
>
> You convinced me - CPU.
>
> 73's
> Richard Clark, KB7QHC

I would think that the likely suspect would be one that does
not already have a fan. I followed the signal as it went off
freq and faded. It climbed 3 kc on 40m then faded out.

--
73's es gd dx de Ken KG WX
Grid EM17ip, Flying Pigs #1055,
List Owner, Yahoo! E-groups:
VX-2R & FT-857

3914. Re: Help ID'ing QRM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 16:58:21 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <at1m31h6iqo174lmk5o7b0tjofllgv9kse@4ax.com>
Source record: 80559
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

On Fri, 18 Mar 2005 10:27:36 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>> On Thu, 17 Mar 2005 23:04:09 -0600, "Ken Bessler"
>> <kg0wx@NOSPAMyahoo.com> wrote:
>>>Tonight I looked at my CPU temp and it was a tad higher
>>>(127 deg F) than normal so I decided to turn on a box
>>>fan pointed at the left side of the tower case. To my shock,
>>>the QRM faded away! I switched the fan on and off several
>>>times to prove my theroy.
>
>I would think that the likely suspect would be one that does
>not already have a fan. I followed the signal as it went off
>freq and faded. It climbed 3 kc on 40m then faded out.

Hi Ken,

I don't quite follow the implication of your statement. Do you have a
dual CPU system, where one CPU has a fan and the other not?

As it appears to be temperature based (the reason why the fan appears
to be significant) and CPU based (over clocked for its operating
temperature); I would suggest trying to cool the CPU with an aerosol
(freeze mist) or one of those cans of air for keyboard cleaning.

73's
Richard Clark, KB7QHC

3915. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 17:31:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113m43tai4k4sce@corp.supernews.com>
Source record: 80560

Cecil Moore wrote:
> john doe wrote:
>
>> Is it possible to cancel the capacitive reactance of the antenna by
>> placing an inductor in series with the radiator??
>
>
> That's exactly what happens with the 5/8WL vertical and
> base coil.
>
> coil 5/8 WL
> GND---/////////---------------------------------------
> ^
> |
> 50 ohm tap
>
> The coil and 5/8 WL whip form a series-resonant circuit.
> --
> 73, Cecil http://www.qsl.net/w5dxp

Not quite. If you look at the analysis I posted regarding the tap feed, you'll see that the inductive reactance required for feeding the antenna this way isn't equal to the series capacitive reactance of the antenna. They're often close (as in the example, where the feedpoint series X = -300 and the required Xl = 319 ohms), but how close they are depends on the Q (Xs/Rs) of the feedpoint Z. When you feed the antenna this way, what you have is not a series resonant circuit but a parallel resonant one, and the required inductance is different for the two. The requirement for this type of feed is not series resonance, but that the Z at the top of the coil be completely resistive, which series resonance doesn't produce. As I pointed out in my most recent posting, you can make a series resonant circuit consisting of the antenna and an inductor, and put the source in series with that. But you need a different size inductor.

Roy Lewallen, W7EL

3916. Re: Help ID'ing QRM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 17:37:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113m4f6fjmb7i95@corp.supernews.com>
Source record: 80561
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Richard Clark wrote:
> . . .
> As it appears to be temperature based (the reason why the fan appears
> to be significant) and CPU based (over clocked for its operating
> temperature); I would suggest trying to cool the CPU with an aerosol
> (freeze mist) or one of those cans of air for keyboard cleaning.

You can use the "canned air" as a freeze mist ("spray cold"), or vice-versa, by inverting the can while you spray. They contain essentially the same stuff, the difference being that the "spray cold" contains a syphon tube to suck liquid up while the "canned air" doesn't.

Roy Lewallen, W7EL

3917. Re: Help ID'ing QRM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 19:19:25 UTC
From: dplatt@radagast.org
Message-ID: <113madtla0tth5e@corp.supernews.com>
Source record: 80562
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

In article <djt_d.14823$Fy.7702@okepread04>,
Ken Bessler <kg0wx@NOSPAMyahoo.com> wrote:

>Tonight I looked at my CPU temp and it was a tad higher
>(127 deg F) than normal so I decided to turn on a box
>fan pointed at the left side of the tower case. To my shock,
>the QRM faded away! I switched the fan on and off several
>times to prove my theroy. Then I made the mp3 recording you
>can download here:
>
>http://members.cox.net/kg0wx/index.html
>
>Listen closely to the sound - at 2.2 seconds into the rec-
>ording, you can hear the "tick" that is me turning on the
>fan to "low". Within a few seconds, the QRM is gone!
>
>Anybody know where I should look to find this and kill
>it?

Most modern PCs use a multi-stage power regulation system. The main power supply isolates and steps down the mains power to create several DC voltages (+5 and +12 in particular) which are routed to the motherboard. Then, an on-board regulator further reduces the voltage being fed to the CPU to meet the CPU's requirements.

Modern CPUs such as the Intel P4 family and the AMD Athlon consume a large amount of current (tens of amperes) at low voltage (1.2 - 1.8 volts, roughly speaking). Modern AGP graphics cards also operate on low voltages (AGP 4x is 1.5 volts, AGP 8x is 0.8 volts if I remember correctly) at high amperages.

To create such high currents at such low voltages in an efficient manner, single- or multi-phase "bucking" voltage regulators are used. These are switching regulators, which step down the main voltage (most commonly from the +12 supply) and step up the amperage. They typically operate at switching frequencies ranging from the high tens of kHz up to the low MHz range.

I suspect that the QRM you are hearing is from the fundamental or harmonic of one of these switching-regulator oscillator rates. Heating and cooling of the CPU and motherboard are probably causing the switching oscillator to drift a bit.

As to how to get rid of it... you're already on the right track, I think... shielding and filtering. Make sure that your monitor and

power (and other) cables have ferrites on them, as close as possible to the PC case. Make sure you've got a "tight" PC chassis, with metal shielding in every possible location (including screw-secured plates over any unused PCI slots, snap-in metal shields for any unused hard-drive bays, etc.). I recommend a chassis which is actually all metal, rather than one of the new lighter-weight plastic chassis with an anti-EMI coating on the inside. Don't run your PC with the side panels off - put 'em on and fasten the screws.

As for the gamer-style transparent acrylic PC chassis, forget 'em - I have serious doubts as to whether a PC build in one of these can pass the FCC Part 15 tests, let alone be RF-clean enough to use in a ham shack.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

3918. Re: Low Power AM Radio Broadcasting

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 19:59:59 UTC
From: hwh <iimeeltje@hotmail.com.nospam>
Message-ID: <423b334c$0$141$e4fe514c@news.xs4all.nl>
Source record: 80563

"John Smith" <kd5yikes@mindspring.com> schreef in bericht
news:FRq_d.13443$cN6.8060@newsread1.news.pas.earthlink.net...
> The total length of the antenna plus ground lead plus connecting lead
> must not exceed 3 meters. The rule doesn't permit a 3 meter diameter
> "top hat" but should be applied to the combined length of each radial.
> If the combined length of each radial added to the length of the antenna
> vertical structure added to the length of the ground wire exceeds 3
> meters, it would not be permitted."

So it *must* be a bad aerial, HI. EiRP is probably lower than 1 mW.

gr, hwh

3919. Re: Help ID'ing QRM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 20:18:49 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <NIG_d.14832$Fy.5960@okepread04>
Source record: 80564
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

"Dave Platt" <dplatt@radagast.org> wrote in message
news:113madtla0tth5e@corp.supernews.com...
> In article <djt_d.14823$Fy.7702@okepread04>,

<snip>

> I suspect that the QRM you are hearing is from the fundamental or
> harmonic of one of these switching-regulator oscillator rates.
> Heating and cooling of the CPU and motherboard are probably causing
> the switching oscillator to drift a bit.
>
> As to how to get rid of it... you're already on the right track, I
> think... shielding and filtering. Make sure that your monitor and
> power (and other) cables have ferrites on them, as close as possible
> to the PC case. Make sure you've got a "tight" PC chassis, with metal
> shielding in every possible location (including screw-secured plates
> over any unused PCI slots, snap-in metal shields for any unused
> hard-drive bays, etc.). I recommend a chassis which is actually all
> metal, rather than one of the new lighter-weight plastic chassis with
> an anti-EMI coating on the inside. Don't run your PC with the side
> panels off - put 'em on and fasten the screws.
>
> As for the gamer-style transparent acrylic PC chassis, forget 'em - I
> have serious doubts as to whether a PC build in one of these can pass
> the FCC Part 15 tests, let alone be RF-clean enough to use in a ham
> shack.
>
> --
> Dave Platt

I've already buttoned up the all metal case with grounded side covers.
I even made sure (with a DVM) they were grounded. (The ends of the
mini tower are metal with the front having a plastic facia on top of the
metal case front).

No help. The only thing that helped was taking both covers off and
blowing air through the chassis. I monitor 3 temps - CPU, Motherboard
and power supply exhaust air. Before the box fan, I was running CPU
at 129-140, Motherboard at 100-118 and power supply exhaust at
room temp +16 degrees (F).

Now I've got CPU at 113, MB at 93 and exhaust at room + 8 deg.

I was planning on buying a can of air and further investigating this but
I feel I've solved it with the box fan. The interference is gone and my

PC is cooler.

Thanks for the ideas!
--
73's es gd dx de Ken KG&#65533;WX
Grid EM17ip, Flying Pigs #1055,
List Owner, Yahoo! E-groups:
VX-2R & FT-857

3920. Re: Help ID'ing QRM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 20:37:26 UTC
From: Howard <mensch90249@yahoo.com>
Message-ID: <7oem311scp058g2q4ahadgdcqkp7upjh5m@4ax.com>
Source record: 80565

On Fri, 18 Mar 2005 14:18:49 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>
>I've already buttoned up the all metal case with grounded side covers.
>I even made sure (with a DVM) they were grounded. (The ends of the
>mini tower are metal with the front having a plastic facia on top of the
>metal case front).
>
>No help. The only thing that helped was taking both covers off and
>blowing air through the chassis. I monitor 3 temps - CPU, Motherboard
>and power supply exhaust air. Before the box fan, I was running CPU
>at 129-140, Motherboard at 100-118 and power supply exhaust at
>room temp +16 degrees (F).
>
>Now I've got CPU at 113, MB at 93 and exhaust at room + 8 deg.
>
>I was planning on buying a can of air and further investigating this but
>I feel I've solved it with the box fan. The interference is gone and my
>PC is cooler.
>
>Thanks for the ideas!

Ken,
Do you mean box fan as in a small fan installed in the pc enclosure or
are you using a big ol honkin room fan directed at your enclosure? If
you are using an AMD processor they do tend to run hotter than Intel;
I installed a second fan in my enclosure and it does keep the
temperature lower. Just something you may wish to consider - takes
less space and keeps your processor happy.

73,
Howard

3921. Re: Help ID'ing QRM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 21:04:05 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <8nH_d.14833$Fy.14438@okepread04>
Source record: 80566

"Howard" <mensch90249@yahoo.com> wrote in message
news:7oem311scp058g2q4ahadgdcqkp7upjh5m@4ax.com...

> Ken,
> Do you mean box fan as in a small fan installed in the pc enclosure or
> are you using a big ol honkin room fan directed at your enclosure? If
> you are using an AMD processor they do tend to run hotter than Intel;
> I installed a second fan in my enclosure and it does keep the
> temperature lower. Just something you may wish to consider - takes
> less space and keeps your processor happy.
>
> 73,
> Howard

It's a big honkin' $5 Wal-Mart special - taller than the PC so
I mounted the tower on stands to put the MB right in the flow
of air. The CPU is a 1.4g Athlon (not over clocked).

I've played with how far the exhaust side is away from a wall
- at 12" most of the air just blew by the components and my MB
and PS temps were not very low. Placing the right side of the
case 1" from the wall created enough back pressure to drop
both another 5-10%.

For the record I have a 2 fans on the case, 1 on the CPU and
1 on the power supply. My video card is a bit low end (Nvidia
G-force Ultra 8 meg) and has no fan. I have 340 gig of space
on 3 Westerd Digital HD's that want to run hot but with this big
box fan, are nice & cool now.

I'm thinking it's the video card.....
--
73's es gd dx de Ken KGWX
Grid EM17ip, Flying Pigs #1055,
List Owner, Yahoo! E-groups:
VX-2R & FT-857

3922. Re: Feeding Ladderline thru window

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 22:24:14 UTC
From: Ted Bruce <kilocycles**@**yahoo.com>
Message-ID: <mqkm31lmk5bte8q6r7lo7pf9c6te9q8iuv@4ax.com>
Source record: 80567

Cecil,
I'm pretty sure that Plexiglass is a trade name for acrylic panels.
That stuff is not at all durable. On the othe hand, Lexan (trade
name) is polycarbonate, which is very durable. It is used in
bullet-resistance glass applications, and is ideal for replacing the
window panes as you suggest. That is what I'm doing in my daylight
basement shack. A couple of banana jacks make a pretty good
feed-through in my case, since part of the house overhangs the windows
down there.

By the way, The Home Depot here in Atlanta sells both kinds of panels.

regards,
Ted KX4OM

On Thu, 17 Mar 2005 21:48:13 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Ed wrote:
>> Question: What is recommended to feed the ladderline through the
>> particle board? Could I just drill and mount a couple #6 brass bolts with
>> solder eyes on each side of the board and use it to connect ladder line, or
>> is something else recommended? Will this have any measurable effect on
>> efficiency?
>
>I use plexiglas instead of particle board. Banana plugs/sockets
>mounted on the plexiglas work for me. As a benefit, when the
>wind blows during a thunderstorm, the antenna unplugs itself.

3923. Re: Good Commercial G5RV ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 22:28:00 UTC
From: Ted Bruce <kilocycles**@**yahoo.com>
Message-ID: <2dlm31125kcplf2cm2s9835hdqmqv9mhtd@4ax.com>
Source record: 80568

On Mon, 14 Mar 2005 14:45:35 GMT, Bob Miller <NOSPAM@neosoft.com>
wrote:

>On Mon, 14 Mar 2005 05:16:21 -0500, Gary <gdn50@@@@usol.com> wrote:
>
>>I will have enough problems getting a G5RV erected so I'd just as soon
>>buy a commercail unit. Does anyone have a source for a heavy duty G5RV
>>with a current balun as I'll be feeding it with RG8X from my shack.
>>Running ladder line ot twin lead from my shack and staying away from
>>metal objects (other coax, aluminum siding etc) would be most
>>diffictult.
>>
>>Thanks in advance.
>>
>>73 Gary
>
>I've had good luck with products from both The Wireman and Radio
>Works. THey both have sell the g5rv, and both have web sites with all
>the paraphernalia you'll need.
>
>bob
>k5qwg

Roger that on The Wireman. They take PayPal, too.

Ted KX4OM
>

3924. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 22:43:02 UTC
From: jgboyles@aol.com
Message-ID: <1111185782.511443.8220@g14g2000cwa.googlegroups.com>
Source record: 80569

Roy Lewallen wrote:

> We can use the inductor as an autotransformer. If we tap up on the
> inductor some fraction k of the whole way up, the impedance we'll see
at
> that tap will be very nearly 1275 * k^2, and it'll be purely
resistive
> (no reactance) because the impedance across the whole coil is purely
> resistive. For example, half way up the coil we'll see 1275 * (.5)^2
=
> 1275 / 4 = 319 ohms. So to get 50 ohms, we tap up sqrt(50/1275) = 20%
of
> the way up the coil.
>
> Roy Lewallen, W7EL

Hi Roy, I'm OK with 319+j0 half way up the coil, but at 20% of the way up I keep getting 50+j50. I did it on the Smith Chart, and on a Spice based circuit analysis program. Too old to do this stuff by hand.
That's not a real good match for 50 ohm coax. The are other taps that will provide a better match, but no where did I find 50+j0.
In an earlier post I stated that it looked like the real part of the antenna impedance needed to be less than 50 ohms to get a perfect match, using this method.
The impedance across the whole coil is not purely resistive, it is at the 50% point. Apparently I am modeling incorrectly, or missing something.
Gary N4AST

3925. Re: Johnson Matchbox on 30 Mtrs?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 23:09:42 UTC
From: jgboyles@aol.com
Message-ID: <1111187382.371516.231390@l41g2000cwc.googlegroups.com>
Source record: 80570

Cecil Moore wrote:
> jgboyles@aol.com wrote:
> > If you don't want to modify the tuner, then
> > feed the 130' dipole with 11.3' of 450 ohm line and then go 50 ohm
coax
> > to the transmitter. Don't need a tuner. Or if you could lenghten
to
> > ladder line to 56' that would give a good 50 ohm match, no tuner
> > needed.
>
> There's a DOS BASIC program on my web page that allows one
> to enter frequency, dipole length, and type of ladder-line
> to obtain the length of feedline that will resonate the
> entire antenna system. Your 56' is pretty close to what my
> BASIC program says (54' for 10.125 MHz, 130' dipole, 450 ohm
> VF = 0.9). As you say, this length gives a virtually perfect
> SWR of 1:1 on 30m - no matchbox required.
>
> The DOS BASIC program can be downloaded from:
>
> http://www.qsl.net/w5dxp/imax.exe
> --
> 73, Cecil, W5DXP
>
>
> -----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World!
>100,000 Newsgroups
> ---= East/West-Coast Server Farms - Total Privacy via Encryption =---

Hi Cecil, thanks for the info, I will take a look. BTW I used one of
Reg Edwards programs to get 56'. I'd say 2' is close enough for
engineering approximations. Have you bumped your program with his to
see how they compare?
Gary N4AST

3926. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-18 23:34:16 UTC
From: Rob Roschewsk <john.doe@i.don't.want.spam.com>
Message-ID: <O6udnfrf9qTp-KbfRVn-pw@comcast.com>
Source record: 80571

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:113k2v6themc1e2@corp.supernews.com...
> Let's suppose you have a vertical antenna with a base feedpoint impedance
> of, say, 75 - j300 ohms (75 ohms resistance in series with 300 ohms of
> capacitive reactance), typical of a thin 5/8 wave vertical. A network
> consisting of 1275 ohms in *parallel* with 319 ohms of capacitive
> reactance has the same impedance.

Roy, how did you come up with "1275 ohms in *parallel* with 319 ohms "
equatating to "75 ohms resistance in series with 300 ohms of capacitive
reactance" ??? Just wondering.

de ka2pbt

3927. Re: Johnson Matchbox on 30 Mtrs?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 00:09:25 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <423b6eb6$1_2@127.0.0.1>
Source record: 80572

jgboyles@aol.com wrote:
> Hi Cecil, thanks for the info, I will take a look. BTW I used one of
> Reg Edwards programs to get 56'. I'd say 2' is close enough for
> engineering approximations. Have you bumped your program with his to
> see how they compare?

Reg once compared them and they were close enough for
government work. I assume a VF of 0.9 for 450 ohm window-
line. Reg may assume something different or allow the user
to enter the VF. In any case, it won't be exactly 54' or
56'. Some adjustment will always be necessary.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

3928. Re: Johnson Matchbox on 30 Mtrs?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 00:15:28 UTC
From: jgboyles@aol.com
Message-ID: <1111191328.148469.211110@g14g2000cwa.googlegroups.com>
Source record: 80573

Cecil Moore wrote:
> jgboyles@aol.com wrote:
> > Hi Cecil, thanks for the info, I will take a look. BTW I used
one of
> > Reg Edwards programs to get 56'. I'd say 2' is close enough for
> > engineering approximations. Have you bumped your program with his
to
> > see how they compare?
>
> Reg once compared them and they were close enough for
> government work. I assume a VF of 0.9 for 450 ohm window-
> line. Reg may assume something different or allow the user
> to enter the VF. In any case, it won't be exactly 54' or
> 56'. Some adjustment will always be necessary.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
> ----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World!
120,000+ Newsgroups
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=----

Good enough!
Gary N4AST

3929. Re: Feeding Ladderline thru window

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 00:56:22 UTC
From: Jerseyj <jerseyj69@comcast.net>
Message-ID: <jerseyj69-BAA037.19562218032005@comcast.dca.giganews.com>
Source record: 80574

[stuff cut]
>
> Another idea would be two double-female so-239 feedthrough's, plugging
> the ladderline into each center hole with banana plugs (banana plugs
> fit the center hole in an so-239 just fine).

What is a "banana plug". I've seen it mentioned a few times but haven't
a clue.

Jerry

3930. Re: Feeding Ladderline thru window

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 01:10:11 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <423b7cf4$1_2@127.0.0.1>
Source record: 80477

Jerseyj wrote:
> What is a "banana plug". I've seen it mentioned a few times but haven't
> a clue.

They are the connectors on the ends of your Simpson meter
leads. They have four springs that ensure a wiping action
and a snug fit in the sockets.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

3931. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 01:11:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113mv1q3r4bb023@corp.supernews.com>
Source record: 80475

Rob Roschewsk wrote:
>
> Roy, how did you come up with "1275 ohms in *parallel* with 319 ohms "
> equatating to "75 ohms resistance in series with 300 ohms of capacitive
> reactance" ??? Just wondering.

I got it from a routine I keep on my HP48GX calculator, which comes from the following series-parallel transformations:

Let:

Rs = resistance of series equivalent circuit
Xs = reactance of series equivalent circuit
Rp = resistance of parallel equivalent circuit
Xp = reactance of parallel equivalent circuit

To convert a series circuit to a parallel circuit which has an identical impedance:

Rp = (Rs^2 + Xs^2) / Rs
Xp = (Rs^2 + Xs^2) / Xs

To convert a parallel circuit to a series circuit which has an identical impedance:

Rs = (Rp * Xp^2) / (Rp^2 + Xp^2)
Xs = (Rp^2 * Xp) / (Rp^2 + Xp^2)

These aren't very difficult to derive if you're comfortable with complex arithmetic. They should be in the toolkit of everyone who works with electrical circuits.

Important things to keep in mind when using these transformations:

1. Although frequency isn't explicitly involved in the conversions, when you make an equivalent circuit from a resistor and inductor or capacitor, Xp and Xs will change with frequency. Therefore a transformed circuit will have the same impedance as the original only at one frequency. If the frequency changes, new values of resistance and capacitance or inductance have to be calculated for the equivalent circuit.

2. Because point 1, one circuit or the other will usually be better for modeling a real circuit over a range of frequencies, because the impedance of the real circuit will change with frequency more like one or the other of the two equivalent circuits.

In the example, where the feedpoint Z = 75 - j300:

Rs = 75
Xs = 300

so

Rp = (75^2 + (-300)^2) / 75 = 1275
Xp = (75^2 + (-300)^2) / (-300) = -318.75

You can check this if you'd like. You'll find that the parallel
combination of 1275 and -j318.75 ohms is 75 - j300.

Roy Lewallen, W7EL

3932. Mild steel wire for Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 01:11:26 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <2%K_d.13959$hA3.6854@trnddc09>
Source record: 80476

I plan to make a 6 element Yagi for FM reception at about 100 MHz. I
would like to use 1/8 diameter mild steel wire for the parasitic elements.
I have absolutely no experience with mild steel for antennas, but thought it
would be more bird tolerant than the copper wire model I made.
I'd sure appreciate hearing from anyone who knows about mild steel for
"VHF" antennas.

Jerry

3933. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 01:21:13 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113mvkcf990rd70@corp.supernews.com>
Source record: 80478

jgboyles@aol.com wrote:
>
> Hi Roy, I'm OK with 319+j0 half way up the coil, but at 20% of the way
> up I keep getting 50+j50. I did it on the Smith Chart, and on a Spice
> based circuit analysis program. Too old to do this stuff by hand.
> That's not a real good match for 50 ohm coax. The are other taps that
> will provide a better match, but no where did I find 50+j0.
> In an earlier post I stated that it looked like the real part of the
> antenna impedance needed to be less than 50 ohms to get a perfect
> match, using this method.
> The impedance across the whole coil is not purely resistive, it is at
> the 50% point. Apparently I am modeling incorrectly, or missing
> something.
> Gary N4AST
>

In SPICE, what coefficient of coupling did you specify between the portion of coil below the tap and the portion above the tap? The autotransformer impedance relationship I gave is strictly true only for a coefficient of coupling = 1. A real inductor will be a little less, but 1 is a decent approximation for a real solenoid of typical proportions for this application.

I'm curious how you handled coupled inductors on the Smith chart -- I don't believe I've ever seen it done.

Roy Lewallen, W7EL

3934. Re: Feeding Ladderline thru window

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 01:23:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113mvoroojv8kbf@corp.supernews.com>
Source record: 80479

A Google search for "banana plug" brought about 67,000 hits. The very first one has lots of pictures. I'll bet more than a few of the others do, too.

Roy Lewallen, W7EL

Jerseyj wrote:
>
> What is a "banana plug". I've seen it mentioned a few times but haven't
> a clue.
>
> Jerry

3935. Re: Balun article now on line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 01:40:00 UTC
From: "carkenord@juno.com" <carkenord@juno.com>
Message-ID: <1111196400.510848.87380@f14g2000cwb.googlegroups.com>
Source record: 80480

Roy Lewallen wrote:
> "Baluns: What They Do and How They Do It", from the _ARRL Antenna
> Compendium_, Vol. 1 is now available on line at
> http://eznec.com/Amateur/Articles/Baluns.pdf.
>
> Roy Lewallen, W7EL

Well, thank you so much Roy! It's appreciated.

You are an asset to the radio community.

Lee C. KA0FPJ

3936. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 02:03:51 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <bML_d.482$191.16@trnddc02>
Source record: 80481

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:113mv1q3r4bb023@corp.supernews.com...
> Rob Roschewsk wrote:
>>
>> Roy, how did you come up with "1275 ohms in *parallel* with 319 ohms "
>> equatating to "75 ohms resistance in series with 300 ohms of capacitive
>> reactance" ??? Just wondering.
>
> I got it from a routine I keep on my HP48GX calculator, which comes from
> the following series-parallel transformations:
>
> Let:
>
> Rs = resistance of series equivalent circuit
> Xs = reactance of series equivalent circuit
> Rp = resistance of parallel equivalent circuit
> Xp = reactance of parallel equivalent circuit
>
> To convert a series circuit to a parallel circuit which has an identical
> impedance:
>
> Rp = (Rs^2 + Xs^2) / Rs
> Xp = (Rs^2 + Xs^2) / Xs
>
> To convert a parallel circuit to a series circuit which has an identical
> impedance:
>
> Rs = (Rp * Xp^2) / (Rp^2 + Xp^2)
> Xs = (Rp^2 * Xp) / (Rp^2 + Xp^2)
>
> These aren't very difficult to derive if you're comfortable with complex
> arithmetic. They should be in the toolkit of everyone who works with
> electrical circuits.
>
> Important things to keep in mind when using these transformations:
>
> 1. Although frequency isn't explicitly involved in the conversions, when
> you make an equivalent circuit from a resistor and inductor or capacitor,
> Xp and Xs will change with frequency. Therefore a transformed circuit will
> have the same impedance as the original only at one frequency. If the
> frequency changes, new values of resistance and capacitance or inductance
> have to be calculated for the equivalent circuit.
>
> 2. Because point 1, one circuit or the other will usually be better for

> modeling a real circuit over a range of frequencies, because the
> impedance of the real circuit will change with frequency more like one
> or the other of the two equivalent circuits.
>
> In the example, where the feedpoint Z = 75 - j300:
>
> Rs = 75
> Xs = 300
>
> so
>
> Rp = (75^2 + (-300)^2) / 75 = 1275
> Xp = (75^2 + (-300)^2) / (-300) = -318.75
>
> You can check this if you'd like. You'll find that the parallel
> combination of 1275 and -j318.75 ohms is 75 - j300.
>
> Roy Lewallen, W7EL

Roy

I like your method for computing the parallel equivalent of the series circuit. I wonder if this is an appropriate place to suggest that the Smith Chart can be used to quickly estimate the parallel equivalent of the series circuits.
I sometimes overlay a "reversed" Smith Chart over "regular" Smith Chart to identify the admittance parameters of the circuit.
I've been disassociated from any antenna discusions since 1969 so I may be introducing information that everyone knows and I'm being an interferance to this discussion.

My quick and dirty "overlay" of a Smith Chart indicated the parallel circuit would be 1,250ohms resistive in parallel with 300 ohms of capacitive reactance.

Jerry

3937. Re: Help ID'ing QRM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 03:07:43 UTC
From: Topaz305RK <k7sam@arrl.net>
Message-ID: <SLCdnaCivb-jCqbfRVn-pg@vnet-inc.com>
Source record: 80482
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

My new plastic sided (gamer?) 2.8 GHz PC causes not a single problem here in the shack. My older 400 MHz Celeron however totally trashes 80 meters and is only tolerable on 40 meters, everything else is fine. Go figure.

Sam

3938. Re: Help ID'ing QRM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 03:23:55 UTC
From: Rich <wildcat56@netscape.net>
Message-ID: <o9CdnebIvcDXBqbfRVn-hQ@wavecable.com>
Source record: 80483
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Ken Bessler wrote:
> The following website has a <1M .mp3 file of some QRM
> I'm getting on 160 meters. A little background is in order:
>
> My station has my PC about 3' away from my FT-857D's.
> I've eliminated all cables except video so I'm pretty sure it's
> not coming from them. I've powered off my monitor and
> adjusted the refresh rate to no avail. I grounded the PC's
> metal case and tried it with/without the side covers. No
> difference in the signal.
>
> Tonight I looked at my CPU temp and it was a tad higher
> (127 deg F) than normal so I decided to turn on a box
> fan pointed at the left side of the tower case. To my shock,
> the QRM faded away! I switched the fan on and off several
> times to prove my theroy. Then I made the mp3 recording you
> can download here:
>
> http://members.cox.net/kg0wx/index.html
>
> Listen closely to the sound - at 2.2 seconds into the rec-
> ording, you can hear the "tick" that is me turning on the
> fan to "low". Within a few seconds, the QRM is gone!
>
> Anybody know where I should look to find this and kill
> it?
>
I had a similar problem with a new computer system I recently built up.
Problem was a noisy 350W Power Supply.

I replaced it and the machine now is perfectly quiet. A good solution
for a few bucks. It is very hard to shield a computer from this sort of
noise as it radiates from the leads in addition to directly from the case

Dick K7RNZ

3939. Re: Mild steel wire for Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 04:06:56 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <86OdndF0MfT_OKbfRVn-2w@comcast.com>
Source record: 80484

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:2%K_d.13959$hA3.6854@trnddc09...
> I plan to make a 6 element Yagi for FM reception at about 100 MHz. I
> would like to use 1/8 diameter mild steel wire for the parasitic elements.
> I have absolutely no experience with mild steel for antennas, but thought
> it would be more bird tolerant than the copper wire model I made.
> I'd sure appreciate hearing from anyone who knows about mild steel for
> "VHF" antennas.
>
> Jerry

Rust ... colors towers and roofs well.

Aluminum is lighter and easier to fabricate or cut. A good sized hardware
store will have 1/8" aluminum rod or tube.

gb

3940. Re: Mild steel wire for Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 04:48:42 UTC
From: Harold Burton <hwburton@cableone.net>
Message-ID: <113nbp5shr39678@corp.supernews.com>
Source record: 80485

"gb" <onw9mapsgb@no.arrl.spam.net> wrote in message
news:86OdndF0MfT_OKbfRVn-2w@comcast.com...
> "Jerry Martes" <j.jmartes@verizon.net> wrote in message
> news:2%K_d.13959$hA3.6854@trnddc09...
>> I plan to make a 6 element Yagi for FM reception at about 100 MHz. I
>> would like to use 1/8 diameter mild steel wire for the parasitic
>> elements. I have absolutely no experience with mild steel for antennas,
>> but thought it would be more bird tolerant than the copper wire model I
>> made.
>> I'd sure appreciate hearing from anyone who knows about mild steel for
>> "VHF" antennas.
>>
>> Jerry
>
> Rust ... colors towers and roofs well.
>
> Aluminum is lighter and easier to fabricate or cut. A good sized hardware
> store will have 1/8" aluminum rod or tube.
>
> gb
Garden stores sell coils of aluminum wire thats a bit larger than 1/8th
inch, may even be close to 3/16th inch dia. I have a coil out in the garage
but given that I don't keep a very neat garage I'm just not gonna go out at
midnight to get an exact measurement.

Harold
KD5SAK

3941. Re: Mild steel wire for Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 05:18:26 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <CCO_d.28$Vi3.2@newsread3.news.atl.earthlink.net>
Source record: 80486

You might try some large mild steel welding rod, like the kind used for
GAS welding. What I have seen is copper plated and easy to solder to.

John
"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:2%K_d.13959$hA3.6854@trnddc09...
> I plan to make a 6 element Yagi for FM reception at about 100 MHz. I
> would like to use 1/8 diameter mild steel wire for the parasitic elements.
> I have absolutely no experience with mild steel for antennas, but thought
> it would be more bird tolerant than the copper wire model I made.
> I'd sure appreciate hearing from anyone who knows about mild steel for
> "VHF" antennas.
>
> Jerry
>

3942. Re: Mild steel wire for Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 05:27:42 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <d1gd8e$2n9$1@mail.specsol.com>
Source record: 80487

Jerry Martes <j.jmartes@verizon.net> wrote:
> I plan to make a 6 element Yagi for FM reception at about 100 MHz. I
> would like to use 1/8 diameter mild steel wire for the parasitic elements.
> I have absolutely no experience with mild steel for antennas, but thought it
> would be more bird tolerant than the copper wire model I made.
> I'd sure appreciate hearing from anyone who knows about mild steel for
> "VHF" antennas.

> Jerry

Will rust like hell.

Aluminum close line wire is pretty cheap and fairly thick and sturdy.

Brazing rod is a bit more expensive and really sturdy unless you have
eagles perching on your antennas.

--
Jim Pennino

Remove -spam-sux to reply.

3943. Re: Help ID'ing QRM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 05:34:50 UTC
From: nm5k@wt.net
Message-ID: <1111210490.937211.53890@g14g2000cwa.googlegroups.com>
Source record: 80488

Ken Bessler wrote:

>
> It's a big honkin' $5 Wal-Mart special - taller than the PC so
> I mounted the tower on stands to put the MB right in the flow
> of air. The CPU is a 1.4g Athlon (not over clocked).
>
> I've played with how far the exhaust side is away from a wall
> - at 12" most of the air just blew by the components and my MB
> and PS temps were not very low. Placing the right side of the
> case 1" from the wall created enough back pressure to drop
> both another 5-10%.
>
> For the record I have a 2 fans on the case, 1 on the CPU and
> 1 on the power supply. My video card is a bit low end (Nvidia
> G-force Ultra 8 meg) and has no fan. I have 340 gig of space
> on 3 Westerd Digital HD's that want to run hot but with this big
> box fan, are nice & cool now.
>
> I'm thinking it's the video card......

Hummmm. I was thinking the CPU fan or the controller...Most
CPU fans vary speed as per CPU temp. It sort of sounds like
the CPU is getting hot, and the MB is telling the fan to speed
up. I was thinking either the controller is causing the noise,
or the fan itself starts to make more noise at the higher speeds.
Does the MB read fan speeds? You might look to see if the fan
speeds follow the noise. I'm not sure about any AMD "throttle back"
modes when overheated, or if that could cause more noise...
I'm having trouble seeing how the video card would increase noise,
just by being hot. Seems it would have to vary clock rate,
display types, res, etc, to change noise...What I would do is
unhook the CPU fan, and use the box fan only as a temp fan.
Then run it until it gets up to that "noisy" temp, and see if
it still does it. If so, it's likely the MB itself...If not,
it was likely the fan itself. If thats the case, it's probably
an easy fix, by using a different fan. As far as the video card,
I guess thats harder to pin down...Unless you have a 2nd card
you can sub out...If I ended up suspecting the video card, I would
install a small fan on it. They make tiny ones for this purpose..
But....I'm still having a bit of trouble seeing it as the video...
I'm kinda leaning to the fan, or it's MB controller...
Wanna talk hot CPU's? I'm running a P4 "prescott" chip...*Thats*
a hot running CPU...I use a CPU fan, a fan under the hard drives,
a big 110v fan on the side of the open case, and the PS fan...

Sounds like a 737 at the gate...:(I don't run a closed case here.
My CPU gets too hot for my tastes if I do...
Mine is all open, with AC filter material as the sides...
I get lots of dust buildup due to all the fans going 24/7...
The Prescotts require the ambient temp in the case to be 38c,
or less..The prescotts do have a throttle back mode at 70-75c I
think, and I can set one myself in the BIOS at any temp...
Mine varys what it does...Gets the hottest running the flight sim...
Maybe 52-55-58c average...Depends on the room temp...Right now,
playing usenet, it's at 45.5c.."113.9f"...BTW, if it's the MB, I
guess all you can do is just add cooling so it doesn't ever run hot
enough to go into the higher speed modes. The fan on mine is a intel
fan, and it varies gradually, not in steps..If it gets hotter,
it just gets slowly faster and faster...I've never noticed any noise
from it..But your's may be different..
MK

3944. Re: Mild steel wire for Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 09:11:50 UTC
From: munterlap@hotmail.com
Message-ID: <d1gqcofdc1@newsg4.svr.pol.co.uk>
Source record: 80489

Stainless welding wire, comes on a 500 metre roll.
Or get a length of the 1/4 inch plumbers microbore tube also hard drawn copper wire is quite sturdy on sorter lengths.
You just anneal it and stretch till it feels springy, by clamping wire in the vice and wrapping the other end round a stick stretch to your specks by pulling on the stick.

3945. Re: Mild steel wire for Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 12:38:24 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <43V_d.127441$pc5.4133@tornado.tampabay.rr.com>
Source record: 80490

wouldnt it be cheaper and easier to just go to radio shack and by an FM
yagi
i believe they have a 5 or 7ele yagi for a cheap price

Jerry Martes wrote:
> I plan to make a 6 element Yagi for FM reception at about 100 MHz. I
> would like to use 1/8 diameter mild steel wire for the parasitic elements.
> I have absolutely no experience with mild steel for antennas, but thought it
> would be more bird tolerant than the copper wire model I made.
> I'd sure appreciate hearing from anyone who knows about mild steel for
> "VHF" antennas.
>
> Jerry
>
>

3946. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 14:45:53 UTC
From: jgboyles@aol.com
Message-ID: <1111243553.542306.30310@l41g2000cwc.googlegroups.com>
Source record: 80491

Roy Lewallen wrote:
> jgboyles@aol.com wrote:
> >
> > Hi Roy, I'm OK with 319+j0 half way up the coil, but at 20% of the
way
> > up I keep getting 50+j50. I did it on the Smith Chart, and on a
Spice
> > based circuit analysis program. Too old to do this stuff by hand.
> > That's not a real good match for 50 ohm coax. The are other taps
that
> > will provide a better match, but no where did I find 50+j0.
> > In an earlier post I stated that it looked like the real part of
the
> > antenna impedance needed to be less than 50 ohms to get a perfect
> > match, using this method.
> > The impedance across the whole coil is not purely resistive, it
is at
> > the 50% point. Apparently I am modeling incorrectly, or missing
> > something.
> > Gary N4AST
> >
>
> In SPICE, what coefficient of coupling did you specify between the
> portion of coil below the tap and the portion above the tap? The
> autotransformer impedance relationship I gave is strictly true only
for
> a coefficient of coupling = 1. A real inductor will be a little less,

> but 1 is a decent approximation for a real solenoid of typical
> proportions for this application.
>
> I'm curious how you handled coupled inductors on the Smith chart -- I

> don't believe I've ever seen it done.
>
> Roy Lewallen, W7EL

Hi Roy, This is where I am probably missing the boat. In both models,
I used 2 separate inductors, the sum of both being the required
inductance, in this case .35uh. I assumed that the tapped coil could
be modeled this way. I see now that this is not an auto-transformer,
it is simply 2 inductors.
The Smith Chart program has a standard transformer feature, and after
you cancel out the reactance, a transformer with a ratio of 1:0.2 gives
50 ohms. The Spice program has coupled inductors, but I will have to

do a little research to see if I can apply them to this model.
Thanks for the explanation, and thanks to others who replied by email
with suggestions.
Gary N4AST

3947. Re: Help ID'ing QRM

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 16:18:38 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <yhY_d.14850$Fy.3994@okepread04>
Source record: 80492

<nm5k@wt.net> wrote in message
news:1111210490.937211.53890@g14g2000cwa.googlegroups.com...
>
> Hummmm. I was thinking the CPU fan or the controller...Most
> CPU fans vary speed as per CPU temp. It sort of sounds like
> the CPU is getting hot, and the MB is telling the fan to speed
> up. I was thinking either the controller is causing the noise,
> or the fan itself starts to make more noise at the higher speeds.
> Does the MB read fan speeds? You might look to see if the fan
> speeds follow the noise. I'm not sure about any AMD "throttle back"
> modes when overheated, or if that could cause more noise...
> I'm having trouble seeing how the video card would increase noise,
> just by being hot. Seems it would have to vary clock rate,
> display types, res, etc, to change noise...What I would do is
> unhook the CPU fan, and use the box fan only as a temp fan.
> Then run it until it gets up to that "noisy" temp, and see if
> it still does it. If so, it's likely the MB itself...If not,
> it was likely the fan itself. If thats the case, it's probably
> an easy fix, by using a different fan. As far as the video card,
> I guess thats harder to pin down...Unless you have a 2nd card
> you can sub out...If I ended up suspecting the video card, I would
> install a small fan on it. They make tiny ones for this purpose..
> But....I'm still having a bit of trouble seeing it as the video...
> I'm kinda leaning to the fan, or it's MB controller...
> Wanna talk hot CPU's? I'm running a P4 "prescott" chip...*Thats*
> a hot running CPU...I use a CPU fan, a fan under the hard drives,
> a big 110v fan on the side of the open case, and the PS fan...
> Sounds like a 737 at the gate...:(I don't run a closed case here.
> My CPU gets too hot for my tastes if I do...
> Mine is all open, with AC filter material as the sides...
> I get lots of dust buildup due to all the fans going 24/7...
> The Prescotts require the ambient temp in the case to be 38c,
> or less..The prescotts do have a throttle back mode at 70-75c I
> think, and I can set one myself in the BIOS at any temp...
> Mine varys what it does...Gets the hottest running the flight sim...
> Maybe 52-55-58c average...Depends on the room temp...Right now,
> playing usenet, it's at 45.5c.."113.9f"...BTW, if it's the MB, I
> guess all you can do is just add cooling so it doesn't ever run hot
> enough to go into the higher speed modes. The fan on mine is a intel
> fan, and it varies gradually, not in steps..If it gets hotter,
> it just gets slowly faster and faster...I've never noticed any noise
> from it..But your's may be different..
> MK
>

My MB is a Shuttle AN35 Ultra (about 3y old) and it does
read fan speed (5443 rpm now) but it does not adjust fan
speed afaik.

One of these days I'll get curious and pop off a case fan and
point it at various components while listening to 160m.....

--
73's es gd dx de Ken KGWX
Grid EM17ip, Flying Pigs #1055,
List Owner, Yahoo! E-groups:
VX-2R & FT-857

3948. Re: Balun article now on line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 16:37:07 UTC
From: Jim Miller <jim@jtmiller.com>
Message-ID: <1111250226.969551.321120@g14g2000cwa.googlegroups.com>
Source record: 80493

Excellent article! It really did a good job of explaining why the
current path on the outside of the coax exists and causes problems.
Also an excellent description of the various types of baluns that had
this rookie puzzled.

More please!

jtm

3949. Re: Balun article now on line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 17:57:15 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <glpo31dbu52adu42vgighp6evhh2asog5j@4ax.com>
Source record: 80494

On 19 Mar 2005 08:37:07 -0800, "Jim Miller" <jim@jtmiller.com> wrote:

>Excellent article! It really did a good job of explaining why the
>current path on the outside of the coax exists and causes problems.
>Also an excellent description of the various types of baluns that had
>this rookie puzzled.
>
>More please!
>
>jtm
Yes, Roy's article in the Compendium is excellent, as are all of Roy's contributions to our art. In his article he referenced my work with baluns, which appeared in QST for March 1983. This article is also available on my web page at www.w2du.com for those who don't have a copy of that issue of QST.

Walt Maxwell, W2DU

3950. Re: Mild steel wire for Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 18:49:41 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <9v__d.12789$oa6.3380@trnddc07>
Source record: 80495

Thanks for the good information on steel elements for a 100MHz yagi. I think I was concerned about something that didnt exist. I thought the fact that the steel was magnetic might effect the elements. I'm comfortable with using this steel wire now. I saw the straight lengths of wire at Home Depot where they sell it for hanging Drop Ceilings. It may not be a rust problem because of the coating on the wire But, the antennas will be in the San Diego Calif. desert anyway, so rust isnt a big problem. Besides, these are gifts so the new owners cal deal with the rust if they want clean *and* cheap.

PS I'm building this (actually several) antenna for friends who live far enough away from the city that their radio reception is poor. This "building of antennas" is strictly fun and learning for me. There is no chance of my buying any commercial antenna, even if it costs me more to build one. I did build one with copper elements and it worked very well.

Jerry

"Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
news:43V_d.127441$pc5.4133@tornado.tampabay.rr.com...
> wouldnt it be cheaper and easier to just go to radio shack and by an FM
> yagi
> i believe they have a 5 or 7ele yagi for a cheap price
>
> Jerry Martes wrote:
>> I plan to make a 6 element Yagi for FM reception at about 100 MHz. I
>> would like to use 1/8 diameter mild steel wire for the parasitic
>> elements. I have absolutely no experience with mild steel for antennas,
>> but thought it would be more bird tolerant than the copper wire model I
>> made.
>> I'd sure appreciate hearing from anyone who knows about mild steel for
>> "VHF" antennas.
>>
>> Jerry

3951. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 19:04:48 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <2oto3196jeo8sbjqb93s3vf60f9c29emc1@4ax.com>
Source record: 80496

On Thu, 17 Mar 2005 10:54:50 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Actually, it is possible to lower the takeoff angle (the elevation angle
>at which the pattern is maximum) without changing the antenna height.
>The method is to narrow the free-space elevation radiation pattern. For
>example, modify the EZNEC example file W8JK.ez by changing the height (Z
>coordinates) to 0.5 wavelength. The takeoff angle is 25 degrees. Delete
>one of the elements to make a dipole and note that the dipole's takeoff
>angle is 28 degrees. The lowering is due to the substantially greater
>elevation directivity of the W8JK. There aren't too many modestly sized
>horizontal arrays that have enough elevation directivity to make much of
>a difference in takeoff angle, however, so the difference is generally
>small at best. It's also interesting to note that the takeoff angle of
>this dipole over real ground is 2 degrees lower than the takeoff angle
>of the dipole over perfect ground.

All true. I see my response was too encompassing. What I was trying
to refer to was Art's "magic" design.

To wit: "Would hams have an interest in a two element 20 M antenna
that have (sic) lower TOA than the norm, say 9 degrees instead of the
normal 14 degrees?"

I can't imagine anything that will make a 2 (or any other number)
element horizontal antenna of any configuration have a TOA of 9
degrees other than placing the array center at a height of ~105' above
real ground at 14 MHz.

3952. Re: Balun article now on line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 19:38:32 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <1d%_d.65235$7z6.53998@lakeread04>
Source record: 80497

"Walter Maxwell" <w2du@iag.net> wrote
> Yes, Roy's article in the Compendium is excellent, as are all of Roy's
> contributions to our art. In his article he referenced my work with
> baluns, which appeared in QST for March 1983. This article is also
> available on my web page at www.w2du.com for those who don't have a
> copy of that issue of QST.
>
> Walt Maxwell, W2DU

Walt & Roy, thank you both very much for your lifetime of service to radio. Have either of you analyzed any the numerous popular Radio Works "Current Baluns"? I was advised many years ago that the current-type balun was more effective for use with a dipole, and have used Radio Work's baluns on both dipole and random wires with success. But my measure of success is not analytical, as your studies have been. Operating a center-fed dipole at it's resonant frequency, slightly below that, and significantly above it, are the specific inquiries wrt current baluns - would a voltage balun be more effective in any of those conditions? Radio Works current baluns the same kind used in your studies?

Thanks for your comments, and the great participation of all in this group.

Jack Painter
Virginia Beach, Virginia

3953. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 19:58:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4a0p311jbk1nq64gpalf2hdkp0ddt00fl1@4ax.com>
Source record: 80498

On Sat, 19 Mar 2005 19:36:35 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:
>I don't remember the two element bit

Because so much of antennas is still unknown, perhaps. So we will
proceed with what you DO know!

>Actually with respect to this thread both of you are showing that you are
> wearing no clothes tho Richard could well be wearing Shakespeare hose
> of a see thru nature that he wears around his abode.

Hi Art,

You certainly entertain some strange fantasies - however one has to
wonder why you expose them here?

It's tough enough trying to separate the wild claims you offer from
actual work performed and then to have to wade through your mauve
musings.

Glad to hear
>To help you out I will stop posting on this thread
again....

not holdin' my breath ;-)
Richard Clark, KB7QHC

3954. Re: Balun article now on line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 20:12:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <051p31dqg3h7ht0k4ogb1eipdf2k5curuu@4ax.com>
Source record: 80499

On Sat, 19 Mar 2005 14:38:32 -0500, "Jack Painter" <223bthp@cox.net>
wrote:

>would a voltage balun be more effective in any of those conditions?

Hi Jack,

The typical Voltage BalUn is constructed in such a way that one lead violates the isolation offered by the Current BalUn method. There are examples found for the same application of the 4:1. One is the Guanella, the other is the Ruthroff. If you examine the Ruthroff model, you will notice that one lead of the load (antenna) is connected directly to the source without a choking intervention. On the other hand, both leads are choked by the Guanella.

By common usage, the Guanella is generally described as a Current type, where as the Ruthroff is described as a Voltage type BalUn. Current or Voltage, the more important feature is in the choking.

73's
Richard Clark, KB7QHC

3955. Re: Balun article now on line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 20:14:02 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d1i16a$8nr$1@titan.btinternet.com>
Source record: 80500

Roy and Walter,

CHOKE BALUNS.

Keep it simple. Why make a song and dance about it?

The pair of wires wound on a choke balun behave as an inductive choke for longitudinal currents and as a transmission line for balanced currents.

The two circuits, line and choke, behave independently of each other.

The actual current on a wire, if anyone should ever wish to know, is just the arithmetical sum of the other two.

All authors omit to say that the the pair of transmission line wires need not be coaxial. They can be a balanced twin line such as a length of stranded flexible speaker cable. Or just a pair of insulated wires laid alongside each other. Or twisted.

Not only is the twin-line mechanically more convenient to construct, it has electrical advantages. Its Zo is intermediate between the high and low terminating impedances. Typically Zo is about 120 -130 ohms. The geometric mean of 50 and 300 ohms is 122 ohms. Not that this matters very much because the device is never terminated in its nominal impedances.

Twin line also has a higher velocity factor than 50-ohm coax.

The length of line wound on the choke behaves as an impedance transformer. So it seriously, but not harmfully, affects the impedance presented to the tuner. The tuner LC settings may be beneficially affected. Otherwise the transformation ratio, which heavily depends on frequency, is not of consquence.

Preferably, the length of twin-line wound on the choke should be less than 1/8th of a wavelength long at its own velocity at the highest operating frequency.

It is not too difficult to construct a choke balun which has sufficient inductive choking reactance at 1.8 MHz without the transmission line exceeding 1/8 wavelengths at 30 MHz.

Reg, G4FGQ

3956. Re: Balun article now on line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 20:32:10 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <f%%_d.65238$7z6.24692@lakeread04>
Source record: 80501

"Richard Clark" <kb7qhc@comcast.net> wrote
> "Jack Painter" <223bthp@cox.net>
> wrote:
>
> >would a voltage balun be more effective in any of those conditions?
>
> Hi Jack,
>
> The typical Voltage BalUn is constructed in such a way that one lead
> violates the isolation offered by the Current BalUn method. There are
> examples found for the same application of the 4:1. One is the
> Guanella, the other is the Ruthroff. If you examine the Ruthroff
> model, you will notice that one lead of the load (antenna) is
> connected directly to the source without a choking intervention. On
> the other hand, both leads are choked by the Guanella.
>
> By common usage, the Guanella is generally described as a Current
> type, where as the Ruthroff is described as a Voltage type BalUn.
> Current or Voltage, the more important feature is in the choking.
>
> 73's
> Richard Clark, KB7QHC

Thanks Richard. I have never seen the internal construction of the Radio Works BalUn, but it is claimed to be a current-type device. It's function as a choke was the only reason for including it in the designs of my antenna systems. I see that Reg as well as yourself remind us that is indeed their primary purpose. Too bad so many may have been fooled into using voltage-type baluns when that appears to be an inappropriate choice for may applications. I was curious what applications would benefit from such a voltage-balancing device.

Jack

3957. Re: Johnson Matchbox on 30 Mtrs?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 20:33:07 UTC
From: W9DMK <nobody@crosslink.net>
Message-ID: <423c8a7a.2027305@news.crosslink.net>
Source record: 80507

On Thu, 17 Mar 2005 01:10:07 GMT, Carter Grabarczyk
<k8vt@ameritech.net> wrote:

>I am using a Johnson KW Matchbox antenna tuner with a 130 foot long, 30
>foot high dipole fed with about 40 feet of ladder (window) line. It
>works well on all bands including the WARC bands *except* for 30 meters.
> (it doesn't make any difference if the band switch is on 20 or 40--it
>will not tune 30 in either case).
>
>The question is, does anyone have any tips/suggestions/modifications to
>make this also operate on 30 meters?
>
>By the way, modifying the antenna is not an option--lucky to have it up
>at all with city and subdivision restrictions. Maybe could add extra
>ladder line in the basement shack, but would have to loop it around the
>basement ceiling???

Dear Carter,

As the owner of a cherry Viking Kilowatt Matchbox Tuner, I would want
to avoid any modifications of the tuner itself. So, what I do is build
up a modular approach for connecting feedlines to the tuner's balanced
terminals.

I use the General Radio design banana plug adapters as the basic
building block. They are available from Radio Shack and have the
advantages of having the exact spacing to match the 450 ohm ladder
line and being both a jack and a plug at the same time as screwing
down the ladder line.

My approach is t ohave a short piece of 450 ohm ladder line from the
Tuner Terminals to a GR banana connector. The antenna feed line has a
similar GR banana connector at its end. When lighting is in the
vicinity I disconncect the connectors and throw the feedline to the
floor or to an earthing.

Whenever I need a matching network for a given antenna due to extreme
mismatches, I build that network between two GR banana connectors and
just plug it in series with the line and tuner. The network is usually
as simple as two inductors wound on PVC or it could be just a mica
transmitting cap or a vacuum cap or any combination or balanced L or
Pi circuit components.

It helps to have a means of measuring the misbehaving antenna's
impedance at the end of the feedline at the frequency in question and
then design and build the necessary matching network based on the

Smith Chart solution.

Bob, W9DMK, Dahlgren, VA
Replace "nobody" with my callsign for e-mail
http://www.qsl.net/w9dmk
http://zaffora/f2o.org/W9DMK/W9dmk.html

3958. Re: Balun article now on line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 20:35:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113p399odmv97ac@corp.supernews.com>
Source record: 80502

Walt, I intended to include a link to your article and looked on your web site for it before I posted my article. But I didn't find it in the index. Where is it relative to your home page? I'll add a link to it.

Walt's article was really the first one I ever saw that explained the phenomenon of currents on the inside and outside of the coax -- my article is really just an extension of his work.

Roy Lewallen, W7EL

Walter Maxwell wrote:
>
> Yes, Roy's article in the Compendium is excellent, as are all of Roy's
> contributions to our art. In his article he referenced my work with
> baluns, which appeared in QST for March 1983. This article is also
> available on my web page at www.w2du.com for those who don't have a
> copy of that issue of QST.
>
> Walt Maxwell, W2DU

3959. Re: Insulating antenna wire for safety?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 20:43:04 UTC
From: DaveC <wntu4@yahoo.com>
Message-ID: <1111264984.071718.321200@z14g2000cwz.googlegroups.com>
Source record: 80503

I dont know about Iceland, but in the US at 160m you are required to perform an RF safety evaluation at PEP 500+ Watts. My personal suggestion is that you have no business even thinking about going 1kw when you cant answer this question yourself. IMHO this is a really bad idea, and with all due respect, I think you need a bit more education (like learning to do the safety eveluation, which would answer your questions) before you fool around and hurt someone.

Kristinn Andersen, TF3KX wrote:
> I am contemplating running a wire, a part of a 160m antenna, along the
> surface of my house where it may be touched by people and animals. To
> prevent accidental burning or shocks from RF the wire would at least
> need to be insulated and preferably even enclosed in a plastic
> conduit, or tube, with sufficient spacing from the wire to the conduit
> surface. This would have to be safe for all types of weather,
> including rainy days when moist creeps everywhere. I am currently
> running only 100W, but may upgrade to a KW in the next few months.
>
> Are there any comments or advice on the safety of having an antenna
> wire in a reachable position and how to prevent accidents? Minimum
> spacing, insulating material? Would the RF result "only" in RF burns
> on the surface of the skin, or worse? A similar problem comes up with
> above-ground radials. My antenna wires will not be visible from my
> operating position in the shack.
>
> 73 - Kristinn, TF3KX

3960. 160 meter mobile -- Reality Check

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 20:45:53 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <113p3ruo11jsff8@corp.supernews.com>
Source record: 80504

My bag is VHF, so forgive me if I've bumbled up the calculations. My numbers show that a standard 108" whip has an input impedance of somewhere around 0.04 ohms in series with a 22 pf capacitor.

These numbers are so far from what I normally deal with that I'm not sure that I'm right, and I'd appreciate somebody who actually works down in this area giving my numbers a reality check.

If they ARE right, how in heaven do most people match to 0.04 ohms? The 22 pf I can resonate out with a 1 millihenry choke (or thereabouts), but how do most people match 50 ohms to fractional ohms in the homebrew arena -- that is, without just going out and buying a "magical matching box" of some sort?

Jim

3961. Re: Balun article now on line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 20:53:13 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113p49t5p052rae@corp.supernews.com>
Source record: 80506

Jack Painter wrote:
>
> Walt & Roy, thank you both very much for your lifetime of service to radio.
> Have either of you analyzed any the numerous popular Radio Works "Current
> Baluns"?

No, since I figured out what baluns do and wrote the article, I've never purchased a balun since I know how to make effective ones myself. When I wrote the article, the popular commercial baluns were all "voltage baluns", and I'd like to think that the article was a factor in causing the gradual changeover of commercial products to "current baluns".

> I was advised many years ago that the current-type balun was more
> effective for use with a dipole, and have used Radio Work's baluns on both
> dipole and random wires with success. But my measure of success is not
> analytical, as your studies have been. Operating a center-fed dipole at it's
> resonant frequency, slightly below that, and significantly above it, are the
> specific inquiries wrt current baluns - would a voltage balun be more
> effective in any of those conditions?

Your question indicates that my article failed to explain one of its major points. The answer is no, a voltage balun is not more effective than a current balun in any antenna/feedline application. If the antenna is perfectly balanced, the third winding in the voltage balun will carry no current and does nothing. If the antenna isn't balanced, the presence of the voltage balun's third winding will prevent balanced currents in the elements. So at best the voltage balun does as well as a current balun, and otherwise it degrades balance.

> Radio Works current baluns the same
> kind used in your studies?

Sorry, I've never purchased one and taken it apart. You might try asking them.

> Thanks for your comments, and the great participation of all in this group.
>

You're welcome. I'm surprised and frankly disappointed that so many people haven't seen the article before. It's been in print for 20 years, and frequently mentioned on this newsgroup and elsewhere. There are a lot of other good articles in the _Antenna Compendium_ series -- people who don't have a set have been missing a lot. But it seems like, more and more, that the web has become the sole source of information for a growing number of people. Make that the web, AM talk radio, and Fox news.

Roy Lewallen, W7EL

3962. Re: Balun article now on line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 20:53:20 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <4j0%d.65239$7z6.4340@lakeread04>
Source record: 80505

"Roy Lewallen" <w7el@eznec.com> wrote
> Walt's article was really the first one I ever saw that explained the
> phenomenon of currents on the inside and outside of the coax -- my
> article is really just an extension of his work.
>
> Roy Lewallen, W7EL

Roy,
Although no credit is given or author claimed, the Radio Works Product Manual includes a similar drawing and detailed explanation of same. This has been in print every year for at least the 6 years that I have been buying products from them. It is the basis for their design, production and marketing of the current-type baluns. Radio Works also recommends a line isolator at the transmitter-end, due to near field coupling of antenna currents onto the coax shield that a Balun cannot prevent. I have never used that product but it is popular.

Jack

3963. Re: 160 meter mobile -- Reality Check

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 22:28:02 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <lg8p315u4nurvf6e4t6c1pcua0sflgpq93@4ax.com>
Source record: 80508

On Sat, 19 Mar 2005 12:45:53 -0800, "RST Engineering"
<jim@rstengineering.com> wrote:

>My bag is VHF, so forgive me if I've bumbled up the calculations. My
>numbers show that a standard 108" whip has an input impedance of somewhere
>around 0.04 ohms in series with a 22 pf capacitor.
>

Not quite. Over perfect ground the Z is ~ 0.37 -j8170 @ 1.9 MHz for a
12mm diameter radiator.

So you add an inductor of +j8170 with say Q=250. That gives Z =
(0.37+32.68) +j0 = 33.05 +j0. Then you add 16.95 ohm of ground loss
and Z = 50 +j0.

A perfect match with a gain of -17 dBi. :) Easy huh?

>These numbers are so far from what I normally deal with that I'm not sure
>that I'm right, and I'd appreciate somebody who actually works down in this
>area giving my numbers a reality check.
>
>If they ARE right, how in heaven do most people match to 0.04 ohms? The 22
>pf I can resonate out with a 1 millihenry choke (or thereabouts), but how do
>most people match 50 ohms to fractional ohms in the homebrew arena -- that
>is, without just going out and buying a "magical matching box" of some sort?
>
>Jim
>

3964. Re: 160 meter mobile -- Reality Check

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 22:30:11 UTC
From: jgboyles@aol.com
Message-ID: <1111271411.108180.28790@l41g2000cwc.googlegroups.com>
Source record: 80509

RST Engineering wrote:
> My bag is VHF, so forgive me if I've bumbled up the calculations. My

> numbers show that a standard 108" whip has an input impedance of
somewhere
> around 0.04 ohms in series with a 22 pf capacitor.
>
> These numbers are so far from what I normally deal with that I'm not
sure
> that I'm right, and I'd appreciate somebody who actually works down
in this
> area giving my numbers a reality check.
>
> If they ARE right, how in heaven do most people match to 0.04 ohms?
The 22
> pf I can resonate out with a 1 millihenry choke (or thereabouts), but
how do
> most people match 50 ohms to fractional ohms in the homebrew arena --
that
> is, without just going out and buying a "magical matching box" of
some sort?
>
> Jim
Hi Jim, Your numbers look about right for a 108" whip on 1.8mhz. To feed a small whip like this you would have to "brute force" it with a large loading coil at the base. The efficiency will be low and the bandwidth narrow. To get any efficiency at all, the 2:1 swr bandwidth will only be around 5khz. Once you tune it up, it will be a single frequency antenna.
There are things like adding capacitive loading at the top of the whip, and moving the inductive loading to the center (have to cut the whip in half). This will make the feedpoint Z a little more managable. I once loaded an 8' antenna on 160, just to see if I could, but never got on the air with it. I read somewhere that in the 50's, law enforcement 2-way radios operated close to our 160m ham band. Wonder what kind of antennas they used on the police cars. Of course the distances they were interested in are different from hams.
Gary N4AST

3965. Ham Radio Magazine - FREE subscription

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 22:41:55 UTC
From: K9YA Telegraph <no_reply@yahoo.com>
Message-ID: <TU1%d.12100$DW.510@newssvr17.news.prodigy.com>
Source record: 80510

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A Novel Rotary Rhombic Antenna By Dick Sylvan, W9CBT
My J-38 and Radio Magic By Rick Hiller, W5RH
Beat Me Daddy, Eight to the Bar By Rod Newkirk, VA3ZBB/W9BRD
Help Wanted

3966. Re: 160 meter mobile -- Reality Check

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 23:23:30 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <Sv2%d.73632$gJ3.41973@clgrps13>
Source record: 80511

"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:lg8p315u4nurvf6e4t6c1pcua0sflgpq93@4ax.com...
> On Sat, 19 Mar 2005 12:45:53 -0800, "RST Engineering"
> <jim@rstengineering.com> wrote:
>
>>My bag is VHF, so forgive me if I've bumbled up the calculations. My
>>numbers show that a standard 108" whip has an input impedance of somewhere
>>around 0.04 ohms in series with a 22 pf capacitor.
>>
>
> Not quite. Over perfect ground the Z is ~ 0.37 -j8170 @ 1.9 MHz for a
> 12mm diameter radiator.
>
> So you add an inductor of +j8170 with say Q=250. That gives Z =
> (0.37+32.68) +j0 = 33.05 +j0. Then you add 16.95 ohm of ground loss
> and Z = 50 +j0.
>
> A perfect match with a gain of -17 dBi. :) Easy huh?
>
>
>>These numbers are so far from what I normally deal with that I'm not sure
>>that I'm right, and I'd appreciate somebody who actually works down in
>>this
>>area giving my numbers a reality check.
>>
>>If they ARE right, how in heaven do most people match to 0.04 ohms? The
>>22
>>pf I can resonate out with a 1 millihenry choke (or thereabouts), but how
>>do
>>most people match 50 ohms to fractional ohms in the homebrew arena -- that
>>is, without just going out and buying a "magical matching box" of some
>>sort?
>>
>>Jim
>>
>

The following code produces Zin = 0.117 - j2717 ohms at 1.9 MHz. What did
I do wrong? Note the high segmentation to place the feed-point near the
base of the antenna.

Frank

```
CM 9 ft monopole
CE
```

```
GW 1 108 0 0 0 0 0 108 0.25
GS 0 0 0.025400
GE 1
GN 1
EX 0 1 1 00 1 0
LD 5 1 1 108 5.8001E7
FR 0 9 0 0 1.8 0.025
RP 0 181 1 1000 -90 0 1.00000 1.00000
EN
```

3967. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 23:24:17 UTC
From: John Doe <JohnDoe@0.0.0.0>
Message-ID: <423cb475$0$22218$afc38c87@news.optusnet.com.au>
Source record: 80512

Roy,
Thank you for your concise description of the auto-transformer.
Now to inject a little spice into the equation;)
Perhaps you would like to tackle the auto-transformer
configured as; Ground|--\\\\\\\---50R J0(from Tx)
^------To Antenna
Thanks again,
73

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:113mv1q3r4bb023@corp.supernews.com...
> Rob Roschewsk wrote:
> >
> > Roy, how did you come up with "1275 ohms in *parallel* with 319 ohms "
> > equatating to "75 ohms resistance in series with 300 ohms of capacitive
> > reactance" ??? Just wondering.
>
> I got it from a routine I keep on my HP48GX calculator, which comes from
> the following series-parallel transformations:
>
> Let:
>
> Rs = resistance of series equivalent circuit
> Xs = reactance of series equivalent circuit
> Rp = resistance of parallel equivalent circuit
> Xp = reactance of parallel equivalent circuit
>
> To convert a series circuit to a parallel circuit which has an identical
> impedance:
>
> Rp = (Rs^2 + Xs^2) / Rs
> Xp = (Rs^2 + Xs^2) / Xs
>
> To convert a parallel circuit to a series circuit which has an identical
> impedance:
>
> Rs = (Rp * Xp^2) / (Rp^2 + Xp^2)
> Xs = (Rp^2 * Xp) / (Rp^2 + Xp^2)
>
> These aren't very difficult to derive if you're comfortable with complex
> arithmetic. They should be in the toolkit of everyone who works with
> electrical circuits.
>
> Important things to keep in mind when using these transformations:

>
> 1. Although frequency isn't explicitly involved in the conversions, when
> you make an equivalent circuit from a resistor and inductor or
> capacitor, Xp and Xs will change with frequency. Therefore a transformed
> circuit will have the same impedance as the original only at one
> frequency. If the frequency changes, new values of resistance and
> capacitance or inductance have to be calculated for the equivalent
circuit.
>
> 2. Because point 1, one circuit or the other will usually be better for
> modeling a real circuit over a range of frequencies, because the
> impedance of the real circuit will change with frequency more like one
> or the other of the two equivalent circuits.
>
> In the example, where the feedpoint Z = 75 - j300:
>
> Rs = 75
> Xs = 300
>
> so
>
> Rp = (75^2 + (-300)^2) / 75 = 1275
> Xp = (75^2 + (-300)^2) / (-300) = -318.75
>
> You can check this if you'd like. You'll find that the parallel
> combination of 1275 and -j318.75 ohms is 75 - j300.
>
> Roy Lewallen, W7EL

3968. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-19 23:40:24 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <7bdp31tak0caousdj9ccgohor16n8he7fj@4ax.com>
Source record: 80513

On Sat, 19 Mar 2005 19:36:35 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>
>"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
>news:2oto3196jeo8sbjqb93s3vf60f9c29emc1@4ax.com...
>> On Thu, 17 Mar 2005 10:54:50 -0800, Roy Lewallen <w7el@eznec.com>
>> wrote:
>>
>>>Actually, it is possible to lower the takeoff angle (the elevation angle
>>>at which the pattern is maximum) without changing the antenna height.
>>>The method is to narrow the free-space elevation radiation pattern. For
>>>example, modify the EZNEC example file W8JK.ez by changing the height (Z
>>>coordinates) to 0.5 wavelength. The takeoff angle is 25 degrees. Delete
>>>one of the elements to make a dipole and note that the dipole's takeoff
>>>angle is 28 degrees. The lowering is due to the substantially greater
>>>elevation directivity of the W8JK. There aren't too many modestly sized
>>>horizontal arrays that have enough elevation directivity to make much of
>>>a difference in takeoff angle, however, so the difference is generally
>>>small at best. It's also interesting to note that the takeoff angle of
>>>this dipole over real ground is 2 degrees lower than the takeoff angle
>>>of the dipole over perfect ground.
>>
>> All true. I see my response was too encompassing. What I was trying
>> to refer to was Art's "magic" design.
>>
>> To wit: "Would hams have an interest in a two element 20 M antenna
>> that have (sic) lower TOA than the norm, say 9 degrees instead of the
>> normal 14 degrees?"
>>
>> I can't imagine anything that will make a 2 (or any other number)top hat
>> element horizontal antenna of any configuration have a TOA of 9
>> degrees other than placing the array center at a height of ~105' above
>> real ground at 14 MHz.

Note this is not a *direct quote*. I did not say "top hat" in the
original post.
>
>
>
>I don't remember the two element bit and I also stated it was NOT a yagi
>design.

Let me refresh your memory:

On Wed, 16 Mar 2005 02:57:31 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

"I don't operate on 40 M so I may be missing something but exactly
what is it that stands out with this antenna that would make it
desirable to hams? Efficiency would be reflected by the loads
used which is not necessarily "state of the art". He then states "a
large F/B is effected" but it doesn't show before and after overlaid
plots !
Would hams have an interest in a two element 20 M antenna that have
lower TOA than the norm, say 9 degrees instead of the normal 14
degrees?
I think I can quickly put one together for the week end while putting
the present assembly aside.
Regards
Art"

End quote

Doesn't the foregoing *exact* quote say, "...two element 20 M
antenna....?"

>You mentioned horiuzontal (sic) antenna which suggests a yagi (sic) design unless you
>intended
>horizontal "polarisation".

Okay polarize it any way you want, and I don't see where I mentioned
Yagi at all.

>Roy, same as I, is pointing out the number of
>incorrect statements that you have made and you are now adding to them.

Roy made a valid point. You on the other hand are full of it.

>To help you out I will stop posting on this thread to save you any further
> embarrasment (sic), that way you will not need to admit to anymore (sic) errors.

When you can show me an error, I will admit to it. So far there's
nothing to admit to. But I can understand your desire to drop out.

>Pity you didn't define what you meant with respect to antenna height i.e.
>feed point height, top hat height, a higher unfed antenna height and so on.

I said, "array center." If you want to vertically polarize it you
might make it at ~70 to 80' with a pair of collinear dipoles if you
can figure out a practical way to feed it. That would give a whopping
4 - 5 dBi at 9 degrees, where my Yagi design at 70' has 12 dBi at 9
degrees even though the max gain is at 13 degrees. (One of the points
Roy was making)

You're claiming some magic design that will lower the "TOA"
significantly, from the "norm" (from whatever hat that came from) of
14 to 9 degrees, without increasing the antenna height. I'm
suggesting that you can't do it. Prove me wrong - wait a minute; you
already confessed that you couldn't.

>Adding ambiguety (sic) just leads to confusion for everybody.

This coming from an expert at bafflegab.

And speaking of bagglegab...

>Frankly you are looking more like Richard every day with your leaning on
>emotions instead instead of technical matters pertaining to the thread with
>the
>assumption that all must be placed before you for judgement as you are the
> leading analysts in antenna design.
>Actually with respect to this thread both of you are showing that you are
> wearing no clothes tho Richard could well be wearing Shakespeare hose
> of a see thru nature that he wears around his abode.
>See you on another thread perhaps.
>Regards
>Art KB9MZ....XG
>

3969. Re: 160 meter mobile -- Reality Check

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 00:02:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113pfc0pvticq80@corp.supernews.com>
Source record: 80514

Frank wrote:
>
> The following code produces Zin = 0.117 - j2717 ohms at 1.9 MHz. What did
> I do wrong? Note the high segmentation to place the feed-point near the
> base of the antenna.
>
> Frank
>
> CM 9 ft monopole
> CE
> GW 1 108 0 0 0 0 0 108 0.25
> GS 0 0 0.025400
> GE 1
> GN 1
> EX 0 1 1 00 1 0
> LD 5 1 1 108 5.8001E7
> FR 0 9 0 0 1.8 0.025
> RP 0 181 1 1000 -90 0 1.00000 1.00000
> EN

If you follow NEC guidelines on the minimum recommended segment length/wire radius ratio, you should have no more than 17 segments; the model has 127. In this case, though, it doesn't seem to be disturbing NEC-2 very much. Also, the half inch diameter is somewhat greater than most CB whips. If you drop the diameter to a quarter inch, you'll get a substantially greater reactance which would require a larger loading inductor and hence result in lower efficiency. Otherwise it looks ok to me.

As Wes pointed out, the ground system and loading inductor losses will be so large as to make the feedpoint resistance (and wire loss) insignificant. The zero-loss feedpoint resistance is, however, useful in determining efficiency. If you set the wire loss to zero by removing the LD "card", you get the more useful value of feedpoint resistance when losses are zero, 0.098 ohms. Using Wes' value of about 50 ohm feedpoint resistance when losses are included, you can calculate the efficiency as 0.098/50 = 0.2%, or 2 watts radiated for each kW applied. In American mobile terms that's 1.5 watts per horsepower. I'm always glad to see more QRP signals on the band.

Roy Lewallen, W7EL

3970. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 00:04:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113pfgj9n3q0uea@corp.supernews.com>
Source record: 80515

Sorry, I don't understand the diagram. Can you describe it in words?

Roy Lewallen, W7EL

John Doe wrote:
> Roy,
> Thank you for your concise description of the auto-transformer.
> Now to inject a little spice into the equation;)
> Perhaps you would like to tackle the auto-transformer
> configured as; Ground|--\\\\\\\---50R J0(from Tx)
> ^------To Antenna
> Thanks again,
> 73

3971. Re: 160 meter mobile -- Reality Check

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 00:05:39 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d1ieojbrc1@sparta.btinternet.com>
Source record: 80516

To obtain obtain some idea of the numerical values involved with mobile, short, antennas on 160 meter and other low frequency bands, download programs -

HELICAL3
VERTLOAD
LOADCOIL

from website below. Takes only a few seconds to download. Not zipped up. Run immediately.

With a very short antenna, to obtain a useful efficiency, a physically large loading coil is essential. The only space available is up the antenna. So the best thing to do is extend the coil up the antenna from near the base, in the form of a long slender helical winding on a pvc plastic pipe.

The whole thing behaves as a short 1/4-wave resonant vertical. There is a short rod at the top which is pruned to resonate the antenna in the required band. It is inevitably a single frequency job. The bandwidth on 160m is only a few kHz.

With a 100 watt transmitter, when both vehicles are in the low-noise countryside, it is possible to work 100 miles or more, on groundwave, in daylight. Much further via skywave in darkness. G3YXM has worked transatlantic from a car in Scotland to a base station in Canada on occasions.

Maximum overall antenna heights are about 9 feet above roof of car with the coil about 2" in diameter, the coil extending to a height of 6 or 7 feet.

The most tedious procedure is pruning all antenas in a group of mobiles to the same frequency on the 160 meter band. But it has been done. Mobile to a base station is easy. For many years the standard UK frequency for mobiles was 1930 kHz.

Matching from antenna base to a 50-ohm transmiier can be accomplished by a single or bank of mica capacitors of several hundred pF.

For quite a number of years, mobile working on 160m was quite popular in the UK using helically-wound antennas.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp

. . . . . .

3972. Re: 160 meter mobile -- Reality Check

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 00:18:55 UTC
From: jgboyles@aol.com
Message-ID: <1111277935.597865.122190@f14g2000cwb.googlegroups.com>
Source record: 80517

Frank wrote:
> "Wes Stewart" <n7ws_@*yahoo.com> wrote in message
> news:lg8p315u4nurvf6e4t6c1pcua0sflgpq93@4ax.com...
> > On Sat, 19 Mar 2005 12:45:53 -0800, "RST Engineering"
> > <jim@rstengineering.com> wrote:
> >
> >>My bag is VHF, so forgive me if I've bumbled up the calculations.
My
> >>numbers show that a standard 108" whip has an input impedance of
somewhere
> >>around 0.04 ohms in series with a 22 pf capacitor.
> >>
> >
> > Not quite. Over perfect ground the Z is ~ 0.37 -j8170 @ 1.9 MHz
for a
> > 12mm diameter radiator.
> >
> > So you add an inductor of +j8170 with say Q=250. That gives Z =
> > (0.37+32.68) +j0 = 33.05 +j0. Then you add 16.95 ohm of ground
loss
> > and Z = 50 +j0.
> >
> > A perfect match with a gain of -17 dBi. :) Easy huh?
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> >
> >>These numbers are so far from what I normally deal with that I'm
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> >>area giving my numbers a reality check.
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> >>If they ARE right, how in heaven do most people match to 0.04 ohms?
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> >>22
> >>pf I can resonate out with a 1 millihenry choke (or thereabouts),
but how
> >>do
> >>most people match 50 ohms to fractional ohms in the homebrew arena
-- that
> >>is, without just going out and buying a "magical matching box" of
some
> >>sort?
> >>

> >>Jim
> >>
> >
>
> The following code produces Zin = 0.117 - j2717 ohms at 1.9 MHz.
What did
> I do wrong? Note the high segmentation to place the feed-point near
the
> base of the antenna.
>
> Frank
>
> CM 9 ft monopole
> CE
> GW 1 108 0 0 0 0 0 108 0.25
> GS 0 0 0.025400
> GE 1
> GN 1
> EX 0 1 1 00 1 0
> LD 5 1 1 108 5.8001E7
> FR 0 9 0 0 1.8 0.025
> RP 0 181 1 1000 -90 0 1.00000 1.00000
> EN

Hi Frank, Well, I got different numbers than both of you. Must depend
on the ground type of the models, as well as the # of segments.
If you are trying to match an antenna with fractions of an ohm
resistive and thousands reactive, the differences we are all observing
will not make a whole lot of difference in the matching network you
decide to use. It will be big and bulky, and very inefficient.
Gary N4AST

3973. Re: Mild steel wire for Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 00:22:23 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <ROqdnfcyoozcX6HfRVn-pQ@comcast.com>
Source record: 80518

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:9v__d.12789$oa6.3380@trnddc07...
> Thanks for the good information on steel elements for a 100MHz yagi. I
> think I was concerned about something that didnt exist. I thought the
> fact that the steel was magnetic might effect the elements. I'm
> comfortable with using this steel wire now. I saw the straight lengths of
> wire at Home Depot where they sell it for hanging Drop Ceilings. It may
> not be a rust problem because of the coating on the wire But, the
> antennas will be in the San Diego Calif. desert anyway, so rust isnt a big
> problem. Besides, these are gifts so the new owners cal deal with the
> rust if they want clean *and* cheap.
>
> PS I'm building this (actually several) antenna for friends who live far
> enough away from the city that their radio reception is poor. This
> "building of antennas" is strictly fun and learning for me. There is no
> chance of my buying any commercial antenna, even if it costs me more to
> build one. I did build one with copper elements and it worked very well.
>
> Jerry
>
Jerry -

In the Popular Electronics July 1969 (VHF/FM) and December 1971 (UHF) ran a
series of articles for homebuilding
FM, VHF and UHF antennas. George J. Monser was the author of these
articles, "Build the Pyramidal TV/FM antenna" who the lived in the Santa
Barbara, CA area.

gb

3974. Re: Mild steel wire for Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 00:29:21 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <DuOdnQPqi8l_XqHfRVn-pA@comcast.com>
Source record: 80519

"gb" <onw9mapsgb@no.arrl.spam.net> wrote in message
news:ROqdnfcyoozcX6HfRVn-pQ@comcast.com...
> "Jerry Martes" <j.jmartes@verizon.net> wrote in message
> news:9v__d.12789$oa6.3380@trnddc07...
>> Thanks for the good information on steel elements for a 100MHz yagi. I
>> think I was concerned about something that didnt exist. I thought the
>> fact that the steel was magnetic might effect the elements. I'm
>> comfortable with using this steel wire now. I saw the straight lengths
>> of wire at Home Depot where they sell it for hanging Drop Ceilings. It
>> may not be a rust problem because of the coating on the wire But, the
>> antennas will be in the San Diego Calif. desert anyway, so rust isnt a
>> big problem. Besides, these are gifts so the new owners cal deal with
>> the rust if they want clean *and* cheap.
>>
>> PS I'm building this (actually several) antenna for friends who live
>> far enough away from the city that their radio reception is poor. This
>> "building of antennas" is strictly fun and learning for me. There is
>> no chance of my buying any commercial antenna, even if it costs me more
>> to build one. I did build one with copper elements and it worked very
>> well.
>>
>> Jerry
>>
> Jerry -
>
> In the Popular Electronics July 1969 (VHF/FM) and December 1971 (UHF) ran
> a series of articles for homebuilding FM, VHF and UHF antennas. George
> J. Monser was the author of these articles, "Build the Pyramidal TV/FM
> antenna" and Build the Mini-Pyramidal UHF TV antenna" who the lived in the
> Santa Barbara, CA area.
>
> w9gb
>

BTW, Mr. Monser was a 1947 Connell University graduate in Electrical
Engineering.

Cornell's alumni magazine reported that: George J. Monser ('47 BS EE) of Las
Vegas, NV, formerly of Goleta, CA,
passed away on January 4, 1998. He was a retired consulting engineer for
Raytheon Corporation and author.

-/-

3975. Re: 160 meter mobile -- Reality Check

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 00:52:56 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <jkep3156h381t0dlj2hcapc5pev256u12u@4ax.com>
Source record: 80520

On Sat, 19 Mar 2005 23:23:30 GMT, "Frank" <ve6cb@nospam.telus.net>
wrote:

[snip]

>The following code produces Zin = 0.117 - j2717 ohms at 1.9 MHz. What did
>I do wrong? Note the high segmentation to place the feed-point near the
>base of the antenna.
>
>Frank
>
>CM 9 ft monopole
>CE
>GW 1 108 0 0 0 0 0 108 0.25
>GS 0 0 0.025400
>GE 1
>GN 1
>EX 0 1 1 00 1 0
>LD 5 1 1 108 5.8001E7
>FR 0 9 0 0 1.8 0.025
>RP 0 181 1 1000 -90 0 1.00000 1.00000
>EN

My bad. I hate it when that happens. A typo on the length on my
part. 101 instead of 108.

It's more like 0.12 -j2890 in EZNEC. I'm not real fluent in NEC decks
but I think you are using too many segments.

>

3976. Re: 160 meter mobile -- Reality Check

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 01:42:55 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <zy4%d.57737$KI2.33508@clgrps12>
Source record: 80521

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:113pfc0pvticq80@corp.supernews.com...
> Frank wrote:
>>
>> The following code produces Zin = 0.117 - j2717 ohms at 1.9 MHz. What
>> did I do wrong? Note the high segmentation to place the feed-point near
>> the base of the antenna.
>>
>> Frank
>>
>> CM 9 ft monopole
>> CE
>> GW 1 108 0 0 0 0 0 108 0.25
>> GS 0 0 0.025400
>> GE 1
>> GN 1
>> EX 0 1 1 00 1 0
>> LD 5 1 1 108 5.8001E7
>> FR 0 9 0 0 1.8 0.025
>> RP 0 181 1 1000 -90 0 1.00000 1.00000
>> EN
>
> If you follow NEC guidelines on the minimum recommended segment
> length/wire radius ratio, you should have no more than 17 segments; the
> model has 127. In this case, though, it doesn't seem to be disturbing
> NEC-2 very much. Also, the half inch diameter is somewhat greater than
> most CB whips. If you drop the diameter to a quarter inch, you'll get a
> substantially greater reactance which would require a larger loading
> inductor and hence result in lower efficiency. Otherwise it looks ok to
> me.
>
> As Wes pointed out, the ground system and loading inductor losses will be
> so large as to make the feedpoint resistance (and wire loss)
> insignificant. The zero-loss feedpoint resistance is, however, useful in
> determining efficiency. If you set the wire loss to zero by removing the
> LD "card", you get the more useful value of feedpoint resistance when
> losses are zero, 0.098 ohms. Using Wes' value of about 50 ohm feedpoint
> resistance when losses are included, you can calculate the efficiency as
> 0.098/50 = 0.2%, or 2 watts radiated for each kW applied. In American
> mobile terms that's 1.5 watts per horsepower. I'm always glad to see more
> QRP signals on the band.
>
> Roy Lewallen, W7EL

I should have read the manual before modeling, but I was so concerned that the feed-point be near the bottom. Changing the segmentation to 17, removing the LD card, and reducing the radius to 0.125 ", calculates the feed-point impedance as: 0.123 - j3286. I considered Jim's calculation of 0.37 - j8170 to be far too reactive. The fact is these points are so close, when observed on the Smith chart, as to be virtually identical.

Analyzing a shunt L/series C matching network, with inductor Q at 300, indicates a loss of 21.5dB with 30 kV RMS at the base of the antenna (1.5 kW into the matching network). (In the case of 0.37 - j8170 the loss is 21.8 dB, with 42 kV at the base). These voltages are so large, I am beginning to wonder if I goofed again! The losses, at least, are the same order of magnitude as Roy's calculation.

73,

Frank

3977. Re: Mild steel wire for Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 01:45:15 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <LA4%d.753$Vi3.638@newsread3.news.atl.earthlink.net>
Source record: 80522

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:9v__d.12789$oa6.3380@trnddc07...
> Thanks for the good information on steel elements for a 100MHz yagi. I
> think I was concerned about something that didnt exist. I thought the
fact
> that the steel was magnetic might effect the elements. I'm comfortable
> with using this steel wire now. I saw the straight lengths of wire at
Home
> Depot where they sell it for hanging Drop Ceilings. It may not be a rust
> problem because of the coating on the wire But, the antennas will be in
the
> San Diego Calif. desert anyway, so rust isnt a big problem. Besides,
these
> are gifts so the new owners cal deal with the rust if they want clean
and
> cheap.
>
I built a 2 meter 6 element beam out of some single strand guy wire. It
worked fine for a year or so that I had it up. There is no electrical
problem with steel but mechanical it may be something else. Rust being one
of them, the small size of the elements at 100 mhz may not be able to stand
up under wind.

3978. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 01:52:48 UTC
From: John Doe <JohnDoe@0.0.0.0>
Message-ID: <423cd753$0$5190$afc38c87@news.optusnet.com.au>
Source record: 80523

ASCII art was never my forte;)

In this configuration the transmitter feeds the top of the
auto-transformer coil with the bottom of the coil at ground
and the antenna is tapped along the coil.
hope that makes more sense?

"John Doe" <JohnDoe@0.0.0.0> wrote in message
news:423cb475$0$22218$afc38c87@news.optusnet.com.au...
> Roy,
> Thank you for your concise description of the auto-transformer.
> Now to inject a little spice into the equation;)
> Perhaps you would like to tackle the auto-transformer
> configured as; Ground|--\\\\\\\---50R J0(from Tx)
> ^------To Antenna
> Thanks again,
> 73
>
>
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:113mv1q3r4bb023@corp.supernews.com...
> > Rob Roschewsk wrote:
> > >
> > > Roy, how did you come up with "1275 ohms in *parallel* with 319 ohms "
> > > equatating to "75 ohms resistance in series with 300 ohms of
capacitive
> > > reactance" ??? Just wondering.
> > >
> > I got it from a routine I keep on my HP48GX calculator, which comes from
> > the following series-parallel transformations:
> >
> > Let:
> >
> > Rs = resistance of series equivalent circuit
> > Xs = reactance of series equivalent circuit
> > Rp = resistance of parallel equivalent circuit
> > Xp = reactance of parallel equivalent circuit
> >
> > To convert a series circuit to a parallel circuit which has an identical
> > impedance:
> >
> > Rp = (Rs^2 + Xs^2) / Rs
> > Xp = (Rs^2 + Xs^2) / Xs
> >

> > To convert a parallel circuit to a series circuit which has an identical
> > impedance:
> >
> > Rs = (Rp * Xp^2) / (Rp^2 + Xp^2)
> > Xs = (Rp^2 * Xp) / (Rp^2 + Xp^2)
> >
> > These aren't very difficult to derive if you're comfortable with complex
> > arithmetic. They should be in the toolkit of everyone who works with
> > electrical circuits.
> >
> > Important things to keep in mind when using these transformations:
> >
> > 1. Although frequency isn't explicitly involved in the conversions, when
> > you make an equivalent circuit from a resistor and inductor or
> > capacitor, Xp and Xs will change with frequency. Therefore a transformed
> > circuit will have the same impedance as the original only at one
> > frequency. If the frequency changes, new values of resistance and
> > capacitance or inductance have to be calculated for the equivalent
> circuit.
> >
> > 2. Because point 1, one circuit or the other will usually be better for
> > modeling a real circuit over a range of frequencies, because the
> > impedance of the real circuit will change with frequency more like one
> > or the other of the two equivalent circuits.
> >
> > In the example, where the feedpoint Z = 75 - j300:
> >
> > Rs = 75
> > Xs = 300
> >
> > so
> >
> > Rp = (75^2 + (-300)^2) / 75 = 1275
> > Xp = (75^2 + (-300)^2) / (-300) = -318.75
> >
> > You can check this if you'd like. You'll find that the parallel
> > combination of 1275 and -j318.75 ohms is 75 - j300.
> >
> > Roy Lewallen, W7EL
>
>

3979. Re: 160 meter mobile -- Reality Check

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 02:41:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113pom41gbu85e1@corp.supernews.com>
Source record: 80524

If you had made this model with EZNEC, you would have seen a warning
that the segment length is shorter than recommended. And you could have
entered the dimensions directly in inches (or immediately converted
between meters and inches). The free demo program is adequate for this
model, providing you don't want more than 20 segments.

Roy Lewallen, W7EL

Frank wrote:
>
> I should have read the manual before modeling, but I was so concerned that
> the feed-point be near the bottom. Changing the segmentation to 17,
> removing the LD card, and reducing the radius to 0.125 ", calculates the
> feed-point impedance as: 0.123 - j3286. I considered Jim's calculation of
> 0.37 - j8170 to be far too reactive. The fact is these points are so close,
> when observed on the Smith chart, as to be virtually identical.
>
> Analyzing a shunt L/series C matching network, with inductor Q at 300,
> indicates a loss of 21.5dB with 30 kV RMS at the base of the antenna (1.5 kW
> into the matching network). (In the case of 0.37 - j8170 the loss is 21.8
> dB, with 42 kV at the base). These voltages are so large, I am beginning to
> wonder if I goofed again! The losses, at least, are the same order of
> magnitude as Roy's calculation.
>
> 73,
>
> Frank
>
>

3980. Re: Mild steel wire for Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 02:42:34 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113pootm9t33n44@corp.supernews.com>
Source record: 80425

You might consider using Copperweld wire. That way you have both the strength and the freedom from rust. It's not mild, however -- it's hard and springy, so it would be harder to work with.

Roy Lewallen, W7EL

Ralph Mowery wrote:
>
> I built a 2 meter 6 element beam out of some single strand guy wire. It
> worked fine for a year or so that I had it up. There is no electrical
> problem with steel but mechanical it may be something else. Rust being one
> of them, the small size of the elements at 100 mhz may not be able to stand
> up under wind.
>
>

3981. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 02:49:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113pp5nrh1kmbd6@corp.supernews.com>
Source record: 80426

Now I understand what you're describing. That could match an antenna having parallel transformed feedpoint R less than 50 ohms and moderate capacitive reactance. But it's probably not the best way to do it. You couldn't feed a 5/8 wave vertical this way, because the parallel transformed feedpoint R is greater than 50 ohms. The portion of L below the tap would be the value needed to resonate with the equivalent shunt Xc of the antenna. Then the additional turns would simply be the rest of the autotransformer to step up the equivalent parallel feedpoint R.

Roy Lewallen, W7EL

John Doe wrote:
> ASCII art was never my forte;)
>
> In this configuration the transmitter feeds the top of the
> auto-transformer coil with the bottom of the coil at ground
> and the antenna is tapped along the coil.
> hope that makes more sense?
>

3982. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 03:09:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113pqbelc3ml754@corp.supernews.com>
Source record: 80427

Art, please fill in the blanks. Trust me, it won't harm in any way your ability to obtain a patent.

Hi, I'm aunwin. I have invented an antenna that's an improvement over existing designs, because:

1. The gain of a __[A]__ when mounted ______ feet high is _____ dBi at an elevation angle of __[B]___ degrees. My remarkable antenna has a gain of ____ dBi at that same angle.
2. At the same frequency as used to determine the gain in item 1, the reference antenna has a front/back ratio of ______ dB at an elevation angle of __[B]__ degrees. My marvelous antenna has a front/back ratio of ______ dB at that same angle.
3. At a frequency _____% [above|below] the frequency of items 1 and 2, the reference antenna's gain has dropped to _____ dBi and the front/back to ____ dB. My terrific antenna, however, still has a gain of ______ dBi and front/back of ______ dB.
4. When matched to 50 ohms at the frequency of items 1 and 2 which is ____ MHz, the reference antenna has a 2:1 SWR bandwidth of _____ MHz. My outstanding antenna has a 2:1 SWR bandwidth of ______ MHz.

A = the name of a reference antenna having a similar size, number of elements, complexity, or cost compared to your antenna. In other words, a common antenna that your antenna is better than.
B = an elevation angle useful for DX work -- choose anything between 2 and 10 or so degrees. It would be best to give gain and front/back for multiple angles.

That'll show those ignorant troglodites like Roy and Wes that there are still Galileos out here who can laugh in the gurus' faces and come up with performance they never dreamed of! You wanted numbers, I gave you numbers. Choke on those, you doubters!

That's all you've got to do, Art, just fill in the blanks. A few numbers. No need for expositions on coupling, polygons, or takeoff angles.

Not holding my breath,

Roy Lewallen, W7EL

3983. Re: Balun article now on line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 03:21:56 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <0aqp31hejskbst6qgmsf1i5q03sv9ak69o@4ax.com>
Source record: 80428

On Sat, 19 Mar 2005 12:35:48 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Walt, I intended to include a link to your article and looked on your
>web site for it before I posted my article. But I didn't find it in the
>index. Where is it relative to your home page? I'll add a link to it.
>
>Walt's article was really the first one I ever saw that explained the
>phenomenon of currents on the inside and outside of the coax -- my
>article is really just an extension of his work.
>
>Roy Lewallen, W7EL
>
>Walter Maxwell wrote:
>>
>> Yes, Roy's article in the Compendium is excellent, as are all of Roy's
>> contributions to our art. In his article he referenced my work with
>> baluns, which appeared in QST for March 1983. This article is also
>> available on my web page at www.w2du.com for those who don't have a
>> copy of that issue of QST.
>>
>> Walt Maxwell, W2DU
Roy, I changed the address to my web page on 3-13-05 to the one listed
above. I also changed the format somewhat.for better organization. The
new page lists the pertinent categories with links to the individual
chapters from Reflections and its appendices. You'll find the chapter
on baluns under the category "Read Chapters from Reflections 2," with
the title, "Some Aspects of the Balun Problem," Chapter 21 in the
book. Thanks for the assist.

Walt, W2DU

3984. Re: Balun article now on line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 03:35:28 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <5nrp31l0lok8ccqaqi1ofk54j4uqouebfl@4ax.com>
Source record: 80429

On Sat, 19 Mar 2005 14:38:32 -0500, "Jack Painter" <223bthp@cox.net>
wrote:

>
>"Walter Maxwell" <w2du@iag.net> wrote
> > Yes, Roy's article in the Compendium is excellent, as are all of Roy's
>> contributions to our art. In his article he referenced my work with
>> baluns, which appeared in QST for March 1983. This article is also
>> available on my web page at www.w2du.com for those who don't have a
>> copy of that issue of QST.
>>
>> Walt Maxwell, W2DU
>
>Walt & Roy, thank you both very much for your lifetime of service to radio.
>Have either of you analyzed any the numerous popular Radio Works "Current
>Baluns"? I was advised many years ago that the current-type balun was more
>effective for use with a dipole, and have used Radio Work's baluns on both
>dipole and random wires with success. But my measure of success is not
>analytical, as your studies have been. Operating a center-fed dipole at it's
>resonant frequency, slightly below that, and significantly above it, are the
>specific inquiries wrt current baluns - would a voltage balun be more
>effective in any of those conditions? Radio Works current baluns the same
>kind used in your studies?
>
>Thanks for your comments, and the great participation of all in this group.
>
>Jack Painter
>Virginia Beach, Virginia
>
Thanks, Jack, for the nice words--they're appreciated.

Walt

3985. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 04:43:03 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <t1vp315e31b0h8nk5pqov6ge95fmhb9p7r@4ax.com>
Source record: 80430

On Sun, 20 Mar 2005 02:15:17 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

[blah blah]

>Have at it You are now free to wave your arms around like
>Andy Capp knowing that all you say will not be refuted
>regardles of the clothing that you wear

Well, just having had surgery to fix a torn rotator cuff, I'm under
doctor's orders to wave only one arm. But since you're seemingly
enamoured with what I'm wearing, I'll let you in on it. My XYL has
designed a lovely tee shirt with a revealing slit up one side that
lets me put it on without raising my arm.

3986. 1

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 04:52:56 UTC
From: Ron038547@yahoo.com
Message-ID: <1111294376.663620.250130@f14g2000cwb.googlegroups.com>
Source record: 80431

2

3987. AR-40 controller box problem

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 13:34:28 UTC
From: "pdrunen@aol.com" <pdrunen@aol.com>
Message-ID: <1111325668.843212.35180@l41g2000cwc.googlegroups.com>
Source record: 80432

Hi Group,

I have a problem with my CDE AR-40 rotor controller box. The controller will drive the rotor into the limit without stopping. I can swap connections 4 and 5 and it goes into the limit in the other direction.

I brought the rotor down and checked it on the bench to verify that it was not a cable problem. I also checked it on another rotor with same.

Any one help with a schematic or has seen and fixed this problem before?

de KJ4UO

3988. Amateur Radio Military Appreciation Day

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 15:34:48 UTC
From: Richard Lyons <rlyons@wi.rr.com>
Message-ID: <9lg%d.9198$hu3.1638@twister.rdc-kc.rr.com>
Source record: 80433

Amateur Radio Military Appreciation Day

http://www.freewebs.com/kb9ibw/

WHAT IS ARMAD ?

ARMAD is an annual Amateur Radio Special Event project that stands for Amateur Radio Military Appreciation Day. We work with National Military Appreciation Month during the month of May. Amateur Radio Operators from around the world team up during this joint effort to allow the people from our communities to gather at public locations such as shopping centers, parks, VA hospitals, and sporting events to express verbal positive support "LIVE" over the radio for members of the Military, Veterans, Reserves, National Guard, and military support groups. It is also a chance for those at each location to hear and exchange messages of appreciation with each other over the radio. Many of us have friends, relatives, and neighbors that are active duty, and past members of the armed forces. ARMAD gives us the chance to support one another, and to express our thanks and appreciation to those that sacrifice and serve in the Armed Forces.

wd9dnm@arrl.net

Node 99262

3989. Re: Balun article now on line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 16:20:34 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <iv7r31h2cg09tpsa7a553su4mtp1p99kd5@4ax.com>
Source record: 80434

On Sun, 20 Mar 2005 03:21:56 GMT, Walter Maxwell <w2du@iag.net> wrote:

>On Sat, 19 Mar 2005 12:35:48 -0800, Roy Lewallen <w7el@eznec.com>
>wrote:
>
>>Walt, I intended to include a link to your article and looked on your
>>web site for it before I posted my article. But I didn't find it in the
>>index. Where is it relative to your home page? I'll add a link to it.
>>
>>Walt's article was really the first one I ever saw that explained the
>>phenomenon of currents on the inside and outside of the coax -- my
>>article is really just an extension of his work.
>>
>>Roy Lewallen, W7EL
>>
>>Walter Maxwell wrote:
>>>
>>> Yes, Roy's article in the Compendium is excellent, as are all of Roy's
>>> contributions to our art. In his article he referenced my work with
>>> baluns, which appeared in QST for March 1983. This article is also
>>> available on my web page at www.w2du.com for those who don't have a
>>> copy of that issue of QST.
>>>
>>> Walt Maxwell, W2DU
>Roy, I changed the address to my web page on 3-13-05 to the one listed
>above. I also changed the format somewhat.for better organization. The
>new page lists the pertinent categories with links to the individual
>chapters from Reflections and its appendices. You'll find the chapter
>on baluns under the category "Read Chapters from Reflections 2," with
>the title, "Some Aspects of the Balun Problem," Chapter 21 in the
>book. Thanks for the assist.
>
>Walt, W2DU
I forgor to mention that I recently wrote an addition to Chapter 21,
Chapter 21A for Reflections 3, telling what led to the development of
the W2DU balun. It also appears on my web page under the category
"Preview Chapters from Reflections 3," The idea came while fixing a
problem that arose in measuring the radiation patterns of antennas I
developed for use on various spacecraft at the antenna lab of the RCA
Space Center, Princeton, NJ in the 1970s

Walt, W2DU.

3990. Re: Double Bazooka question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 16:30:44 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <3s8r31hcn9dbppej8oiqdc1194kle0ev4s@4ax.com>
Source record: 80435

On Thu, 10 Mar 2005 17:16:47 -0800, Dan Richardson
<dwr@mailinator.com> wrote:

>On Thu, 10 Mar 2005 22:59:23 GMT, <someone@somedomain.com.invalid>
>wrote:
>
>>CC&R's at my current QTH requires me to use an antenna that is not visible.
>>My choices are to either use an attic installed antenna or be off the air. I prefer the
former.
>>So, I plan to install a 20 meter double bazooka in the attic, and such a small antenna
>>will allow me to use an inverted V configuration, even up there. I used bazooka's 30+
years ago
>>with success on 80 and 40 so my prejudices are running that way.
>>Question:
>>Does anyone out there have experience or thoughts about feeding multiple
>>double bazooka's with a single coax line?
>>
>>Dave, N6PZ
>>
>
>Dave,
>
>Before you spend all that time, effort and $$$ I suggest you read
>this:
>
>http://www.w2du.com/Reflections2Chapter18DoubleBazooka.pdf
>
>Danny,
>K6MHE
Hi Danny, thanks for the reference to my writing. However, when I
click on the url you show above it brings back an error msg.

I believe anyone who contemplates wasting his time on building a
double bazooka owes it to himself to read my Chapter 18. To find it my
web page is www.w2du.com. Click on "Read Chapters from Reflections 2,"
and then click on Chapter 18.

Walt, Maxwell W2DU

3991. FS: IC706MKIIG, Bearcat BC780XLT, 440HT, and base antenna's.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 17:09:08 UTC
From: Aspen37 <pottsladd13@nospam.yahoo.com>
Message-ID: <U6i%d.155994$Th1.41430@bgtnsc04-news.ops.worldnet.att.net>
Source record: 80436
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.scanner,rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.swap

Icom IC-706MKIIG w/FL223 SSB filter, and remote installation kit.
Never mobile, non-smoker.
$850.00 plus shipping. Cont. US Only. USPS money orders only.

Icom 4SAT 440mhz mono-band HT.(needs work) The radio is a 10
cosmetically and worked
the last time I put it away. I recently took it out of the box, and
it powers up but only
squelches, no display, rx or tx. It is complete with box, manual,
charger, etc.
$50.00

Uniden Bearcat BC780XLT Trunk tracker III base/mobile scanner.
Complete with box, manual,
and AC power supply. $225.00

Cushcraft AR-6 6 meter base antenna. I believe it is around 3db gain.
$40.00
Diamond X510MA 144/440mhz dual-band base antenna. 8.6db gain
VHF/11.4db gain UHF. $125.00
Both antenna's won't be taken down until it warms up. They are still
in use at the moment. These are for pickup only!!!!!!!!!

Lou

pottsladd13@yahoo.com

3992. Rotatable Vertical - Honest

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 17:30:30 UTC
From: Phaselock Ohms <PL@bakerstreet.com>
Message-ID: <Wqi%d.57075$xt.25979@fed1read07>
Source record: 80437

See URL:
http://www.vk4dx.net/rot_vert.htm

--
Elementary Ya All
Phaselock Ohms

3993. Re: 160 meter mobile -- Reality Check

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 18:21:08 UTC
From: Frank <ve6cb@nospam.telus.net>
Message-ID: <oaj%d.60185$KI2.35573@clgrps12>
Source record: 80438

"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:jkep3156h381t0dlj2hcapc5pev256u12u@4ax.com...
> On Sat, 19 Mar 2005 23:23:30 GMT, "Frank" <ve6cb@nospam.telus.net>
> wrote:
>
> [snip]
>
>>The following code produces Zin = 0.117 - j2717 ohms at 1.9 MHz. What did
>>I do wrong? Note the high segmentation to place the feed-point near the
>>base of the antenna.
>>
>>Frank
>>
>>CM 9 ft monopole
>>CE
>>GW 1 108 0 0 0 0 0 108 0.25
>>GS 0 0 0.025400
>>GE 1
>>GN 1
>>EX 0 1 1 00 1 0
>>LD 5 1 1 108 5.8001E7
>>FR 0 9 0 0 1.8 0.025
>>RP 0 181 1 1000 -90 0 1.00000 1.00000
>>EN
>
> My bad. I hate it when that happens. A typo on the length on my
> part. 101 instead of 108.
>
> It's more like 0.12 -j2890 in EZNEC. I'm not real fluent in NEC decks
> but I think you are using too many segments.

A more realistic analysis than above, with the following structure, produces
some interesting results:
9ft monopole, segmented in 12" lengths, mounted above a 6' x 6' wire grid
model, also 12" segments, (All wires # 10 AWG). 5 ft above a
Sommerfeld/Norton average ground (Er = 13, Sigma = 5 mS/m). Frequency 1.9
MHz.

Zin = 1.23 - j3059, max gain = -8.3 dBi at 25 deg. elevation. (surface
wave not computed). Structure
efficiency 98.7%.

A suitable matching network, assuming an inductor Q of 300, consists of a
shunt "L" (161uH) followed by a
series C (16.2 pF). The network loss is 11.5 dB and 28 kV RMS at the base

with 1.5 kW in.

With an inductor Q of 1000, the component values become: L = 193.5 uH, and C = 8.88 pF.
Loss = 6.3 dB, and 51 kV RMS.

Frank

Edited code follows:

```
CM 9 ft monopole above 6ft X 6ft wire grid gp
CE
GW 1 9 0 0 14 0 0 5 0.0509449
GW 2 1 -3 -3 5 -2 -3 5 0.0509449
|
|
GW 85 1 3 2 5 3 3 5 0.0509449
GS 0 0 0.304800
GE 1
GN 2 0 0 0 13.0000 0.0050
EX 0 1 9 0 1 0
LD 5 1 1 9 5.8001E7
LD 5 2 1 1 5.8001E7
|
|
LD 5 85 1 1 5.8001E7
FR 0 9 0 0 1.8 0.025
RP 0 181 1 1000 -90 0 1 1
EN
```

3994. Re: Rotatable Vertical - Honest

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 18:25:00 UTC
From: Harold Burton <hwburton@cableone.net>
Message-ID: <113rfvm7j9ttcd9@corp.supernews.com>
Source record: 80439

"Phaselock Ohms" <PL@bakerstreet.com> wrote in message
news:Wqi%d.57075$xt.25979@fed1read07...
> See URL:
> http://www.vk4dx.net/rot_vert.htm
>
> --
> Elementary Ya All
> Phaselock Ohms
>
>
>
Either he's wanting to verify the true omni staus of the vertical by
experimentation or (more likely) he's installed a quickie vertical in place
of a busted beam, while he rebuilds the beam. Do you know the fellow well
enough to ask, so we can know for sure which it is?

Harold
KD5SAK

3995. Re: Amateur Radio Military Appreciation Day

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 19:21:33 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d1kift$5kk$1@sparta.btinternet.com>
Source record: 80440

Another war-mongering organisation?

3996. Re: Rotatable Vertical - Honest

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 19:55:14 UTC
From: gil <gi1pi@yahoo.com>
Message-ID: <1111348514.071559.66970@l41g2000cwc.googlegroups.com>
Source record: 80441

I would guess the latter.

gil

3997. (",) Do You Want To Know For Sure You Are Going To Heaven?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 20:11:10 UTC
From: Ron038548@yahoo.com
Message-ID: <1111349470.205164.202480@g14g2000cwa.googlegroups.com>
Source record: 80442

http://www.want-to-be-sure.blogspot.com << Click On Link

3998. Re: Double Bazooka question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 20:25:41 UTC
From: Dan Richardson <dwr@mailinator.com>
Message-ID: <ptmr31tssc60sgipdns7shcitjsfvmhn4m@4ax.com>
Source record: 80443

On Sun, 20 Mar 2005 16:30:44 GMT, Walter Maxwell <w2du@iag.net> wrote:

[snip]

>>K6MHE
>Hi Danny, thanks for the reference to my writing. However, when I
>click on the url you show above it brings back an error msg.
>
>I believe anyone who contemplates wasting his time on building a
>double bazooka owes it to himself to read my Chapter 18. To find it my
>web page is www.w2du.com. Click on "Read Chapters from Reflections 2,"
>and then click on Chapter 18.
>
>Walt, Maxwell W2DU

By golly you're right Walter! Strange, I used copy and paste for the
url. Guess a strange bit got in somewhere.

Very 73,

Danny, K6MHE

3999. Re: AR-40 controller box problem

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 22:10:25 UTC
From: ps_dude <ps_dude@nospam.com>
Message-ID: <423DF4D0.E47E6AD6@nospam.com>
Source record: 80444

Bad limit switch inside the rotor.

"pdrunen@aol.com" wrote:

> Hi Group,
>
> I have a problem with my CDE AR-40 rotor controller box. The
> controller will drive the rotor into the limit without stopping. I can
> swap connections 4 and 5 and it goes into the limit in the other
> direction.
>
> I brought the rotor down and checked it on the bench to verify that it
> was not a cable problem. I also checked it on another rotor with same.
>
> Any one help with a schematic or has seen and fixed this problem
> before?
>
> de KJ4UO

4000. Re: Double Bazooka question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-20 22:19:51 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <113rto9i66toe84@corp.supernews.com>
Source record: 80445

"Dan Richardson" <dwr@mailinator.com> wrote in message
news:ptmr31tssc60sgipdns7shcitjsfvmhn4m@4ax.com...
> On Sun, 20 Mar 2005 16:30:44 GMT, Walter Maxwell <w2du@iag.net> wrote:
>
> [snip]
>
>>>K6MHE
>>Hi Danny, thanks for the reference to my writing. However, when I
>>click on the url you show above it brings back an error msg.
>>
>>I believe anyone who contemplates wasting his time on building a
>>double bazooka owes it to himself to read my Chapter 18. To find it my
>>web page is www.w2du.com. Click on "Read Chapters from Reflections 2,"
>>and then click on Chapter 18.
>>
>>Walt, Maxwell W2DU
>
> By golly you're right Walter! Strange, I used copy and paste for the
> url. Guess a strange bit got in somewhere.
>
> Very 73,
>
> Danny, K6MHE
>
>
>
>

Walt
Give credit where it's due.
There is an "effect". But it doesn't widen the 2:1 SWR bandwidth.
It merely makes the negligible reflected power near resonance nearly vanish
if you get the resonance of ALL the parts perfectly equal.
An interesting academic exercise, but no magic solution.
There is no free lunch.

OTOH

I LOVE my SteppIR 4 element beam!!!

73

H.
NQ5H

4001. Armad

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 02:10:48 UTC
From: Richard Lyons <rlyons@wi.rr.com>
Message-ID: <n0q%d.11399$hu3.6182@twister.rdc-kc.rr.com>
Source record: 80448

WHAT IS ARMAD ?

http://www.freewebs.com/kb9ibw/

ARMAD is an annual Amateur Radio Special Event project that stands for Amateur Radio Military Appreciation Day. We work with National Military Appreciation Month during the month of May. Amateur Radio Operators from around the world team up during this joint effort to allow the people from our communities to gather at public locations such as shopping centers, parks, VA hospitals, and sporting events to express verbal positive support "LIVE" over the radio for members of the Military, Veterans, Reserves, National Guard, and military support groups. It is also a chance for those at each location to hear and exchange messages of appreciation with each other over the radio. Many of us have friends, relatives, and neighbors that are active duty, and past members of the armed forces. ARMAD gives us the chance to support one another, and to express our thanks and appreciation to those that sacrifice and serve in the Armed Forces.

wd9dnm

Node 99262

4002. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 02:19:27 UTC
From: John Doe <JohnDoe@0.0.0.0>
Message-ID: <423e2edf$0$29446$afc38c87@news.optusnet.com.au>
Source record: 80446

Yes Roy,
A bit off topic on my part for the 5/8 on 2M.
But as you described the step down character of
the auto-transformer so well, I though you may wish
to add a description on the on the step up characterises.

Now I understand what you're describing. That could match an antenna
having parallel transformed feedpoint R less than 50 ohms and moderate
capacitive reactance. But it's probably not the best way to do it. You
couldn't feed a 5/8 wave vertical this way, because the parallel
transformed feedpoint R is greater than 50 ohms. The portion of L below
the tap would be the value needed to resonate with the equivalent shunt
Xc of the antenna. Then the additional turns would simply be the rest of
the autotransformer to step up the equivalent parallel feedpoint R.

Roy Lewallen, W7EL

John Doe wrote:
> ASCII art was never my forte;)
>
> In this configuration the transmitter feeds the top of the
> auto-transformer coil with the bottom of the coil at ground
> and the antenna is tapped along the coil.
> hope that makes more sense?
>
"John Doe" <JohnDoe@0.0.0.0> wrote in message
news:423cd753$0$5190$afc38c87@news.optusnet.com.au...
> ASCII art was never my forte;)
>
> In this configuration the transmitter feeds the top of the
> auto-transformer coil with the bottom of the coil at ground
> and the antenna is tapped along the coil.
> hope that makes more sense?
>
> "John Doe" <JohnDoe@0.0.0.0> wrote in message
> news:423cb475$0$22218$afc38c87@news.optusnet.com.au...
> > Roy,
> > Thank you for your concise description of the auto-transformer.
> > Now to inject a little spice into the equation;)
> > Perhaps you would like to tackle the auto-transformer
> > configured as; Ground|--\\\\\\\---50R J0(from Tx)
> > ^------To Antenna
> > Thanks again,
> > 73
> >

> >
> >
> > "Roy Lewallen" <w7el@eznec.com> wrote in message
> > news:113mv1q3r4bb023@corp.supernews.com...
> > > Rob Roschewsk wrote:
> > > >
> > > > Roy, how did you come up with "1275 ohms in *parallel* with 319 ohms
"
> > > > equatating to "75 ohms resistance in series with 300 ohms of
> capacitive
> > > > reactance" ??? Just wondering.
> > >
> > > I got it from a routine I keep on my HP48GX calculator, which comes
from
> > > the following series-parallel transformations:
> > >
> > > Let:
> > >
> > > Rs = resistance of series equivalent circuit
> > > Xs = reactance of series equivalent circuit
> > > Rp = resistance of parallel equivalent circuit
> > > Xp = reactance of parallel equivalent circuit
> > >
> > > To convert a series circuit to a parallel circuit which has an
identical
> > > impedance:
> > >
> > > Rp = (Rs^2 + Xs^2) / Rs
> > > Xp = (Rs^2 + Xs^2) / Xs
> > >
> > > To convert a parallel circuit to a series circuit which has an
identical
> > > impedance:
> > >
> > > Rs = (Rp * Xp^2) / (Rp^2 + Xp^2)
> > > Xs = (Rp^2 * Xp) / (Rp^2 + Xp^2)
> > >
> > > These aren't very difficult to derive if you're comfortable with
complex
> > > arithmetic. They should be in the toolkit of everyone who works with
> > > electrical circuits.
> > >
> > > Important things to keep in mind when using these transformations:
> > >
> > > 1. Although frequency isn't explicitly involved in the conversions,
when
> > > you make an equivalent circuit from a resistor and inductor or
> > > capacitor, Xp and Xs will change with frequency. Therefore a
transformed
> > > circuit will have the same impedance as the original only at one

> > > frequency. If the frequency changes, new values of resistance and
> > > capacitance or inductance have to be calculated for the equivalent
> > circuit.
> > >
> > > 2. Because point 1, one circuit or the other will usually be better
for
> > > modeling a real circuit over a range of frequencies, because the
> > > impedance of the real circuit will change with frequency more like one
> > > or the other of the two equivalent circuits.
> > >
> > > In the example, where the feedpoint Z = 75 - j300:
> > >
> > > Rs = 75
> > > Xs = 300
> > >
> > > so
> > >
> > > Rp = (75^2 + (-300)^2) / 75 = 1275
> > > Xp = (75^2 + (-300)^2) / (-300) = -318.75
> > >
> > > You can check this if you'd like. You'll find that the parallel
> > > combination of 1275 and -j318.75 ohms is 75 - j300.
> > >
> > > Roy Lewallen, W7EL
> >
> >
>
>

4003. physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 02:26:42 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d1lbhb$pj0$1@domitilla.aioe.org>
Source record: 80447

My question(s):

For an example, on the 10 meter band:
If I take a 28" whip and mount it at the end of helical wound coil (wound on 1" diameter form), where the "wire length" of the coil, PLUS, the length of the whip (28" + coil wire length) is equal to 1/2 wavelength (electrical length)--BUT, the overall physical length of the antenna (top, tip of whip to base of helical wound coil) is 1/4 wavelength, what would the radiation pattern of such an antenna be?

Would it favor the pattern of a 1/4 or 1/2 wave antenna--or, would the pattern be a compromise between the two--or, would the pattern be totally unrelated to either?

What could I expect the impedance of such an antenna be? Would the reactance be capacitive or inductive? What would be the best way to provide a match to 50 ohm coax from such an antenna?

What software is available to model such an antenna?

Thanks in advance,
warmest regards

4004. Re: Amateur Radio Military Appreciation Day

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 02:47:44 UTC
From: Old Ed <eXseniorsDeleteThisAndTheX@earthlink.net>
Message-ID: <kBq%d.903$H06.307@newsread3.news.pas.earthlink.net>
Source record: 80449

Hi Reg... still a nut case, I see.

It's too bad we can't exempt you from the benefits that have been brought about by our military's sacrifices--yours and ours!

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:d1kift$5kk$1@sparta.btinternet.com...
> Another war-mongering organisation?
>
>

4005. (",) Do You Want To Know For Sure You Are Going To Heaven?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 03:09:03 UTC
From: Ron038548@yahoo.com
Message-ID: <1111374543.512880.315400@g14g2000cwa.googlegroups.com>
Source record: 80450

http://www.want-to-be-sure.blogspot.com << Click On Link

4006. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 04:01:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113shppdvmgs41@corp.supernews.com>
Source record: 80451

If you wind, say, 100 inches of wire into a coil, it doesn't act the same as 100 inches of straight wire. And no two different coils wound from 100 inches of wire will act the same. A coil's radiation characteristics are very nearly the same as for a wire the outside diameter and length of the coil, not the length of the wire it's made from. And the inductance of the coil is dictated by the length, pitch, number of turns, and diameter of the coil, not the length of the wire it's wound from. So your question can't be answered unless you tell us the diameter of the coil and any two of length, pitch, and number of turns; or the length and diameter of the coil and its inductance at the frequency at which it's being used.

Roy Lewallen, W7EL

John Smith wrote:
> My question(s):
>
> For an example, on the 10 meter band:
> If I take a 28" whip and mount it at the end of helical wound coil (wound on
> 1" diameter form), where the "wire length" of the coil, PLUS, the length of
> the whip (28" + coil wire length) is equal to 1/2 wavelength (electrical
> length)--BUT, the overall physical length of the antenna (top, tip of whip
> to base of helical wound coil) is 1/4 wavelength, what would the radiation
> pattern of such an antenna be?
>
> Would it favor the pattern of a 1/4 or 1/2 wave antenna--or, would the
> pattern be a compromise between the two--or, would the pattern be totally
> unrelated to either?
>
> What could I expect the impedance of such an antenna be? Would the
> reactance be capacitive or inductive? What would be the best way to provide
> a match to 50 ohm coax from such an antenna?
>
> What software is available to model such an antenna?
>
> Thanks in advance,
> warmest regards
>
>

4007. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 08:17:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d1lvuk$84o$1@domitilla.aioe.org>
Source record: 80452

OK, if you notice in my post wire length is in quotes, i.e. "wire length."
In the example, it is a given that this length resonates at 1/2 wave along
with the combined length of the whip (hence, electrical 1/2 wavelength.)

So, your post, while presenting individual points and your opinions, in
general--seems to answer very little, if any, of the original questions
raised--and certainly cannot be accused of containing any specifics.

The diameter IS stated (1"), the wire length is the lenght of the wire minus
28 inches which is necessary to be a resonate 1/2 wave, AND this is divided
over (1/4 wave at 10 meters - 28 inches.) to arrive at the coil length--the
pitch is calculated from the coil length ((1/4 wave @ 10 meters) - 28
inches) and the wire lenght divided by pi (number of turns) spread out over
the coil ENTIRE length. And, of course, coil length plus whip length is a
1/4 wave.

If you refer back to my original post, you will see all of this IS there...

However, critical analysis is a wise beginning of any quest for answers.

Regards

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:113shppdvmgs41@corp.supernews.com...
> If you wind, say, 100 inches of wire into a coil, it doesn't act the same
> as 100 inches of straight wire. And no two different coils wound from 100
> inches of wire will act the same. A coil's radiation characteristics are
> very nearly the same as for a wire the outside diameter and length of the
> coil, not the length of the wire it's made from. And the inductance of the
> coil is dictated by the length, pitch, number of turns, and diameter of
> the coil, not the length of the wire it's wound from. So your question
> can't be answered unless you tell us the diameter of the coil and any two
> of length, pitch, and number of turns; or the length and diameter of the
> coil and its inductance at the frequency at which it's being used.
>
> Roy Lewallen, W7EL
>
> John Smith wrote:
>> My question(s):
>>
>> For an example, on the 10 meter band:
>> If I take a 28" whip and mount it at the end of helical wound coil (wound
>> on
>> 1" diameter form), where the "wire length" of the coil, PLUS, the length
>> of
>> the whip (28" + coil wire length) is equal to 1/2 wavelength (electrical

>> length)--BUT, the overall physical length of the antenna (top, tip of
>> whip
>> to base of helical wound coil) is 1/4 wavelength, what would the
>> radiation
>> pattern of such an antenna be?
>>
>> Would it favor the pattern of a 1/4 or 1/2 wave antenna--or, would the
>> pattern be a compromise between the two--or, would the pattern be totally
>> unrelated to either?
>>
>> What could I expect the impedance of such an antenna be? Would the
>> reactance be capacitive or inductive? What would be the best way to
>> provide
>> a match to 50 ohm coax from such an antenna?
>>
>> What software is available to model such an antenna?
>>
>> Thanks in advance,
>> warmest regards
>>

4008. (",) Do You Want To Know For Sure You Are Going To Heaven?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 09:01:55 UTC
From: Ron038548@yahoo.com
Message-ID: <1111395715.618146.194510@l41g2000cwc.googlegroups.com>
Source record: 80453

http://www.want-to-be-sure.blogspot.com << Click On Link

4009. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 13:13:49 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <hMz%d.9885$b_6.3645@trnddc01>
Source record: 80454

"John Smith" <assemblywizard@gmail.com> wrote in message
news:d1lvuk$84o$1@domitilla.aioe.org...
> OK, if you notice in my post wire length is in quotes, i.e. "wire length."
> In the example, it is a given that this length resonates at 1/2 wave along
> with the combined length of the whip (hence, electrical 1/2 wavelength.)
>
> So, your post, while presenting individual points and your opinions, in
> general--seems to answer very little, if any, of the original questions
> raised--and certainly cannot be accused of containing any specifics.
>
> The diameter IS stated (1"), the wire length is the lenght of the wire
minus
> 28 inches which is necessary to be a resonate 1/2 wave, AND this is
divided
> over (1/4 wave at 10 meters - 28 inches.) to arrive at the coil
length--the
> pitch is calculated from the coil length ((1/4 wave @ 10 meters) - 28
> inches) and the wire lenght divided by pi (number of turns) spread out
over
> the coil ENTIRE length. And, of course, coil length plus whip length is a
> 1/4 wave.
>
> If you refer back to my original post, you will see all of this IS
there...
>
> However, critical analysis is a wise beginning of any quest for answers.
>
> Regards
Roy's answer is right on the mark.
The length of the wire is of no help in answering the question.
You are confusing mechanical lengths with electrical lengths.
Dale W4OP

4010. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 13:39:24 UTC
From: nick smith <NickS@ntlworld.com>
Message-ID: <g8A%d.677$eO2.11@newsfe2-gui.ntli.net>
Source record: 80455

It seems to me that the guy was trying to help, so no need to "bite the hand
that feeds",
old chap !! Better to cultivate him, than piss him off, however technically
correct you might be ......

Nick

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:hMz%d.9885$b_6.3645@trnddc01...
>
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:d1lvuk$84o$1@domitilla.aioe.org...
> > OK, if you notice in my post wire length is in quotes, i.e. "wire length."
> > In the example, it is a given that this length resonates at 1/2 wave along
> > with the combined length of the whip (hence, electrical 1/2 wavelength.)
> >
> > So, your post, while presenting individual points and your opinions, in
> > general--seems to answer very little, if any, of the original questions
> > raised--and certainly cannot be accused of containing any specifics.
> >
> > The diameter IS stated (1"), the wire length is the lenght of the wire
> minus
> > 28 inches which is necessary to be a resonate 1/2 wave, AND this is
> divided
> > over (1/4 wave at 10 meters - 28 inches.) to arrive at the coil
> length--the
> > pitch is calculated from the coil length ((1/4 wave @ 10 meters) - 28
> > inches) and the wire lenght divided by pi (number of turns) spread out
> over
> > the coil ENTIRE length. And, of course, coil length plus whip length is a
> > 1/4 wave.
> >
> > If you refer back to my original post, you will see all of this IS
> there...
> >
> > However, critical analysis is a wise beginning of any quest for answers.
> >
> > Regards
> Roy's answer is right on the mark.
> The length of the wire is of no help in answering the question.
> You are confusing mechanical lengths with electrical lengths.
> Dale W4OP
>
>

4011. Re: Rotatable Vertical - Honest

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 15:28:15 UTC
From: W3JXP <jxp16@psu.edu>
Message-ID: <Pa2dndgqi9SUdaPfRVn-rg@adelphia.com>
Source record: 80456

Back in the 70's I saw a CB beam mounted with the boom in the rotor pointing straight up. I guess he didn't want the mast to the rotor interfering with the vertical yagi.

--
John Passaneau W3JXP
State College Pa.
W3JXP@adelphia.net

"Phaselock Ohms" <PL@bakerstreet.com> wrote in message news:Wqi%d.57075$xt.25979@fed1read07...
> See URL:
> http://www.vk4dx.net/rot_vert.htm
>
> --
> Elementary Ya All
> Phaselock Ohms
>
>
>
>
>
>
>

4012. Re: Parabolic reflector for Wi-Fi?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 17:18:02 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <eID%d.17421$mq2.13843@trnddc08>
Source record: 80457

"Nigel M" <reply@thegroup.com> wrote in message
news:4dut31dsb3de8ihfj25ar7ff23n9sf4mip@4ax.com...
> I've been looking to make a linear parabolic reflector for Wi-Fi, I've
> found quite a few sources, such as:
>
> http://www.genericgeek.com/index.php?q=node/280
>
> http://www.freeantennas.com/projects/template2/index.html
>
> Those I've found all give templates for a parabola, but without any
> explanation as to why they have chosen that *particular* parabola, or
> the formula used to draw it. As a result, the drawings are a bit
> "sketchy" to say the least!
>
> I know radio amateurs are often knowledgeable on antennae, so I thought
> this was a good place to ask. I'd like to know a bit more theory, and
> the pros and cons of various parabolic shapes.
>
>
> --
> Nigel M
> "Occam's razor is not always sharp"

Nigel

I've been gathering parts so I can make a WiFi site. I dont know enough about wireless to offer any help with that part. But, I do have some experience with parabloic antennas. Contact me thru my E-mail if you are interested in trading thoughts.

Jerry

4013. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 17:18:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <o50u31hbr7cbkdehda93m9pn384dk6rpbu@4ax.com>
Source record: 80458

On Sun, 20 Mar 2005 18:26:42 -0800, "John Smith"
<assemblywizard@gmail.com> wrote:
>what would the radiation pattern of such an antenna be?

Hi John,

This appears to be a difficult question to answer, if for only all of the extraneous details. Patterns are determined by the physical size in relation to wavelength. It is all about geometry and distances between what are called current nodes - what you describe has no s in the node(s), so the geometry (pattern) is still quite simple.

Obtain a free copy of EZNEC to confirm.

73's
Richard Clark, KB7QHC

4014. Re: Balun article now on line

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 17:18:46 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d1mvlmalo2@hercules.btinternet.com>
Source record: 80459

A few further comments.

For perfectionists, the attenuation along a twin-line wound on a choke balun, is appreciably less than a coaxial line of about the same length.

This is due to the lower Zo of the coax and also due to the very small inner coaxial conductor diameter and its higher loss resistance.

This is not of great conseqence. The length of line involved is quite small anyway. Less than 1/8th wavelengths at the highest frequency of interest.

The power-handling and voltage-handling ability of twin-line is also greater than coax line.

So, in general, a choke balun wound with Radio Shack, 18 SWG speaker cable, is cheap, easier to construct, works better, and is more power efficient than the small-bore coax usually used.

Reg, G4FGQ

4015. Re: Parabolic reflector for Wi-Fi?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 18:21:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <e44u319gj3ai6ddetq62reubbhojde54en@4ax.com>
Source record: 80460

On Mon, 21 Mar 2005 16:49:13 GMT, in rec.radio.amateur.antenna you wrote:
>Those I've found all give templates for a parabola, but without any
>explanation as to why they have chosen that *particular* parabola, or
>the formula used to draw it.

Hi Nigel,

All parabolas have the same formula, simply different constants (size). If you want more gain, build a larger parabola. There is some diminishing return because your actual antenna is not getting larger, and a lot of the gain from the ends would be reflecting into unoccupied space.

I would offer one caution. The "template" offered appears to have a geometrical distortion from being stored for printing vs. stored for viewing (it appears to be squashed from either side, as viewed at the page).

As for a formula, that would be far more complex than construction instructions:
1. Obtain a large sheet of graph paper;
2. Along its longest edge, rule a line;
3. In the middle of this line, extend a perpendicular line;
4. Along that perpendicular mark a focus point (5 inches would do);
5. Along that perpendicular, halfway between the line in 2. and the focus in 4. mark one point of the parabolic surface;

This defines the hallmark characteristic of a parabolic surface, ALL points lie equidistant from a perpendicular line from 2. and from point 4. Your graph paper should provide a lot of perpendiculars from line 2. to use as guides. This will be cut-and-try until you get the hang of it:

A. Select one perpendicular graph line and mark a point out X inches;
B. Using a compass, measure from focus point 4. X inches;
C. If the compass can touch the mark A. you made a lucky guess;
D. Mark this A. as another point along the parabolic surface.

However, luck is not always with us, and the compass either overshoots A. or undershoots it. Move A. and adjust the compass equally until they both match. Repeat A through B along other perpendicular lines and eventually you will have a rough trace of a parabolic surface. Connect the dots and smooth the line.

73's
Richard Clark, KB7QHC

4016. High Gain antenna for mobile phone

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 18:27:51 UTC
From: Mark
Message-ID: <tb4u31levbbmel69padr3ekal6h4mlsjc1@4ax.com>
Source record: 80461

I need to buy an external High Gain Antenna to plug into my mobile phone. I need to operate the phone in a very remote area, where the signal is at best, only one bar on the display. I will mount the antenna on a pole on the roof, so I will need advise on cable as well. Can anybody tell me where to buy such a beast, thanks.

4017. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 18:39:51 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d1n4dqvmg1@domitilla.aioe.org>
Source record: 80463

The original post is a math problem--its "solution" is an antenna. It is structured as a "word problem", as opposed to a math problem written using digits and numbers--for the most part--only coil diameter, whip length and wavelength (both physical and electrical) are expressed as numbers. Most will be familiar with this from high school or college mathematics. However, since this alone seems to be such a matter of confusion, let's look at the problem and rely on more numeric means of expression-using only the information from my first post.

1) top whip length = 28 inches

2) coil diameter = 1 inch

3) physical coil length = (1/4 wavelength - 28 inches)

4) antenna physical length = 28 inches + coil length

5) "wire length"(whip + coil wire length) = electrical wavelength

6) number of turns = (wire length / (pi(3.14159) * coil diameter(1 inch)))

= (wire length / 3.14159 inches)

7) pitch = number of turns spread/spaced over the ENTIRE (helical) coil length

8) antenna is end fed at the base, EFWHA-a vertical monopole

9) The antenna's physical length is wave on 10 meters but, is a wavelength electrical length on 10 meters.

NOTE: Please feel free to critique/correct any errors I have made in the above, no offense will be taken (but, arguments may be posed!)-indeed, this stands in regard to all my posts.

My questions, defined in greater detail, were/are:

1) What would the radiation pattern of such an antenna be-favor wave? Favor wave? A hybrid pattern of and ? Or, would it be unique pattern onto this antenna alone, and only vaguely reminiscent to one or the other, or both? (And arrived at by math, charts, measurement or other means which provide "proofs."

2) Would this antenna display a reactance which is capacitive or inductive, or purely resistive (and what proof(s) confirms this?)

3) What would the impedance of this antenna be? (Even a ballpark figure-within 5%-10% but, derived though math, chart or direct

measurement-NOT a guess?)

4) What method of matching this antenna to 50 ohm coax would be "best?"
(Capacitive hats, l-network, pi-network, balun (unun in this case), &#65533; wave
line, combinations of these schemes, etc.?)

5) Is there software capable of modeling such an antenna constructed under
these specifications (I have mmana but am unable to grasp how it could be
used for such a design?)

Certainly no disrespect was meant in my response to Ray's comments. Indeed,
if I "miss-treat" individuals I don't expect I will get ANY interaction from
them-this is NOT my purpose or intent! And, if you re-read my second post,
I complement him on his critique of the problem and his analytical powers.
In my neck of America, if someone attempts to set up conflict over verbal or
text exchanges, we generally consider him/her to be a "chit stirrer."

If my intent is NOT clear, let me try again: This is simply an excursion
into the exploration of an antenna design and its' properties. If you are
intent to read other goals into my posts-you are on your own!

I totally expect only those with knowledge, skills and investigative minds
to bother in this endeavor and, some will not even see reason to ask these
questions at all-one can probably be purchased off a shelf-somewhere in the
world.

Warmest regards

"nick smith" <NickS@ntlworld.com> wrote in message
news:g8A%d.677$eO2.11@newsfe2-gui.ntli.net...
> It seems to me that the guy was trying to help, so no need to "bite the
> hand
> that feeds",
> old chap !! Better to cultivate him, than piss him off, however
> technically
> correct you might be ......
>
> Nick
>
>
>
> "Dale Parfitt" <par@parelectronics.com> wrote in message
> news:hMz%d.9885$b_6.3645@trnddc01...
>>
>> "John Smith" <assemblywizard@gmail.com> wrote in message
>> news:d1lvuk$84o$1@domitilla.aioe.org...
>> > OK, if you notice in my post wire length is in quotes, i.e. "wire
>> > length."
>> > In the example, it is a given that this length resonates at 1/2 wave
>> > along
>> > with the combined length of the whip (hence, electrical 1/2
>> > wavelength.)

>> >
>> > So, your post, while presenting individual points and your opinions, in
>> > general--seems to answer very little, if any, of the original questions
>> > raised--and certainly cannot be accused of containing any specifics.
>> >
>> > The diameter IS stated (1"), the wire length is the lenght of the wire
>> minus
>> > 28 inches which is necessary to be a resonate 1/2 wave, AND this is
>> divided
>> > over (1/4 wave at 10 meters - 28 inches.) to arrive at the coil
>> length--the
>> > pitch is calculated from the coil length ((1/4 wave @ 10 meters) - 28
>> > inches) and the wire lenght divided by pi (number of turns) spread out
>> over
>> > the coil ENTIRE length. And, of course, coil length plus whip length is
>> > a
>> > 1/4 wave.
>> >
>> > If you refer back to my original post, you will see all of this IS
>> there...
>> >
>> > However, critical analysis is a wise beginning of any quest for
>> > answers.
>> >
>> > Regards
>> Roy's answer is right on the mark.
>> The length of the wire is of no help in answering the question.
>> You are confusing mechanical lengths with electrical lengths.
>> Dale W4OP
>>
>>
>
>

4018. Re: Parabolic reflector for Wi-Fi?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 19:08:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vq6u31d0t0l0fteajrc8og3jd6btc0hhmq@4ax.com>
Source record: 80464

On Mon, 21 Mar 2005 18:58:07 GMT, Nigel M <reply@thegroup.com> wrote:
>>All parabolas have the same formula, simply different constants
>
>Yes, but what is the difference (in gain terms) between one that looks
>flat and one that looks pointy?

????????

They all look the same: Parabolas.

73's
Richard Clark, KB7QHC

4019. Re: Parabolic reflector for Wi-Fi?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 19:10:26 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <d1n672$5ce$1@mail.specsol.com>
Source record: 80462

Nigel M <reply@thegroup.com> wrote:
> In rec.radio.amateur.antenna, Richard Clark wrote:

> >All parabolas have the same formula, simply different constants

> Yes, but what is the difference (in gain terms) between one that looks
> flat and one that looks pointy?

Assuming equally efficient feeds, nothing.

It is diameter in wavelengths that determines gain.

Changing the "pointyness" just changes the focal point, which may cause
gain problems due to practical problems with providing a decent feed, but
doesn't change gain.

--
Jim Pennino

Remove -spam-sux to reply.

4020. Re: Rotatable Vertical - Honest

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 19:37:56 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <mdk3h2-jek.ln1@p400bob.lse.com.au>
Source record: 80472

A few options here...

- NVIS.or short skip distance use only. A 3 element yagi has what, a 120 degree lobe? I did some experiments a long time ago with a quad on 27MHz with it pointed up at about 60 degrees. Stations about 300km away were real good but almost no locals. Have to be a very good ionospheric day of course.

- Speaking to ET's (of course)

- The whole thing was fed as a phased array or the lengths of the Di/Re were varied to give a broadside pattern. (Or an experiment with same)

- There were some low flying but stupid Galas in the area (pink & grey parrots) that along with chewing coax also had a very set flight plan that the operator was trying to dodge..

One of the funniest things I saw was the expectation that a yagi mounted real close to the ground or roof was actually going to perform well..
A good example of this is one mounted 6-12" above a rotary clothes line.

Cheers Bob VK2YQA

W3JXP wrote:
> Back in the 70's I saw a CB beam mounted with the boom in the rotor pointing
> straight up. I guess he didn't want the mast to the rotor interfering with
> the vertical yagi.
>
>

4021. Re: High Gain antenna for mobile phone

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 19:39:27 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <fgk3h2-jek.ln1@p400bob.lse.com.au>
Source record: 80375

Country??

Mark wrote:
> I need to buy an external High Gain Antenna to plug into my mobile
> phone. I need to operate the phone in a very remote area, where the
> signal is at best, only one bar on the display. I will mount the
> antenna on a pole on the roof, so I will need advise on cable as well.
> Can anybody tell me where to buy such a beast, thanks.

4022. Re: Parabolic reflector for Wi-Fi?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 19:42:10 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <d1n82ibvb1@mail.specsol.com>
Source record: 80468

Nigel M <reply@thegroup.com> wrote:
> In rec.radio.amateur.antenna, Richard Clark wrote:

> >They all look the same: Parabolas.

> A flat one is a smaller section of a pointy one, see:

> <http://mathworld.wolfram.com/Parabola.html>

> I can envisage that one that ends with its extremities at between 45 and
> 90 deg to each other would "seem" to envelop the signal better.
> --
> Nigel M
> "Occam's razor is not always sharp"

Nope.

The maximum theoretical gain of any parabola is determined by the diameter in wavelengths.

The things than subtract from the maximum gain are the surface accuracy, both in terms of how close the curve is to a true parabola and any surface "bumps", and the illumination of the feed.

Irregularities in the curve and "bumps" less than about 1/8 wavelength have little effect, bigger than that and they can have significant effect.

The pattern of the feed (the feed itself is an antenna and has it's own pattern) determines the illumination.

The feed is mounted at the focal point of the parabola.

A "flat" parabola has a longer focal point than a more "curved" one, to use your terms.

If the pattern of the feed is such that it just exactly and perfectly illuminates the whole reflector, you get maximum gain.

If, as in the real world, the pattern of the feed spills out beyond the edge of the parabola or doesn't fill the whole parabola, you get less then the maximum theoretical gain.

The ARRL antenna book has a pile of equations, tables, and graphs showing these relationships and how to make working parabolic antennas.

--
Jim Pennino

Remove -spam-sux to reply.

4023. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 19:54:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113u9kbiga2v867@corp.supernews.com>
Source record: 80471

The use of "wire length" to describe the antenna impedance made it diffiicult to understand what you were asking, and certainly deflected my thinking. If you had only said that the coil had the inductance necessary to make the antenna half-wave resonant (or antiresonant), it would have been more clear. On re-reading it, I see that it's what you meant, and it's what you did say in a slightly unconventional manner. So that gives enough information for at least some general answers to your questions:

>>>to base of helical wound coil) is 1/4 wavelength, what would the
>>>radiation
>>>pattern of such an antenna be?
>>>
>>>Would it favor the pattern of a 1/4 or 1/2 wave antenna--or, would the
>>>pattern be a compromise between the two--or, would the pattern be
totally
>>>unrelated to either?

It would have a pattern very similar to a quarter wave vertical, not a half wave.

>>>What could I expect the impedance of such an antenna be? Would the
>>>reactance be capacitive or inductive?

The resistance would be high, on the order of a couple of thousand ohms or more. If the coil resonantes the antenna, the feedpoint reactance, by definition, is zero. However, a slight deviation of the frequency from resonance will result in a fairly large reactance. It will be inductive below resonance and capacitive above.

What would be the best way to
>>>provide
>>>a match to 50 ohm coax from such an antenna?
>>>

Connect one conductor of the feedline to the antenna base, and tap up the helix with the other until a good match is achieved. This requires that the antenna be resonated with the coil.

>>>What software is available to model such an antenna?
>>>

EZNEC is able to do it. The demo program could be used to make an approximate model with the inductor modeled as a number of lumped loads along the wire. With the standard or plus programs you can model the inductor directly as a wire helix. I develop and sell EZNEC, so I'll leave it to others to recommend other programs -- I believe there are

several which can do the job.

Roy Lewallen, W7EL

John Smith wrote:
> OK, if you notice in my post wire length is in quotes, i.e. "wire length."
> In the example, it is a given that this length resonates at 1/2 wave along
> with the combined length of the whip (hence, electrical 1/2 wavelength.)
>
> So, your post, while presenting individual points and your opinions, in
> general--seems to answer very little, if any, of the original questions
> raised--and certainly cannot be accused of containing any specifics.
>
> The diameter IS stated (1"), the wire length is the lenght of the wire minus
> 28 inches which is necessary to be a resonate 1/2 wave, AND this is divided
> over (1/4 wave at 10 meters - 28 inches.) to arrive at the coil length--the
> pitch is calculated from the coil length ((1/4 wave @ 10 meters) - 28
> inches) and the wire lenght divided by pi (number of turns) spread out over
> the coil ENTIRE length. And, of course, coil length plus whip length is a
> 1/4 wave.
>
> If you refer back to my original post, you will see all of this IS there...
>
> However, critical analysis is a wise beginning of any quest for answers.
>
> Regards
>
>
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:113shppdvmgs41@corp.supernews.com...
>
>>If you wind, say, 100 inches of wire into a coil, it doesn't act the same
>>as 100 inches of straight wire. And no two different coils wound from 100
>>inches of wire will act the same. A coil's radiation characteristics are
>>very nearly the same as for a wire the outside diameter and length of the
>>coil, not the length of the wire it's made from. And the inductance of the
>>coil is dictated by the length, pitch, number of turns, and diameter of
>>the coil, not the length of the wire it's wound from. So your question
>>can't be answered unless you tell us the diameter of the coil and any two
>>of length, pitch, and number of turns; or the length and diameter of the
>>coil and its inductance at the frequency at which it's being used.
>>
>>Roy Lewallen, W7EL
>>
>>John Smith wrote:
>>
>>>My question(s):
>>>
>>>For an example, on the 10 meter band:
>>>If I take a 28" whip and mount it at the end of helical wound coil (wound

>>>on
>>>1" diameter form), where the "wire length" of the coil, PLUS, the length
>>>of
>>>the whip (28" + coil wire length) is equal to 1/2 wavelength (electrical
>>>length)--BUT, the overall physical length of the antenna (top, tip of
>>>whip
>>>to base of helical wound coil) is 1/4 wavelength, what would the
>>>radiation
>>>pattern of such an antenna be?
>>>
>>>Would it favor the pattern of a 1/4 or 1/2 wave antenna--or, would the
>>>pattern be a compromise between the two--or, would the pattern be totally
>>>unrelated to either?
>>>
>>>What could I expect the impedance of such an antenna be? Would the
>>>reactance be capacitive or inductive? What would be the best way to
>>>provide
>>>a match to 50 ohm coax from such an antenna?
>>>
>>>What software is available to model such an antenna?
>>>
>>>Thanks in advance,
>>>warmest regards
>>>
>
>

4024. Re: Parabolic reflector for Wi-Fi?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 19:58:11 UTC
From: dplatt@radagast.org
Message-ID: <113u9qj60jbsqe0@corp.supernews.com>
Source record: 80470

In article <d1n82ibvb1@mail.specsol.com>, <jimp@specsol-spam-sux.com> wrote:

>The things than subtract from the maximum gain are the surface accuracy,
>both in terms of how close the curve is to a true parabola and any surface
>"bumps", and the illumination of the feed.
>
>Irregularities in the curve and "bumps" less than about 1/8 wavelength
>have little effect, bigger than that and they can have significant effect.
>
>The pattern of the feed (the feed itself is an antenna and has it's own
>pattern) determines the illumination.
>
>The feed is mounted at the focal point of the parabola.
>
>A "flat" parabola has a longer focal point than a more "curved" one, to
>use your terms.
>
>If the pattern of the feed is such that it just exactly and perfectly
>illuminates the whole reflector, you get maximum gain.
>
>If, as in the real world, the pattern of the feed spills out beyond the
>edge of the parabola or doesn't fill the whole parabola, you get less
>then the maximum theoretical gain.

In the example being discussed, the feed antenna appears to be an
omnidirectional vertical attached to an 802.11 access point.

In this particular case, because the feed has an omnidirectional
pattern, it seems to me that there would be a definite advantage to
using a relatively "deep" and thus somewhat "pointy" parabolic
section, in which the focal point lies a fair distance back from the
forward-most edges of the actual reflector.

This would tend to increase the portion of the feed antenna's omni
pattern which actually illuminates the reflector and is focused in the
forward direction.

Using a more shallow parabolic section, and getting high gain out of
it, would require a modification to the feed antenna so that it
illuminated the reflector more efficiently, with less spillover. I've
seen some designs for 802.11 which use a fairly shallow dish (with the
focal point well forward of the edges of the reflector), illuminated
by a feed antenna which is either a two-element dipole+reflector or a
"backfire" patch antenna.

I don't know whether it's feasible to make such a non-omni-feed design
as inexpensively as the "cardboard, tin foil, standard access point"
designs posted on the Net.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4025. Re: Parabolic reflector for Wi-Fi?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 20:13:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <v5au319kaprgp48pkl0lbs14g1c9s1pakl@4ax.com>
Source record: 80466

On Mon, 21 Mar 2005 19:19:19 GMT, Nigel M <reply@thegroup.com> wrote:
><http://mathworld.wolfram.com/Parabola.html>

Hi Nigel,

As you may observe, their description exactly matches my instructions.
All Parabolas look the same, it is merely a difference in constants,
and the constants in this regard are explicitly stated as the variable
"a."

Change "a" and hold "L" constant, and you have identical gain in the
direction of interest (perpendicular to the directrix).

The only question left unresolved is do you choose graph paper from an
8x11 tablet, or from a newssheet sized tablet? Same instructions for
either, the sheet from the larger tablet (larger "L") yields higher
gain in the direction of interest (perpendicular to the directrix).
Choose any "a" dimension you care to for aesthetics sake only.

73's
Richard Clark, KB7QHC

4026. Re: Parabolic reflector for Wi-Fi?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 20:13:27 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <d1n9t7dut1@mail.specsol.com>
Source record: 80474

Dave Platt <dplatt@radagast.org> wrote:
> In article <d1n82ibvb1@mail.specsol.com>, <jimp@specsol-spam-sux.com> wrote:

> >The things than subtract from the maximum gain are the surface accuracy,
> >both in terms of how close the curve is to a true parabola and any surface
> >"bumps", and the illumination of the feed.
> >
> >Irregularities in the curve and "bumps" less than about 1/8 wavelength
> >have little effect, bigger than that and they can have significant effect.
> >
> >The pattern of the feed (the feed itself is an antenna and has it's own
> >pattern) determines the illumination.
> >
> >The feed is mounted at the focal point of the parabola.
> >
> >A "flat" parabola has a longer focal point than a more "curved" one, to
> >use your terms.
> >
> >If the pattern of the feed is such that it just exactly and perfectly
> >illuminates the whole reflector, you get maximum gain.
> >
> >If, as in the real world, the pattern of the feed spills out beyond the
> >edge of the parabola or doesn't fill the whole parabola, you get less
> >then the maximum theoretical gain.
>
> In the example being discussed, the feed antenna appears to be an
> omnidirectional vertical attached to an 802.11 access point.

> In this particular case, because the feed has an omnidirectional
> pattern, it seems to me that there would be a definite advantage to
> using a relatively "deep" and thus somewhat "pointy" parabolic
> section, in which the focal point lies a fair distance back from the
> forward-most edges of the actual reflector.

> This would tend to increase the portion of the feed antenna's omni
> pattern which actually illuminates the reflector and is focused in the
> forward direction.

> Using a more shallow parabolic section, and getting high gain out of
> it, would require a modification to the feed antenna so that it
> illuminated the reflector more efficiently, with less spillover. I've
> seen some designs for 802.11 which use a fairly shallow dish (with the
> focal point well forward of the edges of the reflector), illuminated
> by a feed antenna which is either a two-element dipole+reflector or a
> "backfire" patch antenna.

> I don't know whether it's feasible to make such a non-omni-feed design
> as inexpensively as the "cardboard, tin foil, standard access point"
> designs posted on the Net.

In the case of an omni vertical, it would be easier to construct a
corner or trough reflector with a ground plane and it would probably
work better since the bottom half of the parabola (or full corner
reflector) most likely won't be illuminated anyway.

--
Jim Pennino

Remove -spam-sux to reply.

4027. Re: Parabolic reflector for Wi-Fi?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 20:33:39 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <zvOdnROFOZM7sqLfRVn-iw@comcast.com>
Source record: 80469

"Nigel M" <reply@thegroup.com> wrote in message
news:4dut31dsb3de8ihfj25ar7ff23n9sf4mip@4ax.com...
> I've been looking to make a linear parabolic reflector for Wi-Fi, I've
> found quite a few sources, such as:
>
> http://www.genericgeek.com/index.php?q=node/280
>
> http://www.freeantennas.com/projects/template2/index.html
>
> Those I've found all give templates for a parabola, but without any
> explanation as to why they have chosen that *particular* parabola, or
> the formula used to draw it. As a result, the drawings are a bit
> "sketchy" to say the least!
>
> I know radio amateurs are often knowledgeable on antennae, so I thought
> this was a good place to ask. I'd like to know a bit more theory, and
> the pros and cons of various parabolic shapes.

Nigel -

A very good technical resource is the Green Bay Professional Packet Radio
group.
http://www.qsl.net/n9zia/

You may not be aware that amateur radio (FCC Part 97) actually shares a
portion of the
802.11 "WiFi" (FCC Part 15) spectrum allocation.

Parabolic Reflector analysis calculator
http://my.athenet.net/~multiplx/cgi-bin/parabolic.main.cgi

"To invent, you need a good imagination and a pile of junk" -- Thomas Alva
Edison (1847-1931)

4028. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 20:45:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d1nbof$3ir$1@domitilla.aioe.org>
Source record: 80473

Well Roy (sorry I mis-spelled your name as Ray in a post above), you are not the first to bring it to my attention, the fact that my manner and methods are "unconventional", indeed, some have not been no kind and have referred to me as eccentric! <grin>

As I type this, I am downloading a demo of your EZNEC program. I will spend a little time with it and see if I can get the hang of it and, how to describe the antenna problem to it. Quite possibly it will provide me with answers, or even (and quite hopefully!) provide me with new questions.

Thank you for your time in responding and, if I have offended you, as some others have pointed out may be the case, I apologize, I am sincere when I state that was not my purpose...

Warmest regards!

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:113u9kbiga2v867@corp.supernews.com...
> The use of "wire length" to describe the antenna impedance made it
> diffiicult to understand what you were asking, and certainly deflected my
> thinking. If you had only said that the coil had the inductance necessary
> to make the antenna half-wave resonant (or antiresonant), it would have
> been more clear. On re-reading it, I see that it's what you meant, and
> it's what you did say in a slightly unconventional manner. So that gives
> enough information for at least some general answers to your questions:
>
> >>>to base of helical wound coil) is 1/4 wavelength, what would the
> >>>radiation
> >>>pattern of such an antenna be?
> >>>
> >>>Would it favor the pattern of a 1/4 or 1/2 wave antenna--or, would the
> >>>pattern be a compromise between the two--or, would the pattern be
> totally
> >>>unrelated to either?
>
> It would have a pattern very similar to a quarter wave vertical, not a
> half wave.
>
> >>>What could I expect the impedance of such an antenna be? Would the
> >>>reactance be capacitive or inductive?
>
> The resistance would be high, on the order of a couple of thousand ohms or
> more. If the coil resonantes the antenna, the feedpoint reactance, by
> definition, is zero. However, a slight deviation of the frequency from
> resonance will result in a fairly large reactance. It will be inductive

> below resonance and capacitive above.
>
> What would be the best way to
> >>>provide
> >>>a match to 50 ohm coax from such an antenna?
> >>>
>
> Connect one conductor of the feedline to the antenna base, and tap up the
> helix with the other until a good match is achieved. This requires that
> the antenna be resonated with the coil.
>
> >>>What software is available to model such an antenna?
> >>>
>
> EZNEC is able to do it. The demo program could be used to make an
> approximate model with the inductor modeled as a number of lumped loads
> along the wire. With the standard or plus programs you can model the
> inductor directly as a wire helix. I develop and sell EZNEC, so I'll leave
> it to others to recommend other programs -- I believe there are several
> which can do the job.
>
> Roy Lewallen, W7EL
>
> John Smith wrote:
>> OK, if you notice in my post wire length is in quotes, i.e. "wire
>> length." In the example, it is a given that this length resonates at 1/2
>> wave along with the combined length of the whip (hence, electrical 1/2
>> wavelength.)
>>
>> So, your post, while presenting individual points and your opinions, in
>> general--seems to answer very little, if any, of the original questions
>> raised--and certainly cannot be accused of containing any specifics.
>>
>> The diameter IS stated (1"), the wire length is the lenght of the wire
>> minus 28 inches which is necessary to be a resonate 1/2 wave, AND this is
>> divided over (1/4 wave at 10 meters - 28 inches.) to arrive at the coil
>> length--the pitch is calculated from the coil length ((1/4 wave @ 10
>> meters) - 28 inches) and the wire lenght divided by pi (number of turns)
>> spread out over the coil ENTIRE length. And, of course, coil length plus
>> whip length is a 1/4 wave.
>>
>> If you refer back to my original post, you will see all of this IS
>> there...
>>
>> However, critical analysis is a wise beginning of any quest for answers.
>>
>> Regards
>>
>>
>>

>> "Roy Lewallen" <w7el@eznec.com> wrote in message
>> news:113shppdvmgs41@corp.supernews.com...
>>
>>>If you wind, say, 100 inches of wire into a coil, it doesn't act the same
>>>as 100 inches of straight wire. And no two different coils wound from 100
>>>inches of wire will act the same. A coil's radiation characteristics are
>>>very nearly the same as for a wire the outside diameter and length of the
>>>coil, not the length of the wire it's made from. And the inductance of
>>>the coil is dictated by the length, pitch, number of turns, and diameter
>>>of the coil, not the length of the wire it's wound from. So your question
>>>can't be answered unless you tell us the diameter of the coil and any two
>>>of length, pitch, and number of turns; or the length and diameter of the
>>>coil and its inductance at the frequency at which it's being used.
>>>
>>>Roy Lewallen, W7EL
>>>
>>>John Smith wrote:
>>>
>>>>My question(s):
>>>>
>>>>For an example, on the 10 meter band:
>>>>If I take a 28" whip and mount it at the end of helical wound coil
>>>>(wound on
>>>>1" diameter form), where the "wire length" of the coil, PLUS, the length
>>>>of
>>>>the whip (28" + coil wire length) is equal to 1/2 wavelength (electrical
>>>>length)--BUT, the overall physical length of the antenna (top, tip of
>>>>whip
>>>>to base of helical wound coil) is 1/4 wavelength, what would the
>>>>radiation
>>>>pattern of such an antenna be?
>>>>
>>>>Would it favor the pattern of a 1/4 or 1/2 wave antenna--or, would the
>>>>pattern be a compromise between the two--or, would the pattern be
>>>>totally
>>>>unrelated to either?
>>>>
>>>>What could I expect the impedance of such an antenna be? Would the
>>>>reactance be capacitive or inductive? What would be the best way to
>>>>provide
>>>>a match to 50 ohm coax from such an antenna?
>>>>
>>>>What software is available to model such an antenna?
>>>>
>>>>Thanks in advance,
>>>>warmest regards
>>>>
>>

4029. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 21:14:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d1ndfk$47f$1@domitilla.aioe.org>
Source record: 80467

Absolutely Richard! It does seem difficult with available tools--at least
without building it and even then putting much labor into expermenting,
testing, pruning and adjusting...

Yet, it seems like such a design would suggest itself to many minds and be a
good solution to many restricted spaces and, one does ponder why the math,
methods, formulas, software, etc. has not been created to make such a matter
of childs play--and well documented and explained.

Many mobile whips seem centered around designs somewhat similiar to the one
proposed. And, indeed, I have seen a few expermentally inclined hams
goofing around with similiar designs for shack antennas on the long
wavelengths, just wish I had paid more attention at the time....

I am a capable C/C++ software engineer (professional hacker) and am
constantly searching for ideas to put to code to feed my personal
interests...

Warmest regards

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:o50u31hbr7cbkdehda93m9pn384dk6rpbu@4ax.com...
> On Sun, 20 Mar 2005 18:26:42 -0800, "John Smith"
> <assemblywizard@gmail.com> wrote:
>>what would the radiation pattern of such an antenna be?
>
> Hi John,
>
> This appears to be a difficult question to answer, if for only all of
> the extraneous details. Patterns are determined by the physical size
> in relation to wavelength. It is all about geometry and distances
> between what are called current nodes - what you describe has no s in
> the node(s), so the geometry (pattern) is still quite simple.
>
> Obtain a free copy of EZNEC to confirm.
>
> 73's
> Richard Clark, KB7QHC

4030. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 21:56:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rueu31hlke23f2f8mc08bjdos0nu2tnte3@4ax.com>
Source record: 80465

On Mon, 21 Mar 2005 13:14:25 -0800, "John Smith"
<assemblywizard@gmail.com> wrote:

>Yet, it seems like such a design would suggest itself to many minds and be a
>good solution to many restricted spaces and, one does ponder why the math,
>methods, formulas, software, etc. has not been created to make such a matter
>of childs play--and well documented and explained.

Hi John,

In fact, nearly every "new" idea that hits this board can be found
described with utter simplicity - years ago (10, 20, 40, 80 years).
Very little math is demanded and the record is full of documentation.

The continuous length of coil you describe has been anticipated by one
in using a "slinky." The benefit there is that the springy form
allows one to collapse or extend the coil to find resonance. Use two
of them and you have a dipole.

It performs, and has performed for years. You can buy one too. Why
doesn't everyone use one? The reason goes back years ago to rather
simple terms: size v. wavelength and the number and separation of
nodes. It performs, but not as well as a larger antenna it attempts
to replace. Hence: size v. wavelength is a restriction, there is only
one node, and it has nothing (another separate node) to combine with.
Once you can get your arms around these simple concepts, then you
throw in loss - the numbers get ugly and the pain is real.

We get tons of small antennas touted here.

>Many mobile whips seem centered around designs somewhat similiar to the one
>proposed.

However, among the population of those many, when they are all
compared the longstanding traditional designs win hands down. They
win for very simple reasons. The list of rules, so to speak, is very
short.

Unfortunately there are too many simple reasons floating around as new
and improved theory. The test of the newcomer is to separate those
improved theories (noted for their baroque language, elaborate math
and lack of field work) from ages-old results nailed down in rather
ordinary terms.

The new-and-improved theories call upon
- separating the E and M fields;
- unique properties of fractal math;

- improved length efficiency;
- proofs of polygonal analysis;
- super gain;
- over/tight/critical coupling;
- faster than light transmission....

As you can see, the field of simple reasons abound. Some reasons have their attractive features, but once you try to pull the conversation into the realm of implementation, barriers to discussion bloom like weeds.

73's
Richard Clark, KB7QHC

4031. Re: High Gain antenna for mobile phone

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 22:15:32 UTC
From: Markus Baertschi <markus@markus.org>
Message-ID: <3a8vcfF64e7d3U1@individual.net>
Source record: 80376

Mark wrote:
> I need to buy an external High Gain Antenna to plug into my mobile
> phone. I need to operate the phone in a very remote area, where the
> signal is at best, only one bar on the display. I will mount the
> antenna on a pole on the roof, so I will need advise on cable as well.
> Can anybody tell me where to buy such a beast, thanks.

Most mobile phone accessory shops have external antennas for sale. These antennas are designed for use in a car, but work fine without. The cable is not very long (2-4m), but adding a chunk of 50Ohm RG58-type cable is possible. I'd cut the cable close to the antenna to preserve a decent bit of the original cable (with the connector matching your phone) on the phone side for comfort.
If you know where the closest base station is than you can add a parabolic reflector and aim for it to increase the signal. Just google for wifi and parabolic and scale according to the frequency you use. If you are using the 800 or 900 Mhz bands the reflector can get quite large though.

Markus

4032. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 22:58:51 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d1njje$6pv$1@domitilla.aioe.org>
Source record: 80377

Well... Yes, that argument is made with most everything...
It has already been done... everything has been tried... all the answers are known... there is nothing new to be found out...
(But, just on the outside chance that thinking is wrong: What about LDE (long delay echo)? You got the answer to that?)
The fact is, most, if not all, of the formulas we deal with are crafted from things we have first built--THEN we look for a mathmatical explanation to explain the object we built. While this is better than nothing, it is slow--exploration by first developing the theory and math--then the physical object--is much more suited for really finding "something new" and the rapid development of such objects. (i.e., computers design computers, however, since antennas can't design antennas--we need computers to design the antennas.)
Unfortuantly, if all we use are past "rules" and "laws" we can only find the past!!! Anything REALLY NEW will break all the laws we are currently slaving under (or, at the least, re-define these laws) with total disregard to the high esteem we had held these faulty laws.... indeed, being too tied to the past and "conventional thinking" may hold us to the past...
However, whenever there seems a danger of this happening, then someone comes in from left field with a new idea, such as quantum physics, and all bets are off, and the physists and mathematicians are sent off to develop new, undenighable and final laws to explain it...

If it were all done, if there is nothing new to be found out, if all the existing data and formulas are totally all there is... WHY THE HELL ARE WE HERE? Let's go buy one, go home and have a beer...

Fact is, we hate to admit when we are wrong, so, when we are wrong we quickly move on and say these NEW ideas are what we have really believed all along!
I am not opposed to the possibility that all that can be known, is known... however, some guy that doesn't know any better usually suddenly pops up and you end up embarassed for your beliefs--one more time.

The fact is, I have built those "silly antennas", by hand, with real materials--then modeled them on mathmatical models, evaluating what is actual against what was predicted... few ever provide anything but disappointment. But, I am convinced that while what the developers are claiming may be "false reasoning" and improper models, there is something here which has been overlooked and current conventional thinking and models miss...

However, the antenna design I presented is simply a helical loaded 1/2 wave which just happens to correspond to 1/4 wave physical length...
It really doesn't challenge any current antenna theory or present anything

new, other than perhaps an unconventional arrangement of wire...

Frankly, I take it as a "leap of faith", but as long as there are
discussions such as these... something new is comming our way right now, we
just won't be able to see it till it gets closer, then we will realize we
really "knew it all along!"
But then the harsh "reality" hits us, we realize and with some
disappointment--that once again it has happened, all the final answers and
laws are known--nothing to do but go home and grab a beer and wait for next
time... <grin>

Warmest regards

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:rueu31hlke23f2f8mc08bjdos0nu2tnte3@4ax.com...
> On Mon, 21 Mar 2005 13:14:25 -0800, "John Smith"
> <assemblywizard@gmail.com> wrote:
>
>>Yet, it seems like such a design would suggest itself to many minds and be
>>a
>>good solution to many restricted spaces and, one does ponder why the math,
>>methods, formulas, software, etc. has not been created to make such a
>>matter
>>of childs play--and well documented and explained.
>
> Hi John,
>
> In fact, nearly every "new" idea that hits this board can be found
> described with utter simplicity - years ago (10, 20, 40, 80 years).
> Very little math is demanded and the record is full of documentation.
>
> The continuous length of coil you describe has been anticipated by one
> in using a "slinky." The benefit there is that the springy form
> allows one to collapse or extend the coil to find resonance. Use two
> of them and you have a dipole.
>
> It performs, and has performed for years. You can buy one too. Why
> doesn't everyone use one? The reason goes back years ago to rather
> simple terms: size v. wavelength and the number and separation of
> nodes. It performs, but not as well as a larger antenna it attempts
> to replace. Hence: size v. wavelength is a restriction, there is only
> one node, and it has nothing (another separate node) to combine with.
> Once you can get your arms around these simple concepts, then you
> throw in loss - the numbers get ugly and the pain is real.
>
> We get tons of small antennas touted here.
>
>>Many mobile whips seem centered around designs somewhat similiar to the
>>one
>>proposed.
>

> However, among the population of those many, when they are all
> compared the longstanding traditional designs win hands down. They
> win for very simple reasons. The list of rules, so to speak, is very
> short.
>
> Unfortunately there are too many simple reasons floating around as new
> and improved theory. The test of the newcomer is to separate those
> improved theories (noted for their baroque language, elaborate math
> and lack of field work) from ages-old results nailed down in rather
> ordinary terms.
>
> The new-and-improved theories call upon
> - separating the E and M fields;
> - unique properties of fractal math;
> - improved length efficiency;
> - proofs of polygonal analysis;
> - super gain;
> - over/tight/critical coupling;
> - faster than light transmission....
>
> As you can see, the field of simple reasons abound. Some reasons have
> their attractive features, but once you try to pull the conversation
> into the realm of implementation, barriers to discussion bloom like
> weeds.
>
> 73's
> Richard Clark, KB7QHC

4033. Re: High Gain antenna for mobile phone

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 23:28:40 UTC
From: Mark
Message-ID: <h0mu31td28a52lbrfu8qtkv99dc68c2q28@4ax.com>
Source record: 80378

On Tue, 22 Mar 2005 06:39:27 +1100, Bob Bob <bcnntp@optusnet.com.au>
wrote:

>Country??

Spain

4034. Re: High Gain antenna for mobile phone

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 23:32:40 UTC
From: Mark
Message-ID: <42mu3117kajfsksu697o6ek3kfelifga3k@4ax.com>
Source record: 80379

On Mon, 21 Mar 2005 23:15:32 +0100, Markus Baertschi
<markus@markus.org> wrote:

>Mark wrote:
>> I need to buy an external High Gain Antenna to plug into my mobile
>> phone. I need to operate the phone in a very remote area, where the
>> signal is at best, only one bar on the display. I will mount the
>> antenna on a pole on the roof, so I will need advise on cable as well.
>> Can anybody tell me where to buy such a beast, thanks.
>
>Most mobile phone accessory shops have external antennas for sale. These
>antennas are designed for use in a car, but work fine without. The cable
>is not very long (2-4m), but adding a chunk of 50Ohm RG58-type cable is
>possible. I'd cut the cable close to the antenna to preserve a decent
>bit of the original cable (with the connector matching your phone) on
>the phone side for comfort.
>If you know where the closest base station is than you can add a
>parabolic reflector and aim for it to increase the signal. Just google
>for wifi and parabolic and scale according to the frequency you use. If
>you are using the 800 or 900 Mhz bands the reflector can get quite large
>though.
>
>Markus

Is there a rough calculation on how high I should be aiming to mount
the Antenna (law of diminishing returns, and all that). A half
informed friend said I should use a YAGI antenna, is he correct? If so
where do I buy a suitable one in the UK or Europe for Spain.

I know where the base station is, where do I buy a parabolica to
match, how does one mount the Antenna on the parabolica? what size
dish is a good size to start with? would an old TV Satellite dish do
it? Do I ground the dish?

4035. Re: Parabolic reflector for Wi-Fi?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-21 23:36:02 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <CTI%d.32063$hA3.14013@trnddc09>
Source record: 80380

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:vq6u31d0t0l0fteajrc8og3jd6btc0hhmq@4ax.com...
> On Mon, 21 Mar 2005 18:58:07 GMT, Nigel M <reply@thegroup.com> wrote:
> >>All parabolas have the same formula, simply different constants
> > >
> > >Yes, but what is the difference (in gain terms) between one that looks
> > >flat and one that looks pointy?
> >
> > ????????
> >
> > They all look the same: Parabolas.
> >
> > 73's
> > Richard Clark, KB7QHC

Not even close. Prime focus parabolas (and offset fed) are defined by their F/D (focal length to diameter ratio). A "deep " dish would have an F/D of 0.3 or less. Shallow dishes 0.6 or greater. The real problem here becomes the ability to properly illuminate the dish with a feedhorn. Typical scalar feeds will be efficient from 0.3 to 0.5 or so. Under illumination can mean better G/T but you are likely not using the all the surface. Over illumination results in seeing warm earth noise and degrading G/T.
Do a Google search of W1GHZ site- an excellent tutorial on passive reflectors and feeds.

Dale W4OP

4036. 4SAT is no longer for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 00:22:18 UTC
From: Aspen37 <pottsladd13@nospam.yahoo.com>
Message-ID: <_yJ%d.432581$w62.26641@bgtnsc05-news.ops.worldnet.att.net>
Source record: 80381
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Radio is no longer for sale.

4037. Re: Parabolic reflector for Wi-Fi?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 01:04:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <msqu31tqe4227l37r519n5sdod7gd60nd6@4ax.com>
Source record: 80382

On Mon, 21 Mar 2005 23:36:02 GMT, "Dale Parfitt"
<par@parelectronics.com> wrote:

>Not even close.
...
> The real problem here becomes
>the ability to properly illuminate the dish with a feedhorn.

Hi Dale,

What feed horn? Let's stick to what is and not what might be. A
dipole is perfectly capable of seeing any surface generated even if it
is not particularly the most optimized focus.

Besides, this is hardly on the scale of 10-24GHz and all such
discussion presents Point Locus Parabolic Reflectors. The original
poster is seeking a obtainable goal, not a theoretical maximum. The
discussion of his provided links show a simple achievement of 10dB
which is not shabby by any means.

73's
Richard Clark, KB7QHC

4038. Re: Amateur Radio Military Appreciation Day

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 01:44:30 UTC
From: Sum Ting Wong <sumtingwong@aol.com>
Message-ID: <12uu31puqqq95hr1810991qh3s1skp3q52@4ax.com>
Source record: 80383

On Sun, 20 Mar 2005 19:21:33 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>Another war-mongering organisation?

If it wasn't for us war mongering yanks y'all would be speaking
German.

S.T.W.

4039. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 01:48:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <sstu31dc9scr5brfoin2j9ajtvs7q4asvn@4ax.com>
Source record: 80384

On Mon, 21 Mar 2005 14:58:51 -0800, "John Smith"
<assemblywizard@gmail.com> wrote:

>Fact is, we hate to admit when we are wrong

Hi John,

That never fazed me as long as I was challenged by facts instead of
superstition. I have failed to many times to worry about it. As the
saying goes, if you haven't failed, you aren't trying hard enough.

>... there is something
>here which has been overlooked and current conventional thinking and models
>miss...

I try those angles, and go the extra mile. Evidence some 300+ pages
of examining fractal antennas:
http://www.qsl.net/kb7qhc/antenna/fractal/index.htm

This work eventually boiled down to a simple conclusion (not that the
leading proponent would allow his mystical explanation to be nudged
into the corner of drab insight).

These days I usually put a filter into the process by asking the
"inventor" a simple question:
Does it bring more than 1dB gain with it?

73's
Richard Clark, KB7QHC

4040. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 02:15:41 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d1nv4d$38p$1@titan.btinternet.com>
Source record: 80385

> Does it bring more than 1dB gain with it?
>
> 73's
> Richard Clark, KB7QHC

==========
Richard, asking such awkward questions you get more insensitive to
people's feelings every day.

Are you not aware that a decrease in gain of even less than 1 dB can
lose a contest?

Reg, G4FGQ

4041. Re: Amateur Radio Military Appreciation Day

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 02:17:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gtvu31pcdjm7ht88galgdtsldi9vgmrsne@4ax.com>
Source record: 80386

On Tue, 22 Mar 2005 01:44:30 GMT, Sum Ting Wong <sumtingwong@aol.com>
wrote:

>On Sun, 20 Mar 2005 19:21:33 +0000 (UTC), "Reg Edwards"
><g4fgq.regp@ZZZbtinternet.com> wrote:
>
>>Another war-mongering organisation?
>
>If it wasn't for us war mongering yanks y'all would be speaking
>German.

If it weren't for the Brits, we would all be speaking Dutch. Or
French. Or Spanish.

B. F. D.

4042. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 02:22:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <830v31d0k6ve3bdgjlv92e0gf3hhle0p3i@4ax.com>
Source record: 80387

On Tue, 22 Mar 2005 02:15:41 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>> Does it bring more than 1dB gain with it?
>>
>> 73's
>> Richard Clark, KB7QHC
>
>==========
>Richard, asking such awkward questions you get more insensitive to
>people's feelings every day.
>
>Are you not aware that a decrease in gain of even less than 1 dB can
>lose a contest?

Reg,

Having failed, I have also lost. Frail egos might feel the pain of
contest - me, I got a backache sitting in a Bar too long drinking Rum
and listening to Rockabilly.

73's
Richard Clark, KB7QHC

4043. Re: Parabolic reflector for Wi-Fi?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 02:37:15 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <vxL%d.9889$wL6.5690@trnddc03>
Source record: 80388

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:msqu31tqe4227l37r519n5sdod7gd60nd6@4ax.com...
> On Mon, 21 Mar 2005 23:36:02 GMT, "Dale Parfitt"
> <par@parelectronics.com> wrote:
>
> >Not even close.
> ...
> > The real problem here becomes
> >the ability to properly illuminate the dish with a feedhorn.
>
> Hi Dale,
>
> What feed horn? Let's stick to what is and not what might be. A
> dipole is perfectly capable of seeing any surface generated even if it
> is not particularly the most optimized focus.
>
> Besides, this is hardly on the scale of 10-24GHz and all such
> discussion presents Point Locus Parabolic Reflectors. The original
> poster is seeking a obtainable goal, not a theoretical maximum. The
> discussion of his provided links show a simple achievement of 10dB
> which is not shabby by any means.
>
> 73's
> Richard Clark, KB7QHC

Hi Richard,
I have worked with parabolas for years- the current dish is a 14' w/ 0.36 F/D and illuminated with a scalar feed. A dipole is perhaps one of the worst feeds for a parabola. If you're going to put the surface up why not take full advantage of it? It takes little if any additional work to properly illuminate it.

Dale W4OP

4044. Re: Rotatable Vertical - Honest

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 02:49:09 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <1111459749.176676.143630@g14g2000cwa.googlegroups.com>
Source record: 80389

Phaselock Ohms wrote:
> See URL:
> http://www.vk4dx.net/rot_vert.htm
>
> --
> Elementary Ya All
> Phaselock Ohms

Might not be what it looks like.

http://www.computeradio.us/INVert.htm

Brian w3rv

4045. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 02:54:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d1o1c9$c0d$1@domitilla.aioe.org>
Source record: 80390

Well... yes... and no....
In investigating small antennas, my quest was not to find antennas which preformed within 1 db as well, as well, or God forbid, better than their full sized counter parts.
Rather, I was looking for antennas which preformed better than the poor preformance which standard theory would suggest--a simple suggestion that the theory was in error and, hopefully ones which could be utilized with acceptable results in restricted spaces. Both of those condidtions I did find!
While a pocket antenna which would preform as well as a half wave antenna on low freqs (or any freq for that matter) would be fantastic, I lack the faith to believe it possible--except at multiple Ghz, where both become the same!
However, it is very possible you might use the pocket antenna in places where you could never never use the halfwave.
And of course, under such conditions--I would want the best possible pocket antenna which could be constructed!

Warmest regards

"Richard Clark" <kb7qhc@comcast.net> wrote in message news:sstu31dc9scr5brfoin2j9ajtvs7q4asvn@4ax.com...
> On Mon, 21 Mar 2005 14:58:51 -0800, "John Smith"
> <assemblywizard@gmail.com> wrote:
>
>>Fact is, we hate to admit when we are wrong
>
> Hi John,
>
> That never fazed me as long as I was challenged by facts instead of
> superstition. I have failed to many times to worry about it. As the
> saying goes, if you haven't failed, you aren't trying hard enough.
>
>>... there is something
>>here which has been overlooked and current conventional thinking and
>>models
>>miss...
>
> I try those angles, and go the extra mile. Evidence some 300+ pages
> of examining fractal antennas:
> http://www.qsl.net/kb7qhc/antenna/fractal/index.htm
>
> This work eventually boiled down to a simple conclusion (not that the
> leading proponent would allow his mystical explanation to be nudged
> into the corner of drab insight).
>

> These days I usually put a filter into the process by asking the
> "inventor" a simple question:
> Does it bring more than 1dB gain with it?
>
> 73's
> Richard Clark, KB7QHC

4046. Re: Down Tilt on Slot Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 03:04:47 UTC
From: Crazy George <munsch@atglobal.net>
Message-ID: <423f8ee5_4@news1.prserv.net>
Source record: 80391

Well, let me just post this at the bottom. RCA made a line of VHF TV transmitting antennas which were a slot arrays. The only one I managed to get close to before it became airborne and clamped a thousand or more feet in the air was for
channel 9. It was 80 feet long (2 - forty foot sections) and was constructed exactly as Tom, K7ITM suggested, the phase
of the feed of each element was progressively changed, in this case, to effect 1.5° of downtilt. I would suggest contacting RCA TV antenna engineering for their design parameters, but they seem to have gone somewhere.

```
--
Crazy George
The attglobal.net address is a SPAM trap. Please change that part to: att<dot>biz properly
formatted.
"Matt" <nospam_ng@fileholder.net> wrote in message
news:113he0pjln68d3c@corp.supernews.com...
> Is there anyway to down tilt the signal on horizontally polarized omni slot
> antenna? I would like to add 1-3 degrees of downtilt.
>
> Matt
>
>
```

4047. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 03:39:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113v4reb1759n38@corp.supernews.com>
Source record: 80392

"Standard theory" has been around for over a hundred years now, and is the basis for the design of some millions of antennas used for everything from your cell phone to communications beyond the solar system. Laboratories world wide measure antennas daily which have been designed with "standard theory", and in those past hundred years plus, no one has found any credible evidence that "standard theory" is in error. Of course, charlatans claim it almost daily, just as they claim the discovery of perpetual motion but inevitably their claims are shown to fail in objective tests.

Backyard tinkerers love to fantasize that they'll be the next Galileo and in a few hours, days, or years, make the breakthrough discovery that shows all them eggheads a thing or two. It's pretty easy for such a person to convince himself that he's done just that, because accurate antenna measurements are much more difficult than amateurs generally appreciate, and the sources of error are often subtle and require knowledge of basic theory to understand. Another common basis for a shouted "Eureka!" is a lack of knowledge of "standard theory", and the gee-whiz revelation that what the discoverer mistakenly thought was true turned out, after all, to be false. Clever ways of applying "standard theory" to make an antenna that's more useful in some way for some application are found frequently. Genuine evidence that "standard theory" is wrong has happened virtually never in the past many decades. The odds are heavily against the new Galileo springing up from the suburbs. My money's sure not on them.

People truly wanting to make a better antenna would better spend their time learning "standard theory" and less time tinkering in ignorance of it.

Roy Lewallen, W7EL

John Smith wrote:
> Well... yes... and no....
> In investigating small antennas, my quest was not to find antennas which
> preformed within 1 db as well, as well, or God forbid, better than their
> full sized counter parts.
> Rather, I was looking for antennas which preformed better than the poor
> preformance which standard theory would suggest--a simple suggestion that
> the theory was in error and, hopefully ones which could be utilized with
> acceptable results in restricted spaces. Both of those condidtions I did
> find!
> While a pocket antenna which would preform as well as a half wave antenna on
> low freqs (or any freq for that matter) would be fantastic, I lack the faith
> to believe it possible--except at multiple Ghz, where both become the same!
> However, it is very possible you might use the pocket antenna in places

> where you could never never use the halfwave.
> And of course, under such conditions--I would want the best possible pocket
> antenna which could be constructed!
>
> Warmest regards

4048. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 04:27:58 UTC
From: Buck <iam@this.site>
Message-ID: <ci7v31l9d8uc1910c9mc38npqod1ak1j91@4ax.com>
Source record: 80393

On Sun, 20 Mar 2005 18:26:42 -0800, "John Smith"
<assemblywizard@gmail.com> wrote:

>My question(s):
>
>For an example, on the 10 meter band:
>If I take a 28" whip and mount it at the end of helical wound coil (wound on
>1" diameter form), where the "wire length" of the coil, PLUS, the length of
>the whip (28" + coil wire length) is equal to 1/2 wavelength (electrical
>length)--BUT, the overall physical length of the antenna (top, tip of whip
>to base of helical wound coil) is 1/4 wavelength, what would the radiation
>pattern of such an antenna be?
>
>Would it favor the pattern of a 1/4 or 1/2 wave antenna--or, would the
>pattern be a compromise between the two--or, would the pattern be totally
>unrelated to either?
>
>What could I expect the impedance of such an antenna be? Would the
>reactance be capacitive or inductive? What would be the best way to provide
>a match to 50 ohm coax from such an antenna?
>
>What software is available to model such an antenna?
>
>Thanks in advance,
>warmest regards
>

EZNec will model your antenna. As for the antenna, I believe that the
shortened 1/2 wave antenna will radiate with less effect than a
stretched 1/2 wave, but possibly better than a 1/4 wave. How much?
That depends on the coil and the matching network pending losses.

Good luck,
Buck
N4PGW

--
73 for now
Buck
N4PGW

4049. Re: Down Tilt on Slot Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 04:34:17 UTC
From: Korbin Dallas <korbindallas@yahoo.com>
Message-ID: <pan.2005.03.22.04.34.09.877403@yahoo.com>
Source record: 80394

On Mon, 21 Mar 2005 21:04:47 -0600, Crazy George wrote:

> Well, let me just post this at the bottom. RCA made a line of VHF TV transmitting antennas which were a slot arrays.
> The only one I managed to get close to before it became airborne and clamped a thousand or more feet in the air was for
> channel 9. It was 80 feet long (2 - forty foot sections) and was constructed exactly as Tom, K7ITM suggested, the phase
> of the feed of each element was progressively changed, in this case, to effect 1.5ï¿½ of downtilt. I would suggest
> contacting RCA TV antenna engineering for their design parameters, but they seem to have gone somewhere.
>
>
>
> --
> Crazy George
> The attglobal.net address is a SPAM trap. Please change that part to: att<dot>biz properly formatted.
> "Matt" <nospam_ng@fileholder.net> wrote in message news:113he0pjln68d3c@corp.supernews.com...
>> Is there anyway to down tilt the signal on horizontally polarized omni slot
>> antenna? I would like to add 1-3 degrees of downtilt.
>>
>> Matt
>>
>>

We had 1 degree of down-tilt on the RCA Slot antenna for Channel 11.
Unfortunately I got the task of Replacing Slot covers on the antenna which
at the time was 15 years old. The antenna was retired 2 years ago, it was
33 years old...

I was 21, and stupid enough to climb a 1000' tower.

--
Korbin Dallas
The name was changed to protect the guilty.

4050. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 04:44:08 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113v8ktgiuqd302@corp.supernews.com>
Source record: 80399

I should add that the antenna you described will be less efficient than a plain wire of the same height. The use of the coil in place of a straight piece of wire:

1. Makes no substantial difference to the pattern shape.
2. Decreases the efficiency.
3. Potentially makes matching more difficult.
4. Unnecessarily increases cost and mechanical complexity.

But it might look groovy and impress the good buddies. And it might *seem* to work better -- the placebo effect is genuine and quite powerful and it's been the reason for a lot of satisfied customers.

Roy Lewallen, W7EL

4051. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 05:38:42 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d1ob11$gs5$1@domitilla.aioe.org>
Source record: 80395

Well, I have 3 test antennas on this project:
1) 1/4 wave stainless steel whip w/4 heavy 1/2 inch, aluminum ground plane radials
2) 1/2 wave without any ground plane/counterpoise, lower 1/4 wave section is 3/4 copper pipe, upper 1/4 is a stainless whip, total of the combination is 1/2 wave... ferrite beads are used on the outer shield of the coax at the point where it connects to the antenna, match is though a simple l-network (ferrite beads are actually un-needed but used anyway, no real detectable radiation from coax either way)
3) This is the antenna I described in the first post(s), I tend to refer to as the "quarter/half", it is constructed on 3/4 ID pvc pipe, and has an OD of just over an inch, the coil is constructed of #8 copper wire and the top whip is the 28 inch stainless whip I mentioned. Is a resonate 1/2 wave and physical 1/4 (whip + helical coil length.) Matching network is a l-network, capactior is constructed of acrylic insulator plates (acrylic "window pane") with copper sheet plates, coil is a 1.3 OD torroid. coil is approx. 1+ uh (computed from toroid data)--I have not measured the capacitance of the capacitor (probably somewhere from 20+ pf to 30+ pf), no groundplane/counterpoise, ferrite beads as above.

Naturally, as the models predict, the 1/4 is lower in preformance than the half 1/2, and very noticable in the most distant contacts.
However, the "quarter/half" out preforms the 1/4 but falls lower in preformance than the 1/2. Contacts out at 30+ miles are where the electrical 1/2 wave antennas differ most from each other (antennas 2 and 3 above.)
FSM measurements of the two 1/2 waves are very simuliar--however, these measurements could have been taken at a greater distance to increase accuracy (meters sensitivity I currently am using limited this.)
Franky, I was surprised by the preformance. As others have predicted--I expected the preformance of the shortened 1/2 wave to be poorer than the 1/4 (mainly due to the helical coil skewing the radiation pattern and adding a slight resistance to a physical 1/4 antenna.)
However, it seems to fall in the middle between the 1/4 and the 1/2 wave (full length) antennas, favoring being closer to the 1/2 full length by 1/2 S-unit+
The biggest difference between the 1/4 and 1/2 wave full length is 2-3 s-units at stations in the 30+ mile distances.
The full 1/2 wave and the shortened 1/2 wave seem close to 1 s-unit on all apparent distant stations.
I find this hard to believe, and the models I calculated did not reflect what I had actually seen in s-units.

All three antennas were placed at the same height, on the same mast while testing (32 ft above real ground.) And all other conditions the same.

The l-network match is the only difference between the two 1/2 wave
antennas, in the future I will correct this and finalize the tests... the
difference in the matches could be responsible for the difference in
expected results.
Right now, it actually looks to me, from the above--that the "1/4 physical,
1/2 wave electrical (quarter/half)" antenna was and is exhibiting properties
of both a 1/4 and a 1/2 wave antenna. This is the main reason I tossed out
this "antenna problem" here, to see others reactions and draw from their
experience.

Warmest regards

"Buck" <iam@this.site> wrote in message
news:ci7v31l9d8uc1910c9mc38npqod1ak1j91@4ax.com...
> On Sun, 20 Mar 2005 18:26:42 -0800, "John Smith"
> <assemblywizard@gmail.com> wrote:
>
>
>
>
>
>>My question(s):
>>
>>For an example, on the 10 meter band:
>>If I take a 28" whip and mount it at the end of helical wound coil (wound
>>on
>>1" diameter form), where the "wire length" of the coil, PLUS, the length
>>of
>>the whip (28" + coil wire length) is equal to 1/2 wavelength (electrical
>>length)--BUT, the overall physical length of the antenna (top, tip of whip
>>to base of helical wound coil) is 1/4 wavelength, what would the radiation
>>pattern of such an antenna be?
>>
>>Would it favor the pattern of a 1/4 or 1/2 wave antenna--or, would the
>>pattern be a compromise between the two--or, would the pattern be totally
>>unrelated to either?
>>
>>What could I expect the impedance of such an antenna be? Would the
>>reactance be capacitive or inductive? What would be the best way to
>>provide
>>a match to 50 ohm coax from such an antenna?
>>
>>What software is available to model such an antenna?
>>
>>Thanks in advance,
>>warmest regards
>>
>
>
> EZNec will model your antenna. As for the antenna, I believe that the
> shortened 1/2 wave antenna will radiate with less effect than a

> stretched 1/2 wave, but possibly better than a 1/4 wave. How much?
> That depends on the coil and the matching network pending losses.
>
> Good luck,
> Buck
> N4PGW
>
> --
> 73 for now
> Buck
> N4PGW

4052. Re: Parabolic reflector for Wi-Fi?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 07:38:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7kiv31hg8t5u7d7qpsq88i521vqe6vrjg5@4ax.com>
Source record: 80396

On Tue, 22 Mar 2005 02:37:15 GMT, "Dale Parfitt"
<par@parelectronics.com> wrote:

>I have worked with parabolas for years- the current dish is a 14' w/ 0.36
>F/D and illuminated with a scalar feed. A dipole is perhaps one of the worst
>feeds for a parabola. If you're going to put the surface up why not take
>full advantage of it? It takes little if any additional work to properly
>illuminate it.

Hi Dale,

Well, I described how to build the reflector, you can describe how to
build the horn. Myself, I think that at 900MHz that is where the
trouble is going to start as the horn will almost certainly shadow the
reflector that already gives him 10dB gain.

Now if Nigel is trying to stretch Wi-Fi into Wi-Max, then such an
investment may be opportune.

73's
Richard Clark, KB7QHC

4053. (",) Do You Want To Know For Sure You Are Going To Heaven?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 07:57:31 UTC
From: Ron038548@yahoo.com
Message-ID: <1111478251.643872.32260@g14g2000cwa.googlegroups.com>
Source record: 80397

http://www.want-to-be-sure.blogspot.com << Click On Link

4054. Re: High Gain antenna for mobile phone

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 08:24:43 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <cb15h2-7qs.ln1@p400bob.lse.com.au>
Source record: 80334

A specific vendor I cant help you with then (I am in Australia)

I would think that many large phone accessory distributors could sell you one. Otherwise look at some more professional antenna manufacturers. They often have yagis available in the phone frequency range. Take care with finding the right connector and keep the coax loss low.

It might also be cheaper to get a simple mobile gain antenna and mount it high. Get it clear of ground clutter and dont be afraid to move it around for the strongest signal (before bolting it in place)

You'll need to know the operating frequency of your phone. If it is a multi band thing you'll have to find the freq of your nearest node. This will also determine the coax loss/cost as well. I would suggest that if you are running 10 metres or so to use LMR400. It isnt the lowest loss cable around but it is still easy to terminate and seems to have the best cost/loss numbers. There are a number of sites around that allow you to calculate cable loss at specific frequencies. Of course it also depends on whether it is available where you are.

To give you an idea a 10m run of coax at 900MHz with LMR400 is about 1.3dB loss. Using RG213 the loss is about twice that and the cable cost is higher! RG58 has a whopping 5-6dB loss. I find it strange that mobile phone antennas have such horrible cable.

Hope this helps

Cheers Bob

Mark wrote:
> On Tue, 22 Mar 2005 06:39:27 +1100, Bob Bob <bcnntp@optusnet.com.au>
> wrote:
>
>
>>Country??
>
>
> Spain

4055. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 08:40:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <113vmgocegae0cf@corp.supernews.com>
Source record: 80398

If there's no ground system loss, a half wave vertical antenna has about 1.3 dB gain over a quarter wave vertical due to the sharper pattern shape. This is the line-of-sight or surface wave gain difference. If reflection from real ground is included in the analysis, the gain difference is about 1 - 1.5 dB at lower angles, and the quarter wave does much better, by 3 or 4 dB or so, at high angles (very roughly above 50 degrees or so).

Coil loading to achieve half wave resonance does have one potential advantage, and that's to reduce ground loss when substantial ground resistance is present. Because of the much higher base impedance, ground current is much less with a half wave resonant base fed antenna than with a quarter wave antenna, even when the resonance is achieved with coil loading. Ground loss is typically pretty low on ten meters in mobile applications, but in some other setups (such as ground mounting over a buried radial system, or a hand-held radio), the reduction in ground current could reduce ground loss more than enough to compensate for coil loss.

I suspect this is the explanation for at least some of any advantage you see in the coil loaded antenna over a straight wire of the same length. However, there's a good sized handful of other possible factors. (Every last one of them, incidentally, explainable perfectly well by "standard theory".) If the measurement results don't agree with the model, it nearly always means that the actual antenna -- that is, the "antenna", the "ground" system, and everything connected to either one or in the near field of either one -- differs from the model in some significant way. Or the measurement system is faulty.

Someone interested in understanding the operation of an antenna will commonly spend a great deal of time tracking down the factors that differ between the model and real antenna, and it's just about always a truly educational experience. When done, the result is usually a model that really represents the antenna system, and that shows results very close to careful and competent measurements. And an experimenter who knows more about antennas, modeling, and the importance of some factors he never before considered. You go through this exercise a few hundred times, like professional engineers routinely do, and you come out with a great respect for "standard theory" and an even greater level of skepticism toward people who have a weak understanding of it and are convinced they've witnessed a miracle. Those of us who have spent a career using "standard theory" to design real, useful items that work as designed haven't become skeptical because our brains have been petrified by education; it's because we've seen "standard theory" work, over and over and over, and every last miracle inevitably fall, one after

another, to careful scrutiny and understanding.

But we also eventually come to realize that astrology, homeopathy, and feng shui(*) will be with us forever. People will simply believe what suits them, and won't be bothered by evidence. Especially if the evidence takes effort, knowledge, patience, and understanding to acquire.

The "S-Unit" is a nice homey amateur unit of measurement, but it has no meaning. (Some people seem to think it's equal to 6 dB, but vast numbers of others think it's the the size of the markings on their receivers' "S Meter". The two can be very different.) dB, on the other hand, is a universally defined and understood unit. Anyone unable to accurately measure relative values in dB is unable to make quantitative gain measurements at all.

(*) My spell checker didn't recognize this, so I did a quick google search to see if I got it right. It came up with 2,180,000 hits. There's no lack of believers.

Roy Lewallen, W7EL

John Smith wrote:
> Well, I have 3 test antennas on this project:
> 1) 1/4 wave stainless steel whip w/4 heavy 1/2 inch, aluminum ground plane
> radials
> 2) 1/2 wave without any ground plane/counterpoise, lower 1/4 wave section is
> 3/4 copper pipe, upper 1/4 is a stainless whip, total of the combination is
> 1/2 wave... ferrite beads are used on the outer shield of the coax at the
> point where it connects to the antenna, match is though a simple l-network
> (ferrite beads are actually un-needed but used anyway, no real detectable
> radiation from coax either way)
> 3) This is the antenna I described in the first post(s), I tend to refer to
> as the "quarter/half", it is constructed on 3/4 ID pvc pipe, and has an OD
> of just over an inch, the coil is constructed of #8 copper wire and the top
> whip is the 28 inch stainless whip I mentioned. Is a resonate 1/2 wave and
> physical 1/4 (whip + helical coil length.) Matching network is a l-network,
> capactior is constructed of acrylic insulator plates (acrylic "window pane")
> with copper sheet plates, coil is a 1.3 OD torroid. coil is approx. 1+ uh
> (computed from toroid data)--I have not measured the capacitance of the
> capacitor (probably somewhere from 20+ pf to 30+ pf), no
> groundplane/counterpoise, ferrite beads as above.
>
> Naturally, as the models predict, the 1/4 is lower in preformance than the
> half 1/2, and very noticable in the most distant contacts.
> However, the "quarter/half" out preforms the 1/4 but falls lower in
> preformance than the 1/2. Contacts out at 30+ miles are where the
> electrical 1/2 wave antennas differ most from each other (antennas 2 and 3
> above.)
> FSM measurements of the two 1/2 waves are very simuliar--however, these
> measurements could have been taken at a greater distance to increase
> accuracy (meters sensitivity I currently am using limited this.)
> Franky, I was surprised by the preformance. As others have predicted--I

> expected the preformance of the shortened 1/2 wave to be poorer than the 1/4
> (mainly due to the helical coil skewing the radiation pattern and adding a
> slight resistance to a physical 1/4 antenna.)
> However, it seems to fall in the middle between the 1/4 and the 1/2 wave
> (full length) antennas, favoring being closer to the 1/2 full length by 1/2
> S-unit+
> The biggest difference between the 1/4 and 1/2 wave full length is 2-3
> s-units at stations in the 30+ mile distances.
> The full 1/2 wave and the shortened 1/2 wave seem close to 1 s-unit on all
> apparent distant stations.
> I find this hard to believe, and the models I calculated did not reflect
> what I had actually seen in s-units.
>
> All three antennas were placed at the same height, on the same mast while
> testing (32 ft above real ground.) And all other conditions the same.
> The l-network match is the only difference between the two 1/2 wave
> antennas, in the future I will correct this and finalize the tests... the
> difference in the matches could be responsible for the difference in
> expected results.
> Right now, it actually looks to me, from the above--that the "1/4 physical,
> 1/2 wave electrical (quarter/half)" antenna was and is exhibiting properties
> of both a 1/4 and a 1/2 wave antenna. This is the main reason I tossed out
> this "antenna problem" here, to see others reactions and draw from their
> experience.
>
> Warmest regards
>
> "Buck" <iam@this.site> wrote in message
> news:ci7v31l9d8uc1910c9mc38npqod1ak1j91@4ax.com...
>
>>On Sun, 20 Mar 2005 18:26:42 -0800, "John Smith"
>><assemblywizard@gmail.com> wrote:
>>
>>
>>
>>
>>
>>
>>
>>>My question(s):
>>>
>>>For an example, on the 10 meter band:
>>>If I take a 28" whip and mount it at the end of helical wound coil (wound
>>>on
>>>1" diameter form), where the "wire length" of the coil, PLUS, the length
>>>of
>>>the whip (28" + coil wire length) is equal to 1/2 wavelength (electrical
>>>length)--BUT, the overall physical length of the antenna (top, tip of whip
>>>to base of helical wound coil) is 1/4 wavelength, what would the radiation
>>>pattern of such an antenna be?
>>>

>>>Would it favor the pattern of a 1/4 or 1/2 wave antenna--or, would the
>>>pattern be a compromise between the two--or, would the pattern be totally
>>>unrelated to either?
>>>
>>>What could I expect the impedance of such an antenna be? Would the
>>>reactance be capacitive or inductive? What would be the best way to
>>>provide
>>>a match to 50 ohm coax from such an antenna?
>>>
>>>What software is available to model such an antenna?
>>>
>>>Thanks in advance,
>>>warmest regards
>>>
>>
>>
>>EZNec will model your antenna. As for the antenna, I believe that the
>>shortened 1/2 wave antenna will radiate with less effect than a
>>stretched 1/2 wave, but possibly better than a 1/4 wave. How much?
>>That depends on the coil and the matching network pending losses.
>>
>>Good luck,
>>Buck
>>N4PGW
>>
>>--
>>73 for now
>>Buck
>>N4PGW
>
>
>

4056. FA EDDYSTSONE EC10 RX SHIP WORLDWIDE Super Condx

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 11:28:31 UTC
From: SNADARC <old.pc@ntlworld.com>
Message-ID: <zjT%d.83$p22.66@newsfe4-gui.ntli.net>
Source record: 80423
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,uk.radio.amateur

FA EDDYSTSONE EC10 RX SHIP WORLDWIDE Super Condx A cOASSI CrECIEVER FROM THE 1960'S

http://cgi.ebay.co.uk/ws/eBayISAPI.dll?ViewItem&rd=1&item=5760439623

4057. Re: Parabolic reflector for Wi-Fi?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 12:40:42 UTC
From: gb <onw9mapsgb@no.arrl.spam.net>
Message-ID: <ZqidnQpen_DWj93fRVn-hw@comcast.com>
Source record: 80413

"Nigel M" <reply@thegroup.com> wrote in message
news:9muv319qjmu1qpkru2q0v4h0nrlbohc0ji@4ax.com...
> In rec.radio.amateur.antenna, Dave Platt wrote:
>
>>In this particular case, because the feed has an omnidirectional
>>pattern, it seems to me that there would be a definite advantage to
>>using a relatively "deep" and thus somewhat "pointy" parabolic
>>section, in which the focal point lies a fair distance back from the
>>forward-most edges of the actual reflector.
>
> This is what I thought, but then I thought that this may make the
> positioning of the focus much more critical.
>
> My reason for posting was really to see if anyone had seen any research
> on the optimum "depth" in this application.
>
> I've been thinking some more about parabolas in general. It dawned on me
> that the difference in shape isn't a change in formula as such, just the
> range of co-ordinates that you use.
>
> I reckon I can use Excel to draw one, but I'm not sure about finding the
> focus, other than by measurement.
>
The practical field method.
You can find the focus my placing small mirrors at dishes edge and aiming
toward a light source.

gb

4058. Re: FA EDDYSTSONE EC10 RX SHIP WORLDWIDE Super Condx

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 13:18:58 UTC
From: Wolseley 6-80 <me@privacy.net>
Message-ID: <3aaka2F6750cnU1@individual.net>
Source record: 80421
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,uk.radio.amateur

"SNADARC" <old.pc@ntlworld.com> wrote in message
news:zjT%d.83$p22.66@newsfe4-gui.ntli.net...
> FA EDDYSTSONE EC10 RX SHIP WORLDWIDE Super Condx A cOASSI CrECIEVER
FROM THE
> 1960'S
>
> http://cgi.ebay.co.uk/ws/eBayISAPI.dll?ViewItem&rd=1&item=5760439623
>
>
I had an EC10 in the 1970s.
It's got germanium pnp transistors and it's sensitivity and selectivity
are rubbish.
The only use I put mine to was with a 2 metre converter in those a.m.
days.

4059. Get Rock Hard Erection With .... PANADEX

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 13:29:45 UTC
From: chessduress <newjersylove27@hotmail.com>
Message-ID: <1111498185.192587.150010@g14g2000cwa.googlegroups.com>
Source record: 80407

PANADEX - An amazing herbal formulation, strengthens the erection like a length of steel pipe, enables you to have ROCK HARD,THROBBING ERECTIONS that will last ALL NIGHT LONG! You'll be able to achieve ROCK HARD erections ANY TIME you want and last in bed like a porn star!A powerful herbal formulation, used from ancient time by emprerors,lords and kings,for playing sex every day with many ladiesat a time. It removes impotence, when taken alongwith Herbaalex herbal tonic.For details

http://www.herbaalex.com/panadex.htm

4060. Herbaalex - Most Powerful Herbal Sex Tonic In The World

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 13:31:26 UTC
From: chessduress <newjersylove27@hotmail.com>
Message-ID: <1111498286.398451.176720@l41g2000cwc.googlegroups.com>
Source record: 80341

Herbaalex most powerful herbal sex tonic in the world,Removes premature ejaculation permanently. It is also a guaranteed treatment for Impotence.It cures erectile dysfunction and improves the prostate health.Herbaalex enhancesthe sex desire in men and women. An amazing formulation of herbs,nothing can compete it's unique formula. No side effects . 100 % money back guarantee, if Herbaalex does not cure your sex problem.

http://www.herbaalex.com/herbaalex.htm

4061. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 13:34:29 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <42401f3a_3@newsfeed.slurp.net>
Source record: 80417

"Reg Edwards" wrote
>> Does it bring more than 1dB gain with it?
>> 73's
>> Richard Clark, KB7QHC
> ==========
> Richard, asking such awkward questions you get more insensitive to
> people's feelings every day.
> Are you not aware that a decrease in gain of even less than 1 dB can
> lose a contest?
> Reg, G4FGQ

This post started with a question about a 28" loaded whip operating on 10 meters, presumably to be used in a mobile application. The concern of the post was how to model the antenna to determine whether it would have the pattern of a 1/4 wave or a 1/2 wave vertical radiator.

But for a mobile application the affect of the auto body, the local environment, and even the direction the car is pointing can alter the free-space pattern of the antenna more than the difference in the relative radiation patterns of 1/4-wave and 1/2-wave verticals -- and particularly so for VHF/UHF antennas.

If 1dB of antenna gain is so critical to amateurs, suggest that more attention needs to be paid in its system design to the operating environment of the antenna. Some NEC programs make it fairly straightforward to model the net patterns of antennas as mounted on vehicles, and should lead to a better understanding of antenna performance in the real world.

RF

4062. Most Effective Herbal Treatment For Acne Control

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 13:34:37 UTC
From: chessduress <newjersylove27@hotmail.com>
Message-ID: <1111498477.802892.204430@z14g2000cwz.googlegroups.com>
Source record: 80419

Clear skin attracts to every one. Remove pimples and blackheads from your face or any part ofbody with Acne-Care tablets.Acne-Care is a guaranteed herbal cure for acne.By using acne-Care Tablets,acne can betreated successfully in virtually every case.If you want clear,blemish-free skin,Acne-Care is a proven effective treatment for acne removal.Acne needs to be treated as soon as possible.When Acne-Care istaken as directed, you will see results in less than Four weeks.With Acne-Care,persistence pays off!

http://www.herbaalex.com/acne.htm

4063. See the miracles !!!! Repairs skin and eliminate eczema

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 13:38:20 UTC
From: chessduress <newjersylove27@hotmail.com>
Message-ID: <1111498700.307697.276460@z14g2000cwz.googlegroups.com>
Source record: 80332

Eczemax- There are several different types of eczema,many of which look similar but have very different causes and treatments. The first step in effective treatment of eczema is a correct diagnosis.We are providing herbal treatment for the cure of eczema.All kinds of eczema has been treated successfully.

http://www.herbaalex.com/eczemax.htm

4064. The Guaranteed treatment for Leukorrhea (Leucorreah)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 13:46:19 UTC
From: chessduress <newjersylove27@hotmail.com>
Message-ID: <1111499179.001955.93420@z14g2000cwz.googlegroups.com>
Source record: 80337

Leukoren- A herbal tonic for treatment of Leukorreah(liquid flowing from vagina). An effective remedy for many female ailments. It improves general and sexhealth of females. Leukoren can also remove any form of swelling in the uterus. Leukoren is also a nervine and general tonic as it helps in maintaining general vitality in females

http://www.herbaalex.com/leukoren.htm

4065. The Magic Herbal Treatment for Leucoderma

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 13:47:51 UTC
From: chessduress <newjersylove27@hotmail.com>
Message-ID: <1111499271.636867.126800@o13g2000cwo.googlegroups.com>
Source record: 80325

Dermarine- A herbal treatment for severe kinds of leucoderma.Herbal Medicine has very encouraging results in leucoderma. Acquired white spots like due to burns or injuries are also treated successfully. The duration and success of treatment depends on extend of the patches and the duration of the illness. Big patches require more days whereas small spots yield faster.

http://www.herbaalex.com/dermarine.htm

4066. Re: Down Tilt on Slot Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 14:51:32 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4240314a_4@newsfeed.slurp.net>
Source record: 80400

"Crazy George" wrote:
> Well, let me just post this at the bottom. RCA made a line of
> VHF TV transmitting antennas which were a slot arrays.
> The only one I managed to get close to before it became airborne
> and clamped a thousand or more feet in the air was for
> channel 9. It was 80 feet long (2 - forty foot sections) and was
> constructed exactly as Tom, K7ITM suggested, the phase
> of the feed of each element was progressively changed,
> in this case, to effect 1.50 of downtilt.

The antenna described above is the RCA "Traveling Wave" design. Without beam tilt for the situation described, it has an omni, horizontal plane RMS gain of ~17.2X (~12.4dBd) . The beam width within the 3dB points on its elevation pattern is about 3.2 ï¿½.

If this antenna was placed with its radiation center 1,500 feet above smooth earth, the radio horizon would be 0.59ï¿½ below the horizontal plane, so using beam tilt would raise field strength there. The 1.5ï¿½ value stated above exceeds that, but there may have been good reasons for it.

Adding beam tilt to an antenna with a very broad elevation pattern, and installed on a short tower is a waste of time and money, however.

RF (RCA Broadcast Field Engineer, 1965-1980)

Visit http://rfry.org for FM transmission system papers.

4067. Hey whatever happend to.... was physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 14:56:56 UTC
From: Michael Coslo <mjc5@enoughalready.psu.edu>
Message-ID: <d1pbnn$p10$1@f04n12.cac.psu.edu>
Source record: 80401

John Smith wrote:
> Well... Yes, that argument is made with most everything...
> It has already been done... everything has been tried... all the answers are
> known... there is nothing new to be found out...

This post got me to thinking (always dangerous)

Whatever happened to that wunderantenna from the University of Rhode
Island?

ttp://tinyurl.com/5qn4d

Especially interesting is the comparison against a 5/8th wave antenna @
150 MHz. Presemably that antenna was matched by a 9 inch DLM.

The BW was apparently 1 MHz better than the 5/8th wave, although thte
sentence was a bit unclear with that respect.

I remain very skeptical.

Bogus or Bonanza?

- Mike KB3EIA -

4068. Phasing verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 15:00:18 UTC
From: Rick Mintz <Rmintz@Rochester.rr.com>
Message-ID: <6qW%d.108198$H05.41349@twister.nyroc.rr.com>
Source record: 80330

Greetings all:

I want to phase two Butternut HF-2V 40/80 verticals.

Additionally I need to switch the phasing line so as to have a N-S and E-W directionality. 40 meters is the most important band in terms of the needed efficiency. Anyone done this and have some specifics?

Rick W1TY

4069. Re: Parabolic reflector for Wi-Fi?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 15:33:50 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ike041tqk44reagfbum58m2764ldo8qf2b@4ax.com>
Source record: 80406

On Tue, 22 Mar 2005 11:06:06 GMT, Nigel M <reply@thegroup.com> wrote:

>I reckon I can use Excel to draw one, but I'm not sure about finding the
>focus, other than by measurement.

Hi Nigel,

You aren't going to find a simpler method than the one I described and
Dale has already given you the range to match dimensions against.

73's
Richard Clark, KB7QHC

4070. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 15:56:29 UTC
From: Buck <iam@this.site>
Message-ID: <1df041db31vbjr9amr6ukm7o1ba1ofbjr2@4ax.com>
Source record: 80338

You said you made your antenna with a base loaded coil and added an L-matching network. I have been reading the ARRL manual which says that the center loaded coil produces a different current curve and a better match.

Assuming that the L-network produces some (any) loss, the better match will theoretically overcome that. However, the inductor has to be considerably larger and inductors are somewhat lossy.

Has anyone tried, and/or can anyone model this version to see how it compares?

--
73 for now
Buck
N4PGW

4071. Re: Hey whatever happend to.... was physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 16:19:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <eah041h8lkr5m7ogqi4e95n5v7l3ketpk5@4ax.com>
Source record: 80404

On Tue, 22 Mar 2005 09:56:56 -0500, Michael Coslo
<mjc5@enoughalready.psu.edu> wrote:
> Bogus or Bonanza?

Hi Mike,

It was a fantastic success! Everyone uses them now, don't you have
one yet?

73's
Richard Clark, KB7QHC

4072. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 16:59:23 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d1pitb$an9$1@sparta.btinternet.com>
Source record: 80327

> The "S-Unit" is a nice homey amateur unit of measurement, but it has
no
> meaning. (Some people seem to think it's equal to 6 dB, but vast
numbers
> of others think it's the the size of the markings on their
receivers' "S
> Meter".
================================

And one million US housewives can't be wrong!

4073. Re: Hey whatever happend to.... was physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 18:10:49 UTC
From: Michael Coslo <mjc5@enoughalready.psu.edu>
Message-ID: <d1pn3avfk1@f04n12.cac.psu.edu>
Source record: 80411

Richard Clark wrote:

> On Tue, 22 Mar 2005 09:56:56 -0500, Michael Coslo
> <mjc5@enoughalready.psu.edu> wrote:
>
>> Bogus or Bonanza?
>
>
> Hi Mike,
>
> It was a fantastic success! Everyone uses them now, don't you have
> one yet?

I did, but it was so efficient that it melted when I tried to run 100 watts through it....

- Mike KB3EIA -

4074. Re: High Gain antenna for mobile phone

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 18:53:30 UTC
From: Mark
Message-ID: <84q041t1s59s7q9256qqbh7mvvnkc4jfql@4ax.com>
Source record: 80335

On Tue, 22 Mar 2005 19:24:43 +1100, Bob Bob <bcnntp@optusnet.com.au>
wrote:

>A specific vendor I cant help you with then (I am in Australia)
>
>I would think that many large phone accessory distributors could sell
>you one. Otherwise look at some more professional antenna manufacturers.
>They often have yagis available in the phone frequency range. Take care
>with finding the right connector and keep the coax loss low.
>
>It might also be cheaper to get a simple mobile gain antenna and mount
>it high. Get it clear of ground clutter and dont be afraid to move it
>around for the strongest signal (before bolting it in place)
>
>You'll need to know the operating frequency of your phone. If it is a
>multi band thing you'll have to find the freq of your nearest node. This
>will also determine the coax loss/cost as well. I would suggest that if
>you are running 10 metres or so to use LMR400. It isnt the lowest loss
>cable around but it is still easy to terminate and seems to have the
>best cost/loss numbers. There are a number of sites around that allow
>you to calculate cable loss at specific frequencies. Of course it also
>depends on whether it is available where you are.
>
>To give you an idea a 10m run of coax at 900MHz with LMR400 is about
>1.3dB loss. Using RG213 the loss is about twice that and the cable cost
>is higher! RG58 has a whopping 5-6dB loss. I find it strange that mobile
>phone antennas have such horrible cable.
>
>Hope this helps
>
>Cheers Bob
>
>Mark wrote:
>> On Tue, 22 Mar 2005 06:39:27 +1100, Bob Bob <bcnntp@optusnet.com.au>
>> wrote:
>>
>>
>>>Country??
>>
>>
>> Spain

Thanks Bob, managed to find a shop that had a Yagi which from memory
is in the 850 - 950 Mhz range. Also bought 2 x 3 metre length antenna
poles and a wall bracket, the guy in the shop seemed to know his stuff

and I took his advice on the cable. I will put this lot up some time this week, I will let you know if this improves things, thanks again to everybody who helped, isn't the internet a marvellous thing, still never cease's to amaze me?

Mark in Spain
mark@markXscotford.com (remove the X to reply)

4075. Re: FA EDDYSTSONE EC10 RX SHIP WORLDWIDE Super Condx

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 19:01:02 UTC
From: Mike Lee <swift240@yahoo.co.uk>
Message-ID: <OXZ%d.117283$y25.79895@fe3.news.blueyonder.co.uk>
Source record: 80410
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,uk.radio.amateur

Wolseley 6-80 wrote:
> "SNADARC" <old.pc@ntlworld.com> wrote in message
> news:zjT%d.83$p22.66@newsfe4-gui.ntli.net...
>
>>FA EDDYSTSONE EC10 RX SHIP WORLDWIDE Super Condx A cOASSI CrECIEVER
>
> FROM THE
>
>>1960'S
>>
>>http://cgi.ebay.co.uk/ws/eBayISAPI.dll?ViewItem&rd=1&item=5760439623
>>
>>
>
> I had an EC10 in the 1970s.
> It's got germanium pnp transistors and it's sensitivity and selectivity
> are rubbish.
> The only use I put mine to was with a 2 metre converter in those a.m.
> days.
>
Yes I used to work for the company many years ago the main transistors
were:-

OC171 the 4 lead type.
OC71 (I think)
And OC81 for the main amp. (if my memory is correct that is)
The Mk II had a 470 Khz trap on the front end.
The IF stages were double tuned at 470Khz
And a filter at 1000Khz for the audio. At least thats what I remember
of the Mk II.

The BFO was rubbish to say the least.
I found it hard to resolve many signals that were to strong.

--
http://uk.geocities.com/swift240/mikes_page_1.html

4076. Fresnel Zone Reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 19:12:40 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_42406e4c@fidonet.org>
Source record: 80346

Hi,

How do Fresnel Zone Reflector satellite antennas work?

A*s*i*m*o*v

4077. Re: FA EDDYSTSONE EC10 RX SHIP WORLDWIDE Super Condx

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 19:43:44 UTC
From: the real ME <realME@here.there>
Message-ID: <d1pshg$n97$1@sparta.btinternet.com>
Source record: 80424
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,uk.radio.amateur

"Mike Lee" <swift240@yahoo.co.uk> wrote in message
news:OXZ%d.117283$y25.79895@fe3.news.blueyonder.co.uk...
> Wolseley 6-80 wrote:
>> "SNADARC" <old.pc@ntlworld.com> wrote in message
>> news:zjT%d.83$p22.66@newsfe4-gui.ntli.net...
>>
>>>FA EDDYSTSONE EC10 RX SHIP WORLDWIDE Super Condx A cOASSI CrECIEVER
>>
>> FROM THE
>>
>>>1960'S
>>>
>>>http://cgi.ebay.co.uk/ws/eBayISAPI.dll?ViewItem&rd=1&item=5760439623
>>>
>>>
>>
>> I had an EC10 in the 1970s.
>> It's got germanium pnp transistors and it's sensitivity and selectivity
>> are rubbish.
>> The only use I put mine to was with a 2 metre converter in those a.m.
>> days.
>>
> Yes I used to work for the company many years ago the main transistors
> were:-
>
> OC171 the 4 lead type.
> OC71 (I think)
> And OC81 for the main amp. (if my memory is correct that is)
> The Mk II had a 470 Khz trap on the front end.
> The IF stages were double tuned at 470Khz
> And a filter at 1000Khz for the audio. At least thats what I remember of
> the Mk II.
>
> The BFO was rubbish to say the least.
> I found it hard to resolve many signals that were to strong.
>
> --
> http://uk.geocities.com/swift240/mikes_page_1.html

If you scrapped the paint of the plastic type OC71 you then had the
equivalent of an OCP71 phototransistor
which IIRC were at least 4x the cost of an OC71 ! Bargain !

nostalgia ain't what it used to be.....

the real ME

4078. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 21:18:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d1q23l$ko1$1@domitilla.aioe.org>
Source record: 80415

Absolutely, and, "If it works don't complain!", is my motto.
Still, my mind ponders and responds with questions...

One thing I haven't been forth coming with is the 1/4 wave antenna. Really, I don't know what specs a "proper" one should be constructed to (working off very basic ARRL diagram).

The one I built has a very heavy stainless whip--most likely is military surplus, but years ago I bought a whole slew of them and still have not used them up, the whip base is about 3/8 and tapers at approx. 12 feet to a 3/16 dia.

I just hacked it to a 1/4 wave with the 1/4 ant length formula provided by the ARRL book and removed length with a very course file, until resonate. The radials are 1/2" aluminum rod and heavy. The insulating material for the whip is cut from 1-1/4" thick nylon sheet. The SWR was originally high, but "drooping" (ARRL book suggested this) the ends of the radials, down near a 45 degree angle, provides 1:1.5. The radials are cut 5% wave longer than the whip (again, suggested by ARRL book), they are grounded to the mast and the mast has a good earth ground. Antenna is directly fed with 50 ohm coax.

Perhaps my construction of the 1/4 is less than optimum? And, this may make it appear that the antenna from my original post is performing better than it really is.... <thoughtful frown>

The weather here is high wind and rain. I will not be tempted to do any more experimenting until this passes...

Regards

Hey! If you can't provide and suggestions, how about just spell checking this for me?

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:113vmgocegae0cf@corp.supernews.com...
> If there's no ground system loss, a half wave vertical antenna has about
> 1.3 dB gain over a quarter wave vertical due to the sharper pattern shape.
> This is the line-of-sight or surface wave gain difference. If reflection
> from real ground is included in the analysis, the gain difference is about
> 1 - 1.5 dB at lower angles, and the quarter wave does much better, by 3 or
> 4 dB or so, at high angles (very roughly above 50 degrees or so).
>
> Coil loading to achieve half wave resonance does have one potential
> advantage, and that's to reduce ground loss when substantial ground
> resistance is present. Because of the much higher base impedance, ground
> current is much less with a half wave resonant base fed antenna than with
> a quarter wave antenna, even when the resonance is achieved with coil

> loading. Ground loss is typically pretty low on ten meters in mobile
> applications, but in some other setups (such as ground mounting over a
> buried radial system, or a hand-held radio), the reduction in ground
> current could reduce ground loss more than enough to compensate for coil
> loss.
>
> I suspect this is the explanation for at least some of any advantage you
> see in the coil loaded antenna over a straight wire of the same length.
> However, there's a good sized handful of other possible factors. (Every
> last one of them, incidentally, explainable perfectly well by "standard
> theory".) If the measurement results don't agree with the model, it nearly
> always means that the actual antenna -- that is, the "antenna", the
> "ground" system, and everything connected to either one or in the near
> field of either one -- differs from the model in some significant way. Or
> the measurement system is faulty.
>
> Someone interested in understanding the operation of an antenna will
> commonly spend a great deal of time tracking down the factors that differ
> between the model and real antenna, and it's just about always a truly
> educational experience. When done, the result is usually a model that
> really represents the antenna system, and that shows results very close to
> careful and competent measurements. And an experimenter who knows more
> about antennas, modeling, and the importance of some factors he never
> before considered. You go through this exercise a few hundred times, like
> professional engineers routinely do, and you come out with a great respect
> for "standard theory" and an even greater level of skepticism toward
> people who have a weak understanding of it and are convinced they've
> witnessed a miracle. Those of us who have spent a career using "standard
> theory" to design real, useful items that work as designed haven't become
> skeptical because our brains have been petrified by education; it's
> because we've seen "standard theory" work, over and over and over, and
> every last miracle inevitably fall, one after another, to careful scrutiny
> and understanding.
>
> But we also eventually come to realize that astrology, homeopathy, and
> feng shui(*) will be with us forever. People will simply believe what
> suits them, and won't be bothered by evidence. Especially if the evidence
> takes effort, knowledge, patience, and understanding to acquire.
>
> The "S-Unit" is a nice homey amateur unit of measurement, but it has no
> meaning. (Some people seem to think it's equal to 6 dB, but vast numbers
> of others think it's the the size of the markings on their receivers' "S
> Meter". The two can be very different.) dB, on the other hand, is a
> universally defined and understood unit. Anyone unable to accurately
> measure relative values in dB is unable to make quantitative gain
> measurements at all.
>
> (*) My spell checker didn't recognize this, so I did a quick google search
> to see if I got it right. It came up with 2,180,000 hits. There's no lack
> of believers.

>
> Roy Lewallen, W7EL
>
> John Smith wrote:
>> Well, I have 3 test antennas on this project:
>> 1) 1/4 wave stainless steel whip w/4 heavy 1/2 inch, aluminum ground
>> plane radials
>> 2) 1/2 wave without any ground plane/counterpoise, lower 1/4 wave section
>> is 3/4 copper pipe, upper 1/4 is a stainless whip, total of the
>> combination is 1/2 wave... ferrite beads are used on the outer shield of
>> the coax at the point where it connects to the antenna, match is though a
>> simple l-network (ferrite beads are actually un-needed but used anyway,
>> no real detectable radiation from coax either way)
>> 3) This is the antenna I described in the first post(s), I tend to refer
>> to as the "quarter/half", it is constructed on 3/4 ID pvc pipe, and has
>> an OD of just over an inch, the coil is constructed of #8 copper wire and
>> the top whip is the 28 inch stainless whip I mentioned. Is a resonate
>> 1/2 wave and physical 1/4 (whip + helical coil length.) Matching network
>> is a l-network, capactior is constructed of acrylic insulator plates
>> (acrylic "window pane") with copper sheet plates, coil is a 1.3 OD
>> torroid. coil is approx. 1+ uh (computed from toroid data)--I have not
>> measured the capacitance of the capacitor (probably somewhere from 20+ pf
>> to 30+ pf), no groundplane/counterpoise, ferrite beads as above.
>>
>> Naturally, as the models predict, the 1/4 is lower in preformance than
>> the half 1/2, and very noticable in the most distant contacts.
>> However, the "quarter/half" out preforms the 1/4 but falls lower in
>> preformance than the 1/2. Contacts out at 30+ miles are where the
>> electrical 1/2 wave antennas differ most from each other (antennas 2 and
>> 3 above.)
>> FSM measurements of the two 1/2 waves are very simuliar--however, these
>> measurements could have been taken at a greater distance to increase
>> accuracy (meters sensitivity I currently am using limited this.)
>> Franky, I was surprised by the preformance. As others have predicted--I
>> expected the preformance of the shortened 1/2 wave to be poorer than the
>> 1/4 (mainly due to the helical coil skewing the radiation pattern and
>> adding a slight resistance to a physical 1/4 antenna.)
>> However, it seems to fall in the middle between the 1/4 and the 1/2 wave
>> (full length) antennas, favoring being closer to the 1/2 full length by
>> 1/2 S-unit+
>> The biggest difference between the 1/4 and 1/2 wave full length is 2-3
>> s-units at stations in the 30+ mile distances.
>> The full 1/2 wave and the shortened 1/2 wave seem close to 1 s-unit on
>> all apparent distant stations.
>> I find this hard to believe, and the models I calculated did not reflect
>> what I had actually seen in s-units.
>>
>> All three antennas were placed at the same height, on the same mast while
>> testing (32 ft above real ground.) And all other conditions the same.
>> The l-network match is the only difference between the two 1/2 wave

>> antennas, in the future I will correct this and finalize the tests... the
>> difference in the matches could be responsible for the difference in
>> expected results.
>> Right now, it actually looks to me, from the above--that the "1/4
>> physical, 1/2 wave electrical (quarter/half)" antenna was and is
>> exhibiting properties of both a 1/4 and a 1/2 wave antenna. This is the
>> main reason I tossed out this "antenna problem" here, to see others
>> reactions and draw from their experience.
>>
>> Warmest regards
>>
>> "Buck" <iam@this.site> wrote in message
>> news:ci7v31l9d8uc1910c9mc38npqod1ak1j91@4ax.com...
>>
>>>On Sun, 20 Mar 2005 18:26:42 -0800, "John Smith"
>>><assemblywizard@gmail.com> wrote:
>>>
>>>
>>>
>>>
>>>
>>>
>>>>My question(s):
>>>>
>>>>For an example, on the 10 meter band:
>>>>If I take a 28" whip and mount it at the end of helical wound coil
>>>>(wound on
>>>>1" diameter form), where the "wire length" of the coil, PLUS, the length
>>>>of
>>>>the whip (28" + coil wire length) is equal to 1/2 wavelength (electrical
>>>>length)--BUT, the overall physical length of the antenna (top, tip of
>>>>whip
>>>>to base of helical wound coil) is 1/4 wavelength, what would the
>>>>radiation
>>>>pattern of such an antenna be?
>>>>
>>>>Would it favor the pattern of a 1/4 or 1/2 wave antenna--or, would the
>>>>pattern be a compromise between the two--or, would the pattern be
>>>>totally
>>>>unrelated to either?
>>>>
>>>>What could I expect the impedance of such an antenna be? Would the
>>>>reactance be capacitive or inductive? What would be the best way to
>>>>provide
>>>>a match to 50 ohm coax from such an antenna?
>>>>
>>>>What software is available to model such an antenna?
>>>>
>>>>Thanks in advance,
>>>>warmest regards

>>>>
>>>
>>>
>>>EZNec will model your antenna. As for the antenna, I believe that the
>>>shortened 1/2 wave antenna will radiate with less effect than a
>>>stretched 1/2 wave, but possibly better than a 1/4 wave. How much?
>>>That depends on the coil and the matching network pending losses.
>>>
>>>Good luck,
>>>Buck
>>>N4PGW
>>>
>>>--
>>>73 for now
>>>Buck
>>>N4PGW
>>
>>

4079. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 21:44:52 UTC
From: richardharrison@webtv.net
Message-ID: <23332-424091D4-582@storefull-3254.bay.webtv.net>
Source record: 80422

Art Unwin wrote:
"I have just come to realize that if one drew a polygon of element phases in an array and all elements were 180 degrees to its companion element and excluding its driven element, the max gain and max front to back will occur at the dame frequency!"

I missed a step or two between the polygon`s resultant and coincidence of maximum gain with maximum front to back ratio.

A vector has both magnitude and direction. A scalar quantity has only magnitude.

Vectors are represented by arrows whose lengths correspond to their magnitudes. Directions of the arrows correspond to the directions of the vectors.

The combined effect of two or more vectors is called a resultant. A resultant can be found by a geometrical rule called vector addition. Vectors are placed head to tail while maintaining their magnitudes and directions. The resultant is a vector drawn from the tail of the first vector to the head of the final vector. Any number of vectors can be added by the head to tail method. These can create a polygon of vectors.

If only two vectors are to be added at a time, they can produce a resultant by the parallelogram method. Two sides of the parallelogram are formed by the two vectors connected at their tails. Parallel same length sides are added to form the parallelogram. A diagonal emanating from the junction of the two vectors forms the resultant

When one vector (call it c) is the resultant of two vectors (call them and b) we can say that a and b are components of c. Any given vector can be resolved into an infinite number of pairs. Usually we find it convenient to resolve a vector into a pair which are at right angles with each other. Then we can use the Pythagorean theorem (c squared = a squared + b squared) to find the magnitude of the resultant (c).

In a right triangle in which two sides are perpendicular, all the trignometric functions are useful in determining the lengths and directions of its sides.

Best regards, Richard Harrison, KB5WZI

4080. Re: Parabolic reflector for Wi-Fi?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 22:06:24 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <AF00e.37749$hA3.29769@trnddc09>
Source record: 80409

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:7kiv31hg8t5u7d7qpsq88i521vqe6vrjg5@4ax.com...
> On Tue, 22 Mar 2005 02:37:15 GMT, "Dale Parfitt"
> <par@parelectronics.com> wrote:
>
> >I have worked with parabolas for years- the current dish is a 14' w/ 0.36
> >F/D and illuminated with a scalar feed. A dipole is perhaps one of the
worst
> >feeds for a parabola. If you're going to put the surface up why not take
> >full advantage of it? It takes little if any additional work to properly
> >illuminate it.
>
> Hi Dale,
>
> Well, I described how to build the reflector, you can describe how to
> build the horn. Myself, I think that at 900MHz that is where the
> trouble is going to start as the horn will almost certainly shadow the
> reflector that already gives him 10dB gain.
>
> Now if Nigel is trying to stretch Wi-Fi into Wi-Max, then such an
> investment may be opportune.
>
> 73's
> Richard Clark, KB7QHC
Hi Richard,
Depending on surface size, that may be correct. An offset dish and an 0.7F/D
horn would avoid that problem. Without doing the math, the now defunct- and
available fro free, Primestar 1M offset dishes may be an excellent solution.
Then again, if he only needs 10dB, a small loop yagi could serve with a lot
less surface area.

Dale W4OP

4081. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 22:43:13 UTC
From: N0GW <wescom@leblink.com>
Message-ID: <1111531393.374184.86710@f14g2000cwb.googlegroups.com>
Source record: 80342

Buck,

I disagree with you on this. If the coil does indeed resonate the antenna in 1/2 wave, antiresonance, current distribution will be different than the straight quarterwave resonance. The current maximum will occur in roughly the center of the loacing coil length with a current minimum at the bottom. Since photon generation is an ampere/length concern, there must be a greater peak coil current to achieve the same power radiated. That would probably incur greater losses than quarter wave resonance.

The half wave resonance might have an advantage if there is a problem achieving an adequate counterpoise under the antenna for normal quarter wave resonance. A lot of through-the-glass mobile antennas have been sold using this principle.

I wonder if Roy has a simple way to include the coil Q or losses in the EZNEC model. I'm sure there is a logical way to work it out but I haven't had time to think it through yet.

Gary - N0GW

4082. Re: Down Tilt on Slot Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 22:55:14 UTC
From: Crazy George <munsch@atglobal.net>
Message-ID: <4240a66d_4@news1.prserv.net>
Source record: 80420

Thanks for checking in, Richard.

Please refresh my admittedly fuzzy memory from 40+ years ago. Did they (RCA) not adjust the phase delay by using
different lengths of dielectric in the inside between adjacent sets of slots? Allowing one size (per channel) of
radiator, but allowing selection of downtilt after machining of the exterior. Or was that Dielectric's design? And,
that particular antenna never worked to expectations, and I always said I thought it had too much tilt. And indeed it
had an extremely strong signal on the ground near the tower. Much more than any other installation I ever visited.

P1-9-1324 back then.

--
Crazy George
The attglobal.net address is a SPAM trap. Please change that part to: att<dot>biz properly formatted.

4083. Re: Parabolic reflector for Wi-Fi?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 23:22:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <q291411tr66s39pr5lq99ppcr3iiv8jcpp@4ax.com>
Source record: 80418

On Tue, 22 Mar 2005 22:06:24 GMT, "Dale Parfitt"
<par@parelectronics.com> wrote:

>Depending on surface size, that may be correct. An offset dish and an 0.7F/D
>horn would avoid that problem. Without doing the math, the now defunct- and
>available fro free, Primestar 1M offset dishes may be an excellent solution.
>Then again, if he only needs 10dB, a small loop yagi could serve with a lot
>less surface area.

Hi Dale,

But this does not answer the problem of the horn design.

As I see it, a simple waveguide (no flared horn) itself will run
something like 6" x 12". About the size of a shoe box. Adding the
flare will probably quadruple that area. Now, to build an offset dish
will force a rather more difficult reflector design project. The
irony is that simply turning the horn around and using it would
probably do just as well, but unfortunately be more cumbersome to
construct and use than the simple design already linked to.

As for the Primestar dish, that is undoubtedly a Point Locus Parabolic
Reflector design that would clash with the geometry of its 10 times
larger intended application. This does not bode well when the appeal
is efficiency based.

Even the style of the classic pringles-can-array is probably simpler
to achieve than horns combined with offset dishes. [However, probably
closer to Crisco Can sized weighing in at several pounds.]

Quick Moral, The first 6 to 10 dB is the easiest gain to achieve.

73's
Richard Clark, KB7QHC

4084. Re: Down Tilt on Slot Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 23:39:22 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4240acff_4@newsfeed.slurp.net>
Source record: 80333

The interior of the VHF TW antenna essentially is a 50 ohm center conductor against the ID of the pylon. Beam tilt is done by the location of the slots on the pylon. The useful part of the elevation pattern of these antennas is made very smooth (no sharp nulls), and it produces fairly uniform fields near the ground from close to the tower base on out toward the radio horizon.

The antenna was designed by RCA (Gibbsboro), and the design and production facilities for it were acquired from them by Dielectric when RCA folded in the mid-1980s.

As for the effects of beam tilt, Figure 1 in paper #9 at http://rfry.com gives a graphical representation and discussion of what can be expected.

P1-8-3246 (1950s).

RF

4085. Re: Amateur Radio Military Appreciation Day

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 23:40:23 UTC
From: Sum Ting Wong <sumtingwong@aol.com>
Message-ID: <m3b141hcsbcp26nt5atm2vrgr5vifv6fm2@4ax.com>
Source record: 80339

On Mon, 21 Mar 2005 18:17:22 -0800, Richard Clark <kb7qhc@comcast.net>
wrote:

>
>If it weren't for the Brits, we would all be speaking Dutch. Or
>French. Or Spanish.

Or we wouldn't have come to America in the first place to get away
from those folks telling us how to live. Take a lessson.

S.T.W.

4086. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 23:46:48 UTC
From: jgboyles@aol.com
Message-ID: <1111535208.894549.238630@z14g2000cwz.googlegroups.com>
Source record: 80326

Buck wrote:
> On Sun, 20 Mar 2005 18:26:42 -0800, "John Smith"
> <assemblywizard@gmail.com> wrote:
>
>
>
>
>
>
> >My question(s):
> >
> >For an example, on the 10 meter band:
> >If I take a 28" whip and mount it at the end of helical wound coil
(wound on
> >1" diameter form), where the "wire length" of the coil, PLUS, the
length of
> >the whip (28" + coil wire length) is equal to 1/2 wavelength
(electrical
> >length)--BUT, the overall physical length of the antenna (top, tip
of whip
> >to base of helical wound coil) is 1/4 wavelength, what would the
radiation
> >pattern of such an antenna be?
> >
> >Would it favor the pattern of a 1/4 or 1/2 wave antenna--or, would
the
> >pattern be a compromise between the two--or, would the pattern be
totally
> >unrelated to either?
> >
> >What could I expect the impedance of such an antenna be? Would the
> >reactance be capacitive or inductive? What would be the best way to
provide
> >a match to 50 ohm coax from such an antenna?
> >
> >What software is available to model such an antenna?
> >
> >Thanks in advance,
> >warmest regards
> >
>
>
> EZNec will model your antenna. As for the antenna, I believe that
the
> shortened 1/2 wave antenna will radiate with less effect than a

> stretched 1/2 wave, but possibly better than a 1/4 wave. How much?
> That depends on the coil and the matching network pending losses.
>
> Good luck,
> Buck
> N4PGW
>
> --
> 73 for now
> Buck
> N4PGW

4087. Re: Down Tilt on Slot Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 23:47:40 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4240aef2_2@newsfeed.slurp.net>
Source record: 80402

"Richard Fry" <rfry@adams.net> wrote
> As for the effects of beam tilt, Figure 1 in paper #9 at http://rfry.com
> gives a graphical representation and discussion of what can be expected.

Sorry, the * CORRECT * URL that should show above is http://rfry.org .

RF

4088. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 23:47:46 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4240afab$1_2@127.0.0.1>
Source record: 80403

John Smith wrote:
> Well... Yes, that argument is made with most everything...
> It has already been done... everything has been tried... all the answers are
> known... there is nothing new to be found out...

Absolutely - someone wanted to close the US patent office
over 100 years ago because everything possible had already
been invented.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4089. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 23:53:10 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4240b0f0$1_2@127.0.0.1>
Source record: 80331

Roy Lewallen wrote:

> Laboratories world wide measure antennas daily which have been
> designed with "standard theory", and in those past hundred years plus,
> no one has found any credible evidence that "standard theory" is in
> error.

Do you really think an antenna using entangled electrons
can be predicted by "standard theory"? :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4090. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-22 23:58:13 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1141c8r3jf50q03@corp.supernews.com>
Source record: 80408

N0GW wrote:
> . . .
> I wonder if Roy has a simple way to include the coil Q or losses in the
> EZNEC model. I'm sure there is a logical way to work it out but I
> haven't had time to think it through yet.

Sure. If modeling it as a helix, simply specify wire loss for the type of wire or plating on the wire used for the coil. (The loss in the coil will be much greater than the loss in the straight wire, so it's no big deal if the straight wire is made from some other material.) If modeling it as lumped loads (not as accurate), include the appropriate value of R in the loads. You can quickly and easily see how much loss the coil is causing by comparing gain with the loss present and absent.

A few experiments showed a pretty close agreement between EZNEC's helix model with wire loss and Reg's inductor program with regard to L, resonant frequency, and Q. I didn't, however, run tests with a wide range of coil geometries and wire sizes.

The EZNEC helix model will underreport loss if wire spacing is less than one or two wire diameters, since it doesn't account for proximity effect (uneven current density around the wire).

Although you can manually (and tediously) build a helix model with EZNEC v. 3.0 or EZNEC-ARRL which is v. 3.0, or create one with an external program and import it, EZNEC v. 4.0 has a built-in helix creation feature that generates a helical coil with a few keystrokes.

Roy Lewallen, W7EL

4091. Re: Amateur Radio Military Appreciation Day

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 00:13:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gcc141hqbtvbgl7di59vfv9odb1ghldv3d@4ax.com>
Source record: 80340

On Tue, 22 Mar 2005 23:40:23 GMT, Sum Ting Wong <sumtingwong@aol.com>
wrote:

>Take a lessson.

Was that a stereotypical racist allusion? More likely poor spelling
than a lame joke.

Sorry Old Son, by your signature it is obvious you have more than
something wrong there in Garden Grove. Perhaps you haven't immigrated
far west enough.

4092. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 00:25:07 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1111537507.347897.46430@f14g2000cwb.googlegroups.com>
Source record: 80405

"John Smith" wrote, " Rather, I was looking for antennas which preformed better than the poor preformance which standard theory would suggest--..."

Perhaps you're thinking of different antennas than I have in mind right now. But using simple resonant half-wave dipoles or quarter waves over ground planes, it seems to me the performance is pretty amazing. Consider that under the right HF skip conditions, you can communicate half way around the world with such antennas, fairly simple receivers, and just a few watts of RF. Put the same amount of RF into a transmission line made of copper wires and consider how far it gets before the power is too low to be useful for communications. Even if your transmission line were extremely low loss (say 2.5cm diameter wires forming a 600 ohm line, giving about 0.15dB/mile at 4MHz), in under 2000 miles, you wouldn't have enough power left on the line to give reliable communications. And the antenna-radiated RF would be detectable over a wide area, not just at the output of a transmission line. Even fairly small antennas, half or a quarter the size required for unloaded resonance, can be efficient enough to allow pretty remarkable transmission of RF energy. In fact, the inefficiencies of small antennas generally come about in the matching systems much more than in the radiating structure itself. So I'm left wondering just why you think antennas that perform as "standard theory" suggests are performing poorly.

Or perhaps you're considering the difficulty of concentrating the radiation in a certain direction using small antennas...though I would not have thought that from your base posting.

Cheers,
Tom

4093. (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 00:38:41 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1111538321.756484.102400@z14g2000cwz.googlegroups.com>
Source record: 80328

More for the fun of pondering it than for any immediate practical
reason...

If I make a balanced two-wire transmission line from round wires, and
I'm constrained to have the wire center-to-center spacing some
particular value (say one inch, or five centimeters, or whatever), what
wire diameter should I use to get the lowest matched-line loss? What
impedance line does that give (assuming air dielectric)?

Clearly for a given wire diameter, the wider the spacing the lower the
loss up to the point where radiation plus dielectric loss becomes
significant, but I can imagine situations where you want to limit the
wire spacing and get low loss.

Cheers,
Tom

4094. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 00:42:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d1qe35$qc3$1@domitilla.aioe.org>
Source record: 80412

Absolutely...
Even though it is only necessary to deliver mere nano watts to the receiver on the other end, the atmospheric sphere, combined with the magnetosphere, around this planet is/are an amazing means of conducting rf for communications.
And the ducting of vhf and uhf can appear to be even "magically" efficient at times.
There was some guy from germany, old ex-postal worker as I remember, never did well in school, and never spoke a word till the age of four, quite a while back now--who claimed it all relative... he might have been right...

Regards

"K7ITM" <k7itm@aol.com> wrote in message
news:1111537507.347897.46430@f14g2000cwb.googlegroups.com...
> "John Smith" wrote, " Rather, I was looking for antennas which
> preformed better than the poor preformance which standard theory would
> suggest--..."
>
> Perhaps you're thinking of different antennas than I have in mind right
> now. But using simple resonant half-wave dipoles or quarter waves over
> ground planes, it seems to me the performance is pretty amazing.
> Consider that under the right HF skip conditions, you can communicate
> half way around the world with such antennas, fairly simple receivers,
> and just a few watts of RF. Put the same amount of RF into a
> transmission line made of copper wires and consider how far it gets
> before the power is too low to be useful for communications. Even if
> your transmission line were extremely low loss (say 2.5cm diameter
> wires forming a 600 ohm line, giving about 0.15dB/mile at 4MHz), in
> under 2000 miles, you wouldn't have enough power left on the line to
> give reliable communications. And the antenna-radiated RF would be
> detectable over a wide area, not just at the output of a transmission
> line. Even fairly small antennas, half or a quarter the size required
> for unloaded resonance, can be efficient enough to allow pretty
> remarkable transmission of RF energy. In fact, the inefficiencies of
> small antennas generally come about in the matching systems much more
> than in the radiating structure itself. So I'm left wondering just why
> you think antennas that perform as "standard theory" suggests are
> performing poorly.
>
> Or perhaps you're considering the difficulty of concentrating the
> radiation in a certain direction using small antennas...though I would
> not have thought that from your base posting.
>
> Cheers,

> Tom
>

4095. Re: Parabolic reflector for Wi-Fi?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 01:06:41 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <Bi30e.14386$GI6.12345@trnddc05>
Source record: 80336

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:q291411tr66s39pr5lq99ppcr3iiv8jcpp@4ax.com...
> On Tue, 22 Mar 2005 22:06:24 GMT, "Dale Parfitt"
> <par@parelectronics.com> wrote:
>
> >Depending on surface size, that may be correct. An offset dish and an
0.7F/D
> >horn would avoid that problem. Without doing the math, the now defunct-
and
> >available fro free, Primestar 1M offset dishes may be an excellent
solution.
> >Then again, if he only needs 10dB, a small loop yagi could serve with a
lot
> >less surface area.
>
> Hi Dale,
>
> But this does not answer the problem of the horn design.
>
> As I see it, a simple waveguide (no flared horn) itself will run
> something like 6" x 12". About the size of a shoe box. Adding the
> flare will probably quadruple that area. Now, to build an offset dish
> will force a rather more difficult reflector design project. The
> irony is that simply turning the horn around and using it would
> probably do just as well, but unfortunately be more cumbersome to
> construct and use than the simple design already linked to.
>
> As for the Primestar dish, that is undoubtedly a Point Locus Parabolic
> Reflector design that would clash with the geometry of its 10 times
> larger intended application. This does not bode well when the appeal
> is efficiency based.
>
> Even the style of the classic pringles-can-array is probably simpler
> to achieve than horns combined with offset dishes. [However, probably
> closer to Crisco Can sized weighing in at several pounds.]
>
> Quick Moral, The first 6 to 10 dB is the easiest gain to achieve.
>
> 73's
> Richard Clark, KB7QHC

At least on the last paragraph- agreed.
On the Primestar, I have sued this on 10GHz with a feed designed for high
F/D with very good efficienvy. Being offset, the feed does not eclipse any

portion of the dish.
There are a couple of new designs for feeds out- one is a square guide that does not require a scalar for choking off edge currents. My version at 1296 has an inside dimension of 5.75" and would then be 1/2 this for 2.4 GHz- or about 6 " SQ inches of occupied space. A 1M dish would have approx 1200 SQ", so even in a prime focus configuration, the feed blockage is a non- issue.
In the final analysis though, I'd go with a parasitic design- bogner or loop yagi. Too high a gain can also be a pointing issue problem.

Dale W4OP

4096. Re: Amateur Radio Military Appreciation Day

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 01:35:19 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <esh141h2rlo3phkanel715ej7e68hh06l4@4ax.com>
Source record: 80414

On Tue, 22 Mar 2005 23:40:23 GMT, Sum Ting Wong <sumtingwong@aol.com>
wrote:

>On Mon, 21 Mar 2005 18:17:22 -0800, Richard Clark <kb7qhc@comcast.net>
>wrote:
>
>>
>>If it weren't for the Brits, we would all be speaking Dutch. Or
>>French. Or Spanish.
>
>Or we wouldn't have come to America in the first place to get away
>from those folks telling us how to live.

Kind of like Tom Delay telling us how to live?

Bob
k5qwg

> Take a lessson.
>
>S.T.W.

4097. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 03:13:58 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d1qmto$t31$1@domitilla.aioe.org>
Source record: 80329

Well....
I could have stated a less controversial design I guess.
Such as an antiresonate antenna cap--folded from aluminum foil, and intended to cancel out the moon bounced mind control rays from the aliens.
Since totally shielding the walls of my home with silver foil has failed to block the penetration of these "antenna rays" into my home, the cap might be just the ticket!
The burning question here would be what wavelength of foil the cap should it be folded from, and heck, I don't even think the frequency of their mind control rays registers on earth meters!
It is a conspiracy, I TELL YA!!! <grin>

Regards
"John Smith" <assemblywizard@gmail.com> wrote in message
news:d1lbhb$pj0$1@domitilla.aioe.org...
> My question(s):
>
> For an example, on the 10 meter band:
> If I take a 28" whip and mount it at the end of helical wound coil (wound
> on
> 1" diameter form), where the "wire length" of the coil, PLUS, the length
> of
> the whip (28" + coil wire length) is equal to 1/2 wavelength (electrical
> length)--BUT, the overall physical length of the antenna (top, tip of whip
> to base of helical wound coil) is 1/4 wavelength, what would the radiation
> pattern of such an antenna be?
>
> Would it favor the pattern of a 1/4 or 1/2 wave antenna--or, would the
> pattern be a compromise between the two--or, would the pattern be totally
> unrelated to either?
>
> What could I expect the impedance of such an antenna be? Would the
> reactance be capacitive or inductive? What would be the best way to
> provide
> a match to 50 ohm coax from such an antenna?
>
> What software is available to model such an antenna?
>
> Thanks in advance,
> warmest regards
>
>

4098. Re: (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 03:17:08 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1141ntqb26q8c2b@corp.supernews.com>
Source record: 80416

Unless I goofed up the math (a distinct possibility), the answer is that you want a Z0 of about 144 ohms, which is a spacing/diameter ratio of about 1.81.

This was pretty easy to solve via differentiation using the approximation Z0 ~ 120 * ln(2S/d) where S = the center-to-center wire spacing and d is the wire diameter. The answer I got was 120 ohms, or d = 2S/e, or S/d ~ 1.36. Unfortunately, this spacing is too close for the approximation to be accurate, so the answer wasn't good. When I used the full inverse hyperbolic cosine formula for Z0 and took the necessary derivative, I found the resulting equation too messy to solve in closed form. So I went brute force and used a simple program to iterate and spot the maximum. It looks to me like you need to maximize d * Z0 in order to minimize the loss (see below).

Don't trust my answer without some checking -- I did it pretty quickly so there's lots of room for error.

It's good to have an opportunity to dust off the neurons once in a while. Thanks.

Loss per unit length = attenuation constant alpha = 1/2 * (R/R0 + G/G0) nepers/m. With air dielectric, G ~ 0, so alpha = R/(2*R0), where R = AC resistance per meter (both wires) and R0 = (assumed purely real) Z0. Assuming skin effect is fully developed, R ~ k / d where d = wire diameter and k depends on frequency, resistivity, and permeability of the wire but not on d, S, or Z0. So alpha = k / (2 * d * R0). This shows that minimizing alpha (loss) requires maximizing d * R0, which appears to occur when R0 ~ 144 ohms (S/d ~ 1.81).

Roy Lewallen, W7EL

K7ITM wrote:
> More for the fun of pondering it than for any immediate practical
> reason...
>
> If I make a balanced two-wire transmission line from round wires, and
> I'm constrained to have the wire center-to-center spacing some
> particular value (say one inch, or five centimeters, or whatever), what
> wire diameter should I use to get the lowest matched-line loss? What
> impedance line does that give (assuming air dielectric)?
>
> Clearly for a given wire diameter, the wider the spacing the lower the

> loss up to the point where radiation plus dielectric loss becomes
> significant, but I can imagine situations where you want to limit the
> wire spacing and get low loss.
>
> Cheers,
> Tom
>

4099. Re: Phasing verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 03:48:42 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <4240E71A.A39@wt.net>
Source record: 80347

Rick Mintz wrote:
>
> Greetings all:
>
> I want to phase two Butternut HF-2V 40/80 verticals.
>
> Additionally I need to switch the phasing line so as to have a N-S and E-W
> directionality. 40 meters is the most important band in terms of the needed
> efficiency. Anyone done this and have some specifics?
>
> Rick W1TY

Being you want to go both directions, you will probably need to
use a compromise spacing that affords near equal gain in both
directions...Naturally, this will compromise maximum gain, but
not too much you can do about that, being in one direction you
will be running a broadside array, and the other, an endfire array.
The spacings for max gain are quite different for each type.
In general, max gain for a broadside array is about 5/8 wave
spacing. An endfire array, somewhere around 1/8 wave. So I'd
probably use something like a 1/4 wave spacing to make both
directions appx equal gain. You could model this, if you wanted
it real close...Naturally, on other bands, this will all go
out the window...But if you used the 1/4 wave spacing on 40m,
at least you could run an endfire array on 80m, using the close
1/8 wave spacing. The max gain of a wide spaced broadside array
is slightly higher than the max gain of a close end fire array.
But if you fed with a wider 5/8 WL spacing for max broadside gain,
it will be too wide to feed as a decent endfire array in the
other direction."2 db less than 1/8 wl spacing"
You could feed with 1/4 wave spacing for 80, and have 1/2 for 40,
but ditto again..You will lose a bit endfire.."about 1.5 db less"
If you use 1/4 wl spacing , the difference between the two
directions will be only about .5 db using 90 and 180 degrees
phasing , for broadside, and then endfire. You can try other
phasings and get even more patterns...
There are graphs in the antenna handbook.
Also, there are articles in the antenna handbook on
how to feed them. The simplest method I use, just being changing
feedline lengths...You don't really need a phasing line, per
say...IE: if you want to feed one element 90 out of phase from
the first, just add 90 degrees "1/4 wave" of extra feedline to
the second element ...Consider the velocity factor, etc...
There is plenty of info on all this in the ARRL antenna handbook.

http://web.wt.net/~nm5k

4100. Re: Down Tilt on Slot Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 04:17:12 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <4240ed49$0$3703$39cecf19@news.twtelecom.net>
Source record: 80344

Richard Fry wrote:
> "Richard Fry" <rfry@adams.net> wrote
>
>> As for the effects of beam tilt, Figure 1 in paper #9 at
>> http://rfry.com gives a graphical representation and discussion of
>> what can be expected.
>
> _______
>
> Sorry, the * CORRECT * URL that should show above is http://rfry.org .
> RF

It would be nice if you knew your own domain. ;)

Better if you actually pointed at the URL which has your answer to the question instead of a list of things which don't have a title of "Figure 1 in paper #9"

tom
K0TAR

4101. Re: Fresnel Zone Reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 04:41:06 UTC
From: Jmbi <invalid@nospam.com>
Message-ID: <3acab4F688dugU1@individual.net>
Source record: 80345

"Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote in message
news:MSGID_1=3a167=2f133.0_42406e4c@fidonet.org...
> Hi,
>
> How do Fresnel Zone Reflector satellite antennas work?
>
> A*s*i*m*o*v
>
>
Same as Fresno lens just cut out the sold sections 1/2 wavelength thick.
I knew a guy made on out of beer cans, each cut to length.

4102. Re: Amateur Radio Military Appreciation Day

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 04:41:39 UTC
From: Sum Ting Wong <sumtingwong@privacy.net>
Message-ID: <9rs141119nbllbj278uk4qcoi9micprula@4ax.com>
Source record: 80343

On Wed, 23 Mar 2005 01:35:19 GMT, Bob Miller <NOSPAM@neosoft.com>
wrote:

>Kind of like Tom Delay telling us how to live?

Him or anyone else.

S.T.W.

4103. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 04:58:33 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d1qt1tvvc1@domitilla.aioe.org>
Source record: 80348

Actually, and back to reality:
I am in the San Joaquin Valley in California, while this used to be one of the richest agricultural areas in the world, decades of double and triple farming has depleated the soil of many of the plentiful nutrients (salts, trace minerals, metals, etc.)
Also, this area was like a tule swap before levies were built to hold back the water, i.e., a peat bog!
Those who mentioned a poor and lossy ground condition might have something there...
This area may naturally favor the 1/2 properties.

But then too, maybe it is only those damn aliens with their mind control which are placing these ideas in my head! <grin> Yanno, agriculture uses a lot of those darn illegal aliens' labor!!!

Regards

"John Smith" <assemblywizard@gmail.com> wrote in message
news:d1qmto$t31$1@domitilla.aioe.org...
> Well....
> I could have stated a less controversial design I guess.
> Such as an antiresonate antenna cap--folded from aluminum foil, and
> intended
> to cancel out the moon bounced mind control rays from the aliens.
> Since totally shielding the walls of my home with silver foil has failed
> to
> block the penetration of these "antenna rays" into my home, the cap might
> be
> just the ticket!
> The burning question here would be what wavelength of foil the cap should
> it
> be folded from, and heck, I don't even think the frequency of their mind
> control rays registers on earth meters!
> It is a conspiracy, I TELL YA!!! <grin>
>
> Regards
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:d1lbhb$pj0$1@domitilla.aioe.org...
>> My question(s):
>>
>> For an example, on the 10 meter band:
>> If I take a 28" whip and mount it at the end of helical wound coil (wound
>> on
>> 1" diameter form), where the "wire length" of the coil, PLUS, the length
>> of

>> the whip (28" + coil wire length) is equal to 1/2 wavelength (electrical
>> length)--BUT, the overall physical length of the antenna (top, tip of
>> whip
>> to base of helical wound coil) is 1/4 wavelength, what would the
>> radiation
>> pattern of such an antenna be?
>>
>> Would it favor the pattern of a 1/4 or 1/2 wave antenna--or, would the
>> pattern be a compromise between the two--or, would the pattern be totally
>> unrelated to either?
>>
>> What could I expect the impedance of such an antenna be? Would the
>> reactance be capacitive or inductive? What would be the best way to
>> provide
>> a match to 50 ohm coax from such an antenna?
>>
>> What software is available to model such an antenna?
>>
>> Thanks in advance,
>> warmest regards
>>
>>
>
>

4104. (",) Do You Want To Know For Sure You Are Going To Heaven?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 09:08:17 UTC
From: Ron038652@yahoo.com
Message-ID: <1111568897.788586.235030@f14g2000cwb.googlegroups.com>
Source record: 80349

http://www.want-to-be-sure.blogspot.com << Click On Link

4105. Re: (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 12:43:22 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d1ro99jap1@titan.btinternet.com>
Source record: 80350

As he says, Roy's resulta are very approximate. That's mainly because he neglected proximity effect between the wires.

A better approximation is obtained by incorporating an approximate expression for proximity effect. However, this makes differentiation of the loss formula with respect to wire diameter ridiculously tedious. So I found minimum loss by plotting a graph with a pocket calculator and searching for it.

At HF when skin effect is fully effective, and neglecting dielectric loss in comparison with conductor loss -

For a fixed wire spacing, as wire diameter increases, the wires get closer together and proximity loss eventually increases faster than ordinary loss decreases due to the increase in diameter.

Thus minimum loss occurs at a smaller diameter and a greater Spacing/Diameter ratio. The Ro at which minimum loss occurs is independent of both frequency and wire conductivity. Results are -

Ro = 177 ohms. Spacing between wire centres is 2.29 times wire diameter.

Which demonstrates that mathematics is vastly superior and takes priority over practical experiments and making measurements.

From an engineering point of view, K7ITM asked the wrong question. He should have asked, for a given wire spacing, what wire diameter minimises the cost of the copper. Or something like that.

Many years back a similar sort of calculation was done for coax. Coax does not suffer from proximity effect. It's easier to work out. The answer was 75 ohms. That's how 75 ohms became the standard comunications Ro. There are many millions of miles of the stuff. The Chinese are now making even more of it.

Reg, G4FGQ

4106. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 13:14:50 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d1rq4a$r37$1@hercules.btinternet.com>
Source record: 80351

Without line amplifiers across the USA, if all the energy output from the sun was sent into one end of the phone line, only one electron in a thousand years would trickle out of the other end.

4107. Re: Down Tilt on Slot Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 13:28:34 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <42416f59_5@newsfeed.slurp.net>
Source record: 80352

Maybe I have a subconcious ".com envy?" The URL points to the entry page leading to all the papers on the website. Paper 9 is easy to find in the numbered list on the "Papers" page, and the others listed there might interest some. That was my thinking, anyway.

RF

4108. Re: Down Tilt on Slot Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 14:42:13 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <42417fc4$0$3714$39cecf19@news.twtelecom.net>
Source record: 80353

Richard Fry wrote:

> Maybe I have a subconcious ".com envy?" The URL points to the entry
> page leading to all the papers on the website. Paper 9 is easy to find
> in the numbered list on the "Papers" page, and the others listed there
> might interest some. That was my thinking, anyway.
>
> RF

I have done the same when sending a reminder email to myself, and gotten back "xxxxxx@taring.com - invalid user". .com is pounded into our brains.

4109. Re: Feeding Ladderline thru window

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 15:13:34 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <424188a8$1_1@127.0.0.1>
Source record: 80354

Ted Bruce wrote:
> Cecil,
> I'm pretty sure that Plexiglass is a trade name for acrylic panels.
> That stuff is not at all durable.

There's a picture of the Plexiglasï¿½ panel on my web page that
was taken ten years ago in Arizona and I'm still using it.
It's the 1/2 inch thick stuff, is still in good shape, and
is still performing its function perfectly. My Piper Plastics
properties chart says the effect of sunlight on Acrylic is "nil".
The main reason that I used acrylic was - it was a 50 cent piece
of stuff from the odds and ends box at a plastics place in Phoenix.
I also used it and some acrylic rods to build an air-core mobile
loading coil about 15 years ago. That coil is still in good shape.

> On the othe hand, Lexan (trade
> name) is polycarbonate, which is very durable.

Yep, Lexanï¿½ is the stuff used in Airplane windows and is easy
to machine. It is superior to acrylic in every way. If I had
used polycarbonate, it would probably still be performing its
function perfectly. (My '96 GMC Sierra Pickup with 180,000 miles
on it is still performing its function perfectly. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
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4110. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 15:19:12 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <424189fa$1_2@127.0.0.1>
Source record: 80355

jgboyles@aol.com wrote:
> In an earlier post I stated that it looked like the real part of the
> antenna impedance needed to be less than 50 ohms to get a perfect
> match, using this method.

Maybe it's the same as the parallel tuning coil installed
at the base of a 75m mobile antenna which has a real part
equal to 12-25 ohms (depending on the quality of the antenna).
--
73, Cecil http://www.qsl.net/w5dxp

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4111. Re: (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 15:35:08 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42418db6$1_1@127.0.0.1>
Source record: 80356

Reg Edwards wrote:
> Many years back a similar sort of calculation was done for coax. Coax
> does not suffer from proximity effect. It's easier to work out. The
> answer was 75 ohms. That's how 75 ohms became the standard
> comunications Ro.

I vaguely remember something about efficiency Vs power
handling capability being the difference in the 75 ohm
standard and the 50 ohm standard. Is that right?
--
73, Cecil http://www.qsl.net/w5dxp

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4112. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 16:17:45 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <424197b4_2@127.0.0.1>
Source record: 80358

> jgboyles@aol.com wrote:
>> In an earlier post I stated that it looked like the real part of the
>> antenna impedance needed to be less than 50 ohms to get a perfect
>> match, using this method.

EZNEC comes with VERT1.EZ, a 40m vertical. I just ran it
at 19 MHz and EZNEC reports a 50-j160 ohm feedpoint impedance
with a maximum gain of 2.23 dBi and a TOA of 16 deg. Seems all
that is needed for matching to 50 ohms is a series base coil.
--
73, Cecil http://www.qsl.net/w5dxp

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4113. Re: (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 16:17:48 UTC
From: John - KD5YI <kd5yikes@mindspring.com>
Message-ID: <MEg0e.1985$gl5.1773@newsread1.news.pas.earthlink.net>
Source record: 80357

Cecil Moore wrote:
> Reg Edwards wrote:
>
>> Many years back a similar sort of calculation was done for coax. Coax
>> does not suffer from proximity effect. It's easier to work out. The
>> answer was 75 ohms. That's how 75 ohms became the standard
>> comunications Ro.
>
>
> I vaguely remember something about efficiency Vs power
> handling capability being the difference in the 75 ohm
> standard and the 50 ohm standard. Is that right?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
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> http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+
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Page 5-15 of The ARRL UHF/Microwave Experimenter's Manual says:

"Consider that both power handling capability and cable losses vary with Zo.
It has been shown that cable losses are minimum at a characteristic
impedance on the order of 75 [Ohms], while power handling capability is
maximum at a Zo of about 30 [Ohms]."

(The book used the Greek symbol rather than [Ohms])

The quoted passage is in a chapter by Dr. Paul Shuch, N6TX, Professor of
Electronics, Pennsylvania College of Technology. At the end of the quote, is
an indication to see footnote 13 which is:

"Moreno, Theodore, Microwave Transmission Design Data, Dover Publications,
1948."

73,
John

4114. Compact 40m gain antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 16:40:48 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <42419b8e$0$3708$39cecf19@news.twtelecom.net>
Source record: 80359

I have a coworker that would like to put up a 40m antenna on his tower
that has some gain and directivity. I have modeled a few things, and
while they are fairly satisfactory, I wanted to see what ideas the group
had.

The approximate limitations are as follows -

o Boomlength 30 feet
o Element length 30 feet
o Any vertical components are max -10 feet from the plane of the boom
and elements. The reason here is that it's a crankup, and his roof
clearance would be about 10 feet when lowered.

It would be desirable to have both CW and phone covered, but phone only
is ok.
It will need to be coax fed.

Thanks.

tom
K0TAR

4115. Re: Mild steel wire for Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 17:09:44 UTC
From: William Mutch <wcm1@NOSPAM.cornell.edu>
Message-ID: <MPG.1cab6ce7feef8420989802@newsstand.cit.cornell.edu>
Source record: 80360

In article <2%K_d.13959$hA3.6854@trnddc09>, j.jmartes@verizon.net
says...
> I plan to make a 6 element Yagi for FM reception at about 100 MHz. I
> would like to use 1/8 diameter mild steel wire for the parasitic elements.
> I have absolutely no experience with mild steel for antennas, but thought it
> would be more bird tolerant than the copper wire model I made.
> I'd sure appreciate hearing from anyone who knows about mild steel for
> "VHF" antennas.
>
> Jerry
>
Try brazing rod. 1/8" is quite rigid, easily soldered, doesn't
rust and is relatively inexpensive. Got mine for an FM phased array at
Home Depot for a little more than a dollar a yard.

4116. Re: Phasing verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 17:09:58 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnd438n6.2m98.bit-bucket@shell.config.com>
Source record: 80361

On Tue, 22 Mar 2005 15:00:18 GMT, Rick Mintz wrote:
> Greetings all:
>
> I want to phase two Butternut HF-2V 40/80 verticals.
>
> Additionally I need to switch the phasing line so as to have a N-S and E-W
> directionality. 40 meters is the most important band in terms of the needed
> efficiency. Anyone done this and have some specifics?

There was an article in QST (IIRC) in the last decade and a half (IIRC)
about selectable phasing. The coax to _both_ verticals - of equal
length - were brought into the shack. These were attached to the ends of
a multi-position switch - and then sections of coax were daisy-chained from
switch position to switch position. The coax to the xcvr, then, was
connected to the rotary position of the switch. At least, IIRC. HI!HI!

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

4117. Re: (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 17:19:47 UTC
From: richardharrison@webtv.net
Message-ID: <10502-4241A533-4@storefull-3253.bay.webtv.net>
Source record: 80362

Cecil Moore, W5DXP wrote:
"I vaguely remember something about efficiency versus power handling capability being the difference in the 75 ohm standard and the 50 ohm standard."

That seens exactly right. It`s the reason you would use 75-ohm Zo cable for TV distribution at low-power where you want to minimize loss but there is no danger of too much voltage flashing over the cable.

Terman in his 1955 edition on page 106 says:
"---in an air-insulated coaxial line of given outer radius b, Q will be maximum when the inner conductor has a size such thet b/a = 3.6. (b=inner radius of outer conductor in concentric line, and a=outer radius of inner conductor in concentric line) corresponding to Zo = 77 ohms. These are also the proportions for minimum power loss----."
However the maximum power that can be transmitted without exceeding a given voltage gradient occurs when b/a 1.65, giving Zo = 30 ohms."

So for minimum loss you would want Zo of about 75 ohms and for maximum power capability you would want 30 ohms. I suspect Zo=50 ohms is a compromise between power handling capability and reasonable loss.

Best regards, Richard Harrison, KB5WZI

4118. Loading Coil Q

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 17:56:34 UTC
From: Buck <iam@this.site>
Message-ID: <uca3419vpurnm4a9dddrtk6s0hveh3uqti@4ax.com>
Source record: 80363

I have aluminum poles of three diameters, 1.5, 1, and .5 inches. I have enough of the first two to create a pole of about 15 feet each and about 8 to 9 feet with the 1/5 inch poles. The poles are no more than 4 feet long each, but they are able to tuck inside each other, at least for the same diameter.

What I want to do is to make up a 'kit' with these that I can take to the field to setup whatever antenna I want to use at the time. For example, I might set it up as a 20 meter vertical in one configuration, but in the evening, I might reconfigure it to 75 meters or 15, or 30 or whatever I desire.

One consideration is to create a high-q coil for it. I am thinking of using 1/4 inch copper tubing to make a ten to twelve inch diameter coil so I can match it to the lower bands. I have been reading that base loaded coils have to be matched to the antenna, but center loaded verticals are more closely matched to 50 ohms. from what I have been reading, the center loaded coil requires more turns and a top loaded coil even more.

A capacity hat is also a viable option.

I am wondering how much I am helping or hurting myself with the larger coil or if I would be better off with a smaller coil. One thought is to connect x number of poles, then the coil, then another set of poles or a whip to make the final adjustment for the match or to match the antenna by tapping the coil.

I am open to all suggestions, but I am interested in knowing the best location for the coil and the best size for it.

Thank you

--
73 for now
Buck
N4PGW

4119. Re: 5/8 wave 2 meter antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 18:10:44 UTC
From: jgboyles@aol.com
Message-ID: <1111601444.581116.73290@f14g2000cwb.googlegroups.com>
Source record: 80364

Cecil Moore wrote:
> jgboyles@aol.com wrote:
> > In an earlier post I stated that it looked like the real part of
the
> > antenna impedance needed to be less than 50 ohms to get a perfect
> > match, using this method.
>
> Maybe it's the same as the parallel tuning coil installed
> at the base of a 75m mobile antenna which has a real part
> equal to 12-25 ohms (depending on the quality of the antenna).
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
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News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World!
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If you use an "L" network consisting of two inductors as a matching
device, the R must be less than 50 ohms. I was incorrectly modeling
the tapped coil as a two inductor "L" network.
Gary N4AST

4120. Re: (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 19:41:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1143hjm85r4tr4d@corp.supernews.com>
Source record: 80365

You're correct, I neglected proximity effect. And the wires are close enough that it's a factor. What is the approximate expression you used?

Roy Lewallen, W7EL

Reg Edwards wrote:
> As he says, Roy's resulta are very approximate. That's mainly because
> he neglected proximity effect between the wires.
>
> A better approximation is obtained by incorporating an approximate
> expression for proximity effect. However, this makes differentiation
> of the loss formula with respect to wire diameter ridiculously
> tedious. So I found minimum loss by plotting a graph with a pocket
> calculator and searching for it.
> . . .

4121. Re: (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 20:41:40 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d1ska4$c6t$1@hercules.btinternet.com>
Source record: 80366

"John - KD5YI" wrote
> Cecil Moore wrote:
> > Reg Edwards wrote:
> >
> >> Many years back a similar sort of calculation was done for coax.
Coax
> >> does not suffer from proximity effect. It's easier to work out.
The
> >> answer was 75 ohms. That's how 75 ohms became the standard
> >> comunications Ro.
> >
> >
> > I vaguely remember something about efficiency Vs power
> > handling capability being the difference in the 75 ohm
> > standard and the 50 ohm standard. Is that right?
> > --
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Encryption =----
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>
> Page 5-15 of The ARRL UHF/Microwave Experimenter's Manual says:
>
> "Consider that both power handling capability and cable losses vary
with Zo.
> It has been shown that cable losses are minimum at a characteristic
> impedance on the order of 75 [Ohms], while power handling capability
is
> maximum at a Zo of about 30 [Ohms]."
>
> (The book used the Greek symbol rather than [Ohms])
>
> The quoted passage is in a chapter by Dr. Paul Shuch, N6TX,
Professor of
> Electronics, Pennsylvania College of Technology. At the end of the
quote, is
> an indication to see footnote 13 which is:
>

> "Moreno, Theodore, Microwave Transmission Design Data, Dover
Publications,
> 1948."
>
> 73,
> John
==========

It is unreliable to use ARRL and similar publications as Bibles. They are written by amateurs for amateurs and tell only a sufficient fraction of the whole story. Phrases such as "It has been shown that .... " arise. They also refer to UHF/Microwave when LF and HF are of interest. At microwave frequencies the dielectric loss cannot be considered negligible.

For minimum attenuation, air-spaced coax Zo = 75 ohms and D/d = 3.6
For solid polyethylene Zo is smaller.

Confusion about the value of Zo which maximises power handling capabilty arises because coax cables have different shapes and materials to support the inner conductor. Even though the dielectric may be considered lossless its presence affects matched line loss.

If my memory serves me correct, for maximum power handling I think 50 ohms refers to air-spaced coax and 30 ohms or thereabouts refers to solid polyethylene dielectric. Or it may be the other way about. It will be different again for a different dielectric permittivity.

For a coax line used as a tuned circuit, eg., when short-circuited, maximum impedance at resonance occurs when Zo = 132 ohms and D/d ratio = 9.1

And just to add a little more to the confusion, whether the outer conductor is solid or braided also makes a small difference.

Reg, G4FGQ

4122. Re: (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 20:58:06 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1111611486.272516.322860@z14g2000cwz.googlegroups.com>
Source record: 80367

Actually, the problem as I posed it is from an engineering point of view, assuming that a particular constraint dominated the problem...well, actually I had in mind stating it as wires that would fit inside some diameter, but that complicated it more than I wanted as an exercise for this group. Engineers should first ask what the goals and constraints are, and the space the wires fit into may be one such constraint. I suppose minimum copper cost would be the smallest wires (that could handle the required power)!

A starting point for a more complete problem statement from an engineering point of view might be, "Minimize total system cost, expressed in net present value, of the system over its operating life, under a particular set of performance and installation constraints."

Thanks, though, for your consideration of proximity effect. Without that, I got the same answer as Roy, and appreciated Roy's inclusion of the basis on which he made the calculation.

I'd point out that for coaxial cable construction, a particular D/d minimizes the loss for a given D, and a different D/d minimizes the electric field strength for a given power and therefore maximizes the power handling capability of the line in the case where the line is voltage-limited (generally low duty cycle pulse operation), and yet another D/d minimizes the peak electric field strength for a given voltage applied to the line. So long as the dielectric loss is negligible and the dielectric is uniform, all those D/d ratios are independent of dielectric fill. The D/d which minimizes loss is close to the D/d which maximizes power handling capability of the line, if the line is power-dissipation limited, but not exactly so because it doesn't consider how the center conductor gets rid of its heat. The minimum attenuation (if the inner and outer conductors are the same smooth material and skin depth is small compared with the thickness of each) is for D/d = 3.5911, which as others have pointed out yields about 76.7 ohms with air dielectric, but if the dielectric is solid polyethylene, it's about 51 ohms. If the center conductor is smooth copper and the outer is corrugated aluminum, the minimum-attenuation D/d increases. If the dielectric is foamed polyethylene, that pushes the impedance back toward 75 ohms.

Cecil...if the line is limited in power handling by its temperature rise (which is almost always the case, except for low duty cycle pulses or line construction that's very different from what we commonly use), the minimum attenuation configuration will also be the minimum net dissipation configuration, and therefore close to the optimal power handling capability. As an example of how cables we commonly use are

thermally limited, consider that solid-dielectric RG-213 at 40C ambient
and at 10MHz is rated at about 2kW. At 50 ohms, that's only 316 vrms
for a CW signal, and RG-213 is rated for use up to 5000 vrms, which
would 250 times as much power (so it better only come in little short
bursts that don't overheat the line). That "power handling is maximum
for Zo=30 ohms" thing is ONLY good if the line is limited by voltage
breakdown, not by temperature rise! It IS useful--in radar systems,
for example--but you must be careful to understand your application.

Cheers,
Tom

4123. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 21:22:19 UTC
From: richardharrison@webtv.net
Message-ID: <24934-4241DE0B-37@storefull-3256.bay.webtv.net>
Source record: 80368

Richard Fry wrote:
"This post started with a question about a 28" loaded whip operating on 10 meters presumably to be used in a mobile application."

As Richard Fry noted, the vehicle and its position affect the antenna`s pattern. Also at 10 meters, a 1/4-wave whip would be little more than 8 feet long. A 28" whip is less than 1/3 a resonant length. Capacitive loading to make up the missing length is probably impractical. A loading coil is lossy but practical. Best choice is likely the 8-ft whip. A CB whip can be trimmed to resonance on 10-meters.

If one wanted an antenna to fit between poles about 1/4-wave apart, one could use a 1/4-wave folded dipole, which is resonant due to its 1/2-wave circumference. Gain is only 0.5 dB less than a full 1/2-wave dipole. Like a small loop, the small folded dipole can be resonated with a high-Q series capacitor. Arnold B. Bailey in "TV and Other Receiving Antennas" gives the resistance of the 1/4-wave folded dipole as 6000 ohms at center frequency. This would require transformation to a lower impedance. Another resonant antenna that fits a 1/4-wave space is square and 1/4-wave on each side. It`s about 35 feet of wire for 10 meters and has a feedpoint resistance of 100 to 200 ohms depending on its height over the earth. Over good earth, feed one of its vertical sides in the center. Over poor earth, feed a horizontal side in the center. See ON4UN`s "Low-Band DXing" Chapter 10 for details on large loops.

Best regards, Richard Harrison, KB5WZI

4124. Re: Loading Coil Q

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 22:00:51 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d1souj$k66$1@hercules.btinternet.com>
Source record: 80369

Program LOADCOIL models short, coil-loaded, vertical antennas.

Amongst other things it allows the coil to slide up and down the antenna (from the keyboard) and find the coil location at which power radiating efficiency is maximised.

The best location depends on antenna dimensions, coil dimensions and ground loss resistance ohms, and is very non-critical. Top loading is never the best.

Download program LOADCOIL in a few seconds from website below and run immediately.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

4125. Re: Loading Coil Q

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 23:13:22 UTC
From: nm5k@wt.net
Message-ID: <1111619602.596023.165780@f14g2000cwb.googlegroups.com>
Source record: 80370

Buck wrote:
> I have aluminum poles of three diameters, 1.5, 1, and .5 inches. I
> have enough of the first two to create a pole of about 15 feet each
> and about 8 to 9 feet with the 1/5 inch poles. The poles are no more
> than 4 feet long each, but they are able to tuck inside each other,
at
> least for the same diameter.
>
> What I want to do is to make up a 'kit' with these that I can take to
> the field to setup whatever antenna I want to use at the time. For
> example, I might set it up as a 20 meter vertical in one
> configuration, but in the evening, I might reconfigure it to 75
meters
> or 15, or 30 or whatever I desire.
>
> One consideration is to create a high-q coil for it. I am thinking
of
> using 1/4 inch copper tubing to make a ten to twelve inch diameter
> coil so I can match it to the lower bands.

That thickness of coil is overkill....

> I have been reading that
> base loaded coils have to be matched to the antenna, but center
loaded
> verticals are more closely matched to 50 ohms.

The loading coil is used to tune out the capacitive reactance.
The input impedance will vary to length of the vertical, coil loss,
ground loss, etc..Just because a center load is used, doesn't always
mean the input impedance will end up 50 ohms..

from what I have been
> reading, the center loaded coil requires more turns and a top loaded
> coil even more.

Yes.
>
> A capacity hat is also a viable option.

It's the best option. And top loading is best using capacitive
loading, where as if using a coil for top loading, the coil losses
overshadow any increase in efficiency from the improved current
distribution, etc.. Top loading using wires is the best system you
could use, if you can swing it.
>

> I am wondering how much I am helping or hurting myself with the
larger
> coil or if I would be better off with a smaller coil.

It's not that critical...

One thought is
> to connect x number of poles, then the coil, then another set of
poles
> or a whip to make the final adjustment for the match or to match the
> antenna by tapping the coil.
>
> I am open to all suggestions, but I am interested in knowing the best
> location for the coil and the best size for it.

The *best* location for a loading coil is appx 2/3 to 3/4 up the
radiator. But even half way up is fine. Base loading is the least
efficient, and has the worst current distribution. But it uses the
least number of coil turns, and would have the least coil loss.
Being low, it's the easiest to adjust also...
Don't forget that the ground system for a short loaded vertical,
becomes even more critical than for a full 1/4 wave vertical.
It's for this reason that I usually avoid verticals for portable
use, unless the ground issue can be dealt with. IE: at the beach
is a good place for verticals...But in the boonies, on lossy, rocky,
ground, they may not do so hot if you have no radials. In that
case, I would take the vertical "sticks", and hang a dipole from
them...:/ My mobile antenna is my usual "portable vertical"...MK

4126. Re: (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 23:32:56 UTC
From: John - KD5YI <kd5yikes@mindspring.com>
Message-ID: <I0n0e.2236$gI5.488@newsread1.news.pas.earthlink.net>
Source record: 80371

Reg Edwards wrote:
> "John - KD5YI" wrote
>
>>Cecil Moore wrote:
>>
>>>Reg Edwards wrote:
>>>
>>>
>>>>Many years back a similar sort of calculation was done for coax.
>
> Coax
>
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>
> The
>
>>>>answer was 75 ohms. That's how 75 ohms became the standard
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>>>
>>>
>>>I vaguely remember something about efficiency Vs power
>>>handling capability being the difference in the 75 ohm
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> Usenet
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>>(The book used the Greek symbol rather than [Ohms])
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> are written by amateurs for amateurs and tell only a sufficient
> fraction of the whole story. Phrases such as "It has been shown that
> .... " arise. They also refer to UHF/Microwave when LF and HF are of
> interest. At microwave frequencies the dielectric loss cannot be
> considered negligible.
>
>
> For minimum attenuation, air-spaced coax Zo = 75 ohms and D/d = 3.6
> For solid polyethylene Zo is smaller.
>
>
> Confusion about the value of Zo which maximises power handling
> capabilty arises because coax cables have different shapes and
> materials to support the inner conductor. Even though the dielectric
> may be considered lossless its presence affects matched line loss.
>
>

> If my memory serves me correct, for maximum power handling I think 50
> ohms refers to air-spaced coax and 30 ohms or thereabouts refers to
> solid polyethylene dielectric. Or it may be the other way about. It
> will be different again for a different dielectric permittivity.
>
>
> For a coax line used as a tuned circuit, eg., when short-circuited,
> maximum impedance at resonance occurs when Zo = 132 ohms and D/d ratio
> = 9.1
>
>
> And just to add a little more to the confusion, whether the outer
> conductor is solid or braided also makes a small difference.
> ----
> Reg, G4FGQ
>
>

Okay, Reg, then go read the material referenced by footnote 13. That's one reason I included it. Maybe that way we won't need to rely on your memory.

John

4127. Re: (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-23 23:45:59 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d1sv3n$n6k$1@titan.btinternet.com>
Source record: 80372

```
Provided skin effect is fully operative, ie., skin depth is about
1/6th wire diameter or less, proximity effect increases wire
resistance by dividing normal skin-effect resistance of a single
straight wire by K :

K = SquareRoot( 1 - Square( D / S ) )

where D is wire diameter and S is centre-to-centre wire spacing. Note
that resistance increases towards infinity as the pair of wires
approach contact with each other. This is confirmed by precision
measurements.

To minimise line attenuation for any given wire spacing, maximise U
with respect to D :

U = D * InvCosh( S / D ) * SquareRoot( 1 - Square( D / S ) ) .

-----
Reg, G4FGQ
```

4128. water proof swr's?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 02:34:27 UTC
From: ml <m@di.net>
Message-ID: <m-3A00CA.21342023032005@news.verizon.net>
Source record: 80373

hi

larger swr's bother me, if you can bare w/my ramblings i wonder f
anyone might have some useful tips...

i have a center fed dipole mounted on some pvc w/eyebolts .

previous rains/snows didn't really effect my swr's

accross 6-160m my swr's were usually 1:2 maybe 1:4 on one band.

thanks to the mast mounted sgc237 feeding my dipole via 5' of ladderline

its a short dipole 25ft hot side about 40ft rf 'gnd' side.

today i guess the snow was wet and trees, n stuff are all coated
w/thick ice, can't see my antenna, but guessing it might have the
center part frozen?? and or other parts. (not my dipole is roof mounted
and clear of trees)

on most bands starting at 18mhz and lower my swr are now anywhere from
1.5 to about 2, not terrible, but not great(good as b4)

so my question is , does anyone know of any tricks that might prevent
ice from altering the swr's, anyone try plastic coatings that repel
ice or 'hoods" guessing they'd have to be far or would just form a ice
hat?

my center is spaced just about 1 1/4" the dia of my pvc pipe and only
slightly larger than my 450 ladder,, would it make sence to make the
top of my ladder line wider spaced ie increasing the gap between the 2
dipole halves? to minimize ice?? i am guessing that creating this
larger 'gap' would increase my ohms maybe this would be bad

thanks

4129. Re: Loading Coil Q

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 03:30:32 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_424239f6@fidonet.org>
Source record: 80275

"nm5k@wt.net" bravely wrote to "All" (23 Mar 05 15:13:22)
--- on the heady topic of "Re: Loading Coil Q"

nm> It's the best option. And top loading is best using capacitive
nm> loading, where as if using a coil for top loading, the coil losses
nm> overshadow any increase in efficiency from the improved current
nm> distribution, etc.. Top loading using wires is the best system you
nm> could use, if you can swing it.

How about distributed loading?

A*s*i*m*o*v

... May you find the light and walk the mountain tops.

4130. Want Money? Try This

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 04:49:51 UTC
From: gh <ghernandez46@mailblocks.com>
Message-ID: <1111639791.277460.277060@f14g2000cwb.googlegroups.com>
Source record: 80374

Quick Easy Cash

: LOTS OF CASH, FAST AND COMPLETELY LEGAL, THIS REALLY WORKS!!
: THIS REALLY CAN MAKE YOU EASY MONEY!! IT WORKS!!! BUT YOU
: HAVE TO FOLLOW IT TO THE LETTER FOR IT TO WORK!!!!
: A little while back, I was browsing through newsgroups, just like you
are now, and came
: across an article similar to this that said you could make thousands
of dollars within weeks
: with only an initial investment of $6.00! So I thought," Yeah, right,
this must be a scam",
: but like most of us, I was curious, so I kept reading.
: Anyway, it said that you send $1.00 to each of the 6 names and
address stated in the
: article. You then place your own name and address in the bottom of
the list at #6, and
: post the article in at least 200 newsgroups. (There are thousands) No
catch, that was it.
: So after thinking it over, and talking to a few people first, I
thought about trying it. I figured
: what have I got to lose except 6 stamps and $6.00, right? Like most
of us I was a little
: skeptical and a little worried about the legal aspects of it
: all. So I checked it out with the U.S. Post Office (1-800-725-2161)
and they confirmed
: that it is indeed legal! Then I invested the measly $6.00. Well GUESS
WHAT!!... within 7
: days, I started getting money in the mail! I was shocked! I figured
it would end soon, but
: the money just kept coming in. In my first week, I made about $25.00.
By the end of the
: second week I had made a total of over $1,000.00! In the third week I
had over
: $10,000.00 and it's still growing. This is now my fourth week and I
have made a total of
: just over $42,000.00 and it's still coming in rapidly. It's
: certainly worth $6.00, and 6 stamps, I have spent more than that on
the lottery!!
: Let me tell you how this works and most importantly, why it
works....also, make sure you
: print a copy of this article NOW, so you can get the information off
of it as you need it.
: A cousin of mine did this a few months back, and he is now enjoying
life in his brand new Tahoe Sport!! ($30,000+). So it does work!!

: STEP 1: Get 6 separate pieces of paper and write the following on
each piece of paper
: "PLEASE PUT ME ON YOUR MAILING LIST." Now get 6 US $1.00 bills and
place
: ONE inside EACH of the 6 pieces of paper so the bill will not be seen
through the
: envelope to prevent thievery. Next, place one paper in each of the 6
envelopes and seal
: them. You should now have 6 sealed envelopes, each with a
: piece of paper stating the above phrase, your name and address, and a
$1.00 bill. What
: you are doing is creating a service by this. THIS IS ABSOLUTELY
LEGAL! Mail the 6
: envelopes to the following addresses:
:
:
:
:
:
: 1- Kevin Klingelhoefer
: 615 Crescent St.
: Langhorne, PA 19047
: USA
:
: 2- A.L.
: Rimon 631/24
: Natzareth illit, T.D. 13123
: ISRAEL (17000)
:
: 3- Jeremy Franklin
: PO Box 11
: McCune, KS 66753
: USA
:
: 4- Wallden Enterprises Inc.
: 14329 - 68th Avenue, Surrey, B.C. V3W 2H5
: Canada
:
: 5- Frank Gomez
: 11108 Shoreline Dr.
: El Paso, TX 79936
: USA
:
: 6-G.H.
1011 W. Alberta St.
Anaheim,Ca. 92805
USA
:
: STEP 2: Now take the #1 name off the list that you see above, move
the other names up

: (6 becomes 5, 5 becomes 4, etc...) and add YOUR Name as number 6 on
the list. STEP
: 3: Change anything you need to, but try to keep this article as close
to original as possible.
: Now, post your amended article to at least 200 newsgroups. (I think
there are close to
: 24,000 groups) All you need is 200, but remember, the more you post,
the more money
: you make! ---DIRECTIONS -----HOW TO POST TO NEWSGROUPS------------
: Step 1) You do not need to re-type this entire letter to do your own
posting. Simply put
: your cursor at the beginning of this letter and drag your
: cursor to the bottom of this document, and select 'copy' from the
edit menu. This will copy
: the entire letter into the computers memory. Step 2) Open a blank
'notepad' file and place
: your cursor at the top of the blank page. From the 'edit' menu select
'paste'. This will paste
: a copy of the letter into notepad so that you can add your name to
the list. Step 3) Save
: your new notepad file as a .txt file. If you want to do your postings
in different sittings,
: you'll always have this file to go back to.
: Step 4) Use Netscape or Internet explorer and try searching for
various newsgroups
: (on-line
: forums, message boards, chat sites, discussions.) Step 5) Visit these
message boards and
: post this article as a new message by highlighting the text of this
letter and selecting paste
: from the edit menu. Fill in the Subject, this will be the header that
everyone sees as they
: scroll through the list of postings in a particular group, click the
post message button.
: You're done with your first one!
: Congratulations...THAT'S IT! All you have to do is jump to different
newsgroupes and
: post away, after you get the hang of it, it will take about 30
seconds for each newsgroup!
: **REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE
: MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF
: 200** That's it! You will begin reciving money from around the world
within days! You
: may eventually wany to rent a P.O.Box due to the large amount of mail
you will receive. If
: you wish to stay anonymous, you can invent a name to use, as
: long as the postman will deliver it. **JUST MAKE SURE ALL THE
ADDRESSES ARE
: CORRECT.**
: Now the WHY part: Out of 200 postings, say I receive only 5 replies

(a very low
: example). So then I made $5.00 with my name at #6 on the letter. Now,
each of the 5
: persons who just sent me $1.00 make the MINIMUM 200 postings, each
with my name
: at #5 and only 5 persons respond to each of the original 5, that is
another $25.00 for me,
: now those 25 each make 200 MINIMUM posts with my name at #4 and only
5 replies
: each, I will bring in an additional
: $125.00! Now, those 125 persons turn around and post the MINIMUM 200
with my
: name at #3 and only receive 5 replies each, I will make an additional
$626.00! OK, now
: here is the fun part, each of those 625 persons post a MINIMUM 200
letters with my
: name at #2 and they each only receive 5 replies, that just made me
$3,125.00!!! Those
: 3,125 persons will all deliver this message to 200 newsgroups with my
name at #1 and if
: still 5 persons per 200 newsgroups react I will receive $15,625,00!
With a original
: investment of only $6.00! AMAZING! When your name is no longer on the
list, you just
: take the latest posting in the newsgroups, and send out another $6.00
to names on the list,
: putting your name at number 6 again. And start posting again. The
thing to remember is,
: do you realize that thousands of people all over the world are
joining the internet and
: reading these articles everyday, JUST LIKE YOU are now!! So can you
afford $6.00
: and see if it really works?? I think so... People have said, "what if
the plan is played out
: and no one sends you
: the money? So what! What are the chances of that happening when there
are tons of new
: honest users and new honest people who are joining the internet and
newsgroups everyday
: and are willing to give it a try? Estimates are at 20,000 to 50,000
new users, every day,
: with thousands of those joining the actual internet. Remember, play
FAIRLY and
: HONESTLY and this will work.
: Also, for the skeptics, you're looking at this and thinking about
doing it right? imagine
how many millions are looking and thinking the EXACT same thing

Good Luck

4131. Re: Loading Coil Q

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 06:12:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6em4415i9d1t1b93ugtp17imf8cfp4uc0n@4ax.com>
Source record: 80276

On Wednesday, 23 Mar 2005 22:30:32 -500, "Asimov"
<Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote:

>How about distributed loading?

Hi OM,

The wrong way, and it is called air cooled resistance. If you simply did a Googles group search using that very query, you would find a trove of hits.

73's
Richard Clark, KB7QHC

4132. Re: Marine band antenna for the Yaesu VX-7R

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 06:39:42 UTC
From: gbrent@garlic.com
Message-ID: <9vn44196gt1ddbi50sae2eav543b1olq1q@4ax.com>
Source record: 80277

On Tue, 15 Mar 2005 17:23:34 +0800, "muskie" <muskie@muskie.com>
wrote:

>Hi,
>
>I'm thinkinig to make an antenna for the marine band (156mhz) and hooked to
>my vx-7r portable.
>
>1. How could I make it to a reasonable carrying size (perhaps less than 12
>inches)?
>
>2. Is it possible to use the steel wire and put the heat shrink tube
>outside?
>
>3. Is the wire solder to the SMA core and no ground need?
>
>Thanks,
>
>Muskie
>
>

You can make a coaxial antenna using coax cable. Take RG-58 for
example. Cut off the outside jacket about 20 inches from the end.
Make a small hole in the shield brade and pull out the center
insulator and conductor. Cut both the center conductor and braid to
about 18 inches in length. Then tape the braid to the side of the
coax cable. Make some sort of hook on the top of the center conductor
and hook it, or maybe tape it, to a high place. The antenna will be
effectively a vertical dipole. They work great.

4133. More articles and new program now on web

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 08:01:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <1144svblsi20oac@corp.supernews.com>
Source record: 80278

I've uploaded two more articles to my web site:

"Antenna Feed Lines for Portable Use", from Technical Correspondence, QST, Feb. 1992. This includes measurements I made of 300 ohm twinlead which showed that it can become very lossy when wet. http://eznec.com/Amateur/Articles/Portable_Feed_Lines.pdf.

"The Simplest Phased Array Feed System - That Works", from the ARRL Antenna Compendium, Vol. 2. If you simply cut "phasing lines" to electrical lengths equaling the delay between elements in a phased array, you won't usually get anywhere near the phase delay you expect. You'll also get unequal element currents. The reasons for this are explained in Chapter 8 of the ARRL Antenna Book, and briefly in this article. The article shows how "phasing line" lengths which *do* work can be calculated, and new program Simpfeed (http://eznec.com/Amateur/Articles/SimpfeedZip.exe) does the calculations for you.

Roy Lewallen, W7EL

4134. Re: Yagi Hairpin Match

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 08:52:52 UTC
From: "Mike M." <notme@invalid.email.net>
Message-ID: <qav441p51jn3j15ancla05b7ptu8u6s70k@4ax.com>
Source record: 80279

On Sun, 13 Mar 2005 08:46:04 +0800, "muskie" <muskie@muskie.com>
wrotF:

>I'm a newbie in HAM and would like to build my own 430mhz 3 elements Yagi
>but don't have enough information. Although I have the ARRL Handbook and
>ARRL Antenna book. But, I do have some questions about that.
>
>
>
>1. Detail information about the hairpin. match (i.e. length, the distance
>between the 2 legs and the location to solder)
>
>
>
>2. The feedline should be even or odd 1/4 wavelength?
>
>
>
>3. When solder the feedline to the hairpin, what's the location?
>
>
>
>4. If I don't have the SWR meter, is it still possible to build the Yagi?
>
>
>
>I did the search for a month on the net and newsgroup, but still don't have
>any luck to give me the answers. Thanks for any comment in advance!!!
>
Look at this antenna link. No hairpin match, but I built the 6 element
wide band utility yagi with excellent results.

http://www.cebik.com/vhf/wb46.html

And here is a link to some hairpin match info.

http://www.cebik.com/trans/beta.html

Might as well got to the index, Cebik has lots of good stuff at his
site.

http://www.cebik.com/radio.html

4135. (",) Do You Want To Know For Sure You Are Going To Heaven?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 11:11:50 UTC
From: Ron038653@yahoo.com
Message-ID: <1111662710.724440.7960@o13g2000cwo.googlegroups.com>
Source record: 80280

http://www.want-to-be-sure.blogspot.com << Click On Link

4136. Re: Loading Coil Q

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 15:13:29 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4242d9b8$1_1@127.0.0.1>
Source record: 80281

Reg Edwards wrote:
> Amongst other things it allows the coil to slide up and down the
> antenna (from the keyboard) and find the coil location at which power
> radiating efficiency is maximised.

Sliding the coil up and down the antenna also changes
the resonant frequency.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4137. Re: water proof swr's?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 15:16:56 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4242da87$1_1@127.0.0.1>
Source record: 80282

ml wrote:
> so my question is , does anyone know of any tricks that might prevent
> ice from altering the swr's, ...

Move to Hawaii?

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4138. Re: Loading Coil Q

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 15:19:15 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4242db12$1_1@127.0.0.1>
Source record: 80283

Asimov wrote:
> How about distributed loading?

Helical antennas are not as efficient as
other forms of loading.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4139. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 15:23:55 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4242dc2a$1_1@127.0.0.1>
Source record: 80284

aunwin@insightbb.com wrote:
> Yet at the same time many are anxious to find out how I managed
> to lower the TOA.

Art, I'll bet you could do something interesting using
entangled electrons. I wonder if entangled electrons
emit entangled photons?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4140. Re: water proof swr's?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 16:11:03 UTC
From: Harold Burton <hwburton@cableone.net>
Message-ID: <1145pkqa0ar3c58@corp.supernews.com>
Source record: 80285

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:4242da87$1_1@127.0.0.1...
> ml wrote:
>> so my question is , does anyone know of any tricks that might prevent ice
>> from altering the swr's, ...
>
> Move to Hawaii?
>

Wonder if you could keep spraying it to keep it wet while tuning, get an acceptable impedance match, and then perhaps see it improve as it dries? If, by any lucky fluke that worked, it might keep rain or ice from rendering the antenna unusable. You could try making it a little long and then a little short and testing both lengths wet and dry. At worst it might not improve in either case as it dries and you could go back to the standard tuning mode. It might be worth trying. I like antenna experimentation and, being retired, have all the time I need to experiment. (Money is my limiting constraint.)

Harold
KD5SAK

4141. Re: water proof swr's?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 16:24:09 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <JQB0e.24531$hU7.24217@newssvr33.news.prodigy.com>
Source record: 80286

ml,
I would think that it may be more trouble than it's worth. The
'trick' would be to keep stuff off of the ladder line which is the
problem (mostly).
One method I've found that works for me is to give the ladder
line a wack or two with a broom stick. Knocks the snow/ice off,
but (I probably have easier access to the ladder line than you do
since it runs from a window to my antenna :) .).
'Doc

PS - I'd rather move to Hawaii, but...

4142. Re: water proof swr's?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 16:26:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <68q541p07ab46790h9r8ci0dn0p8pjbesv@4ax.com>
Source record: 80287

On Thu, 24 Mar 2005 02:34:27 GMT, ml <m@di.net> wrote:

>accross 6-160m my swr's were usually 1:2 maybe 1:4 on one band.

Hi Myles,

Water and Ice are not that big a deal when you have an SGC.

This and other SWR reports suggest your tuner is not taking care of
the job. You are not supposed to be seeing SWR. It sounds like you
don't have enough choking on the transmission line and/or the control
lines going up to your dipole. As pointed out before, trying to
obtain a total solution with one antenna MUST lead to some exceptions
in operation.

73's
Richard Clark, KB7QHC

4143. Re: Loading Coil Q

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 16:28:59 UTC
From: Buck <iam@this.site>
Message-ID: <v5q5411l79211qkok66far2l8ildgiuvm5@4ax.com>
Source record: 80288

Thank you to Cecil, Reg, Mark, Asimov and Richard.

I have read what you said and done more reading about Cap Hats. The Cap Hat doesn't improve the inductor, it basically replaces it, at least in part, which removes the loss of the inductor. I misunderstood that somehow.

What I will focus on, then, is to create some form of capacity hat for each appropriate band together with an adjustable vertical length for tuning to the appropriate frequency.

Mark, You may have a point about the dipole being better, especially for portable operation. I just want to experiment with the aluminum poles I have. I may take your advice and use them to create a portable tower in the long-run. But first I think I will try out the vertical.

Thanks to all,

Buck
N4PGW

On Wed, 23 Mar 2005 12:56:34 -0500, Buck <iam@this.site> wrote:

>
>I have aluminum poles of three diameters, 1.5, 1, and .5 inches. I
>have enough of the first two to create a pole of about 15 feet each
>and about 8 to 9 feet with the 1/5 inch poles. The poles are no more
>than 4 feet long each, but they are able to tuck inside each other, at
>least for the same diameter.
>
>What I want to do is to make up a 'kit' with these that I can take to
>the field to setup whatever antenna I want to use at the time. For
>example, I might set it up as a 20 meter vertical in one
>configuration, but in the evening, I might reconfigure it to 75 meters
>or 15, or 30 or whatever I desire.
>
>One consideration is to create a high-q coil for it. I am thinking of
>using 1/4 inch copper tubing to make a ten to twelve inch diameter
>coil so I can match it to the lower bands. I have been reading that
>base loaded coils have to be matched to the antenna, but center loaded
>verticals are more closely matched to 50 ohms. from what I have been
>reading, the center loaded coil requires more turns and a top loaded
>coil even more.
>
>A capacity hat is also a viable option.

>
>I am wondering how much I am helping or hurting myself with the larger
>coil or if I would be better off with a smaller coil. One thought is
>to connect x number of poles, then the coil, then another set of poles
>or a whip to make the final adjustment for the match or to match the
>antenna by tapping the coil.
>
>I am open to all suggestions, but I am interested in knowing the best
>location for the coil and the best size for it.
>
>Thank you

--
73 for now
Buck
N4PGW

4144. Re: water proof swr's?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 16:40:45 UTC
From: Buck <iam@this.site>
Message-ID: <69r541tjsij4ovd79uubci58b91vktlbtd@4ax.com>
Source record: 80289

Use nichrome wire and run power into the antenna until the ice melts
off?

OK, I am crawling back into my hole now....

;)

Buck

On Thu, 24 Mar 2005 02:34:27 GMT, ml <m@di.net> wrote:

>hi
>
>
>larger swr's bother me, if you can bare w/my ramblings i wonder f
>anyone might have some useful tips...
>
>i have a center fed dipole mounted on some pvc w/eyebolts .
>
>previous rains/snows didn't really effect my swr's
>
>accross 6-160m my swr's were usually 1:2 maybe 1:4 on one band.
>
>thanks to the mast mounted sgc237 feeding my dipole via 5' of ladderline
>
>
>its a short dipole 25ft hot side about 40ft rf 'gnd' side.
>
>
>today i guess the snow was wet and trees, n stuff are all coated
>w/thick ice, can't see my antenna, but guessing it might have the
>center part frozen?? and or other parts. (not my dipole is roof mounted
>and clear of trees)

--
73 for now
Buck
N4PGW

4145. Re: Loading Coil Q

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 17:41:39 UTC
From: nm5k@wt.net
Message-ID: <1111686099.291449.133240@l41g2000cwc.googlegroups.com>
Source record: 80290

>
> Mark, You may have a point about the dipole being better, especially
> for portable operation. I just want to experiment with the aluminum
> poles I have. I may take your advice and use them to create a
> portable tower in the long-run. But first I think I will try out the
> vertical.

You could probably rig it up to do either, if the vertical
is stout enough to support a dipole/s. I have a couple of
drive on masts that I use with the fence rail masting.
Two of those makes 20 ft, and a good support for dipoles,
or other antennas. For industrial use, I have a tower and
beam I can drag around...I've drug it to the last four field
days...Wonder if I'm gonna make it five..?? It's a lot of
work for a two day deal....:/ I'm almost tempted to take a
field day vacation for a year...Have to see...MK

4146. Re: (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 18:43:43 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1111689823.035465.22720@g14g2000cwa.googlegroups.com>
Source record: 80291

John - KD5YI wrote:
...
>
> Okay, Reg, then go read the material referenced by footnote 13.
That's one
> reason I included it. Maybe that way we won't need to rely on your
memory.
>
The confusion comes (in the quoting of the texts) because of a failure to consider that there are two different mechanisms that can limit the power handling capability of the line. One is power dissipation (temperature rise), and the other is voltage breakdown. Clearly the minimum power dissipation for a given input power and matched line occurs where the line attenuation is minimum. But if you make the inner conductor slightly larger, it may be able to get rid of heat enough better (for a given line construction) that the inner conductor temperature rise is slightly lower, even though the power dissipation is slightly higher. I would expect, though, that the optimal construction in most circumstances would result in an impedance only marginally lower than the minimum attenuation case, and the improvement would be a very small one. You'd have to convince me it was really important to get me to worry about it beyond just minimizing attenuation.

If it's voltage breakdown that limits the line power handling capability, the air-insulated impedance of the line will be at a D/d that results in about 30 ohms impedance for air-dielectric line, and .66 times as much for solid polyethylene line.

And if it's maximum voltage-handling you want, the D/d results in somewhere around 50 ohms with air-insulated line, about 33 ohms with solid poly, if memory serves. I could look it up if it's really important.

Generally in ham applications, (reasonably well matched) lines will be power dissipation limited, not voltage limited.

Cheers,
Tom

4147. Re: Loading Coil Q

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 20:32:08 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_42432756@fidonet.org>
Source record: 80301

"Cecil Moore" bravely wrote to "All" (24 Mar 05 09:19:15)
--- on the heady topic of "Re: Loading Coil Q"

CM> From: Cecil Moore <w5dxp@hotmail.com>
CM> Xref: aeinews rec.radio.amateur.antenna:27211

CM> Helical antennas are not as efficient as
CM> other forms of loading.

Considering that sometimes efficiency isn't quite as important, like
for example reception, are helical antennas less used simply because
the math is a little harder or not discussed enough? I recall seeing
this type being popularized during the old CB craze in the mid 70's.

A*s*i*m*o*v

... "Ol' Frothinslosh": The pale, stale ale with the foam on the bottom.

4148. Re: Loading Coil Q

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 20:42:26 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_42432757@fidonet.org>
Source record: 80302

"nm5k@wt.net" bravely wrote to "All" (24 Mar 05 09:41:39)
--- on the heady topic of "Re: Loading Coil Q"

nm> From: nm5k@wt.net
nm> Xref: aeinews rec.radio.amateur.antenna:27218

nm> For industrial use, I have a tower and
nm> beam I can drag around...I've drug it to the last four field
nm> days...Wonder if I'm gonna make it five..?? It's a lot of
nm> work for a two day deal....:/ I'm almost tempted to take a
nm> field day vacation for a year...Have to see...MK

Lately I've seen TV media trucks with a type of rather wide pole of
what seems to consist of a large coiled up ribbon. When they get to a
location they unfurl the tube and it raises the microwave antenna.
They seem to be made out of plastic or carbon, not sure. The one I saw
went up about 30 feet. It seems very lightweight in any case. Anyone
here know what it is?

A*s*i*m*o*v

... "Not a morning person" doesn't even begin to cover it.

4149. Re: (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 20:48:56 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d1v93ncpn1@hercules.btinternet.com>
Source record: 80292

From LF to VHF it is ALWAYS power dissipated in conductor resistance which limits the power handling capability of the line. Voltage has nothing to do with it. Above VHF dielectric loss becomes be the limitation.

Consideration of ambient temperature is vital. Are you located in Alaska at midnight in mid-winter? Or are you in the New Mexico desert in July, at noon. It makes hell of a difference?

With coax everything depends on the temperture softening point of polyethylene and on the the longer-term temperature deterioration (hardening, cracking, brittleness) of the PVC sheath.

Is the cable embedded in an asbestos insulated brick wall or is it suspended in free air with a breeze in the shade? Or in sunlight?

The power rating data provided by manufacturers for amateur grade coaxial cables is useless nonsense. From inspection of manufacturers' tables (watts) it can be deduced their ratings are based on the melting point of polyethylene. Salesmen's blurbs, no doubt plagiarised in ARRL publications, sound very good in order to sell the stuff.

To gain an elementary understanding of what it's all about, download in a few seconds, easy to use, practical application, small program "COAXRATE" from website below and run immediately. (Not zipped up).

Program "COAXRATE".

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

4150. Re: (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 21:30:28 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42433213$1_1@127.0.0.1>
Source record: 80293

Reg Edwards wrote:
> From LF to VHF it is ALWAYS power dissipated in conductor resistance
> which limits the power handling capability of the line. Voltage has
> nothing to do with it.

What if it arcs?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4151. Re: (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-24 22:29:13 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d1vevp$1gc$1@sparta.btinternet.com>
Source record: 80294

```
> What if it arcs?
> --
=================

It shows the voltage rating has been exceeded.
```

4152. Re: (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 00:57:48 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1111712268.340271.128040@g14g2000cwa.googlegroups.com>
Source record: 80295

Reg wrote:

"From LF to VHF it is ALWAYS power dissipated in conductor resistance which limits the power handling capability of the line. Voltage has nothing to do with it. Above VHF dielectric loss becomes be the limitation. "

Always? Hardly. Transmission of pulses with low duty cycle will get you to voltage-limited operation pretty quickly. Transmission of power to a high-resistance load where the line is a very small fraction of a wavelength long may get you into voltage-limited operation. Those perhaps aren't typical ham applications, but they do happen in practice. Also, though the cable itself may not have trouble with the applied voltage, the connectors at the ends may. They're generally rated for much lower voltage than the line itself.

Also, for the small-diameter (nom. RG-58 size) cables I've been using lately, conductor loss exceeds dielectric loss out past 10GHz. YYMV.

Cheers,
Tom

4153. Re: (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 01:26:07 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4243694e$1_2@127.0.0.1>
Source record: 80296

Reg Edwards wrote:
>>What if it arcs?

> It shows the voltage rating has been exceeded.

But, but, but, Reg, you said "voltage has nothing
to do with it." :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4154. Re: (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 01:32:18 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42436ac2$1_2@127.0.0.1>
Source record: 80297

K7ITM wrote:
> Also, though the cable itself may not have trouble with the
> applied voltage, the connectors at the ends may. They're generally
> rated for much lower voltage than the line itself.

Yep, during duststorms and thunderstorms, the connectors
arc. Arcing at the coax connectors of my IC-745, IC-725,
IC-706, and IC-756PRO has never seemed to injure any of
them. Is that just luck or are they that well protected?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4155. Re: water proof swr's?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 02:38:38 UTC
From: John Franklin <jpfrank@peoplepc.com>
Message-ID: <OQK0e.7976$S46.5737@newsread3.news.atl.earthlink.net>
Source record: 80298

I feel your pain!!

"Harold Burton" <hwburton@cableone.net> wrote in message
news:1145pkqa0ar3c58@corp.supernews.com...

> I like antenna experimentation and, being retired, have all the time I
> need to experiment. (Money is my limiting constraint.)
>
> Harold
> KD5SAK
>

4156. Re: 160 meter mobile -- Reality Check

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 04:35:49 UTC
From: Crazy George <munsch@atglobal.net>
Message-ID: <4244a823_4@news1.prserv.net>
Source record: 80228

Gary:

First, you are off by a decade, the Texas DPS moved from 1658 kcps. to 42.9 Mc. in 1949. Prior to the move, they used (very successfully, I might add) a earlier version of Reg's antenna, which was a 10 foot bamboo pole helically wound with waxed cotton insulated bell wire. IIRC, the winding was spaced about 1 to 1&#65533; wire diameters apart . The transmitter was directly connected to the base of the antenna with a short piece of 8 gauge wire, so there was no SWR to
worry about, and final tuning of the antenna was done in the transmitter output pi-network. Black '41 and '48 Fords with 10 foot cane poles on the rear bumper brackets, brings back memories.

--
Crazy George
The attglobal.net address is a SPAM trap. Please change that part to: att<dot>biz properly formatted.
<jgboyles@aol.com> wrote in message
news:1111271411.108180.28790@l41g2000cwc.googlegroups.com...

<snippety>

> I read somewhere that in the 50's, law
> enforcement 2-way radios operated close to our 160m ham band. Wonder
> what kind of antennas they used on the police cars. Of course the
> distances they were interested in are different from hams.
> Gary N4AST
>

4157. WARC Bands Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 04:43:47 UTC
From: KU4YP <ku4yp@verizon.net>
Message-ID: <7GM0e.10355$Ax.1042@trnddc04>
Source record: 80299

hello all,

i have a question reference WARC bands dipoles. will using a common feed line be a problem? nothing fancy, just a three band dipole (6 elements, 3 each side) using a common feed line and supports.

just wanting to see if someone has already tried it and what their results were. any info will be appreciated.

73 mike ku4yp

p.s. i already have multi band antennas which can be tuned to the above bands. i just wanted to experiment with dipoles cut for resonance.

4158. NEC Section 810 Online?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 04:57:12 UTC
From: Jim Miller <jim@jtmiller.com>
Message-ID: <1111726632.065464.168340@o13g2000cwo.googlegroups.com>
Source record: 80300

I've not be able to find a copy of the NEC to read section 810 which supposedly covers amateur antennas.

Anyone got a link?

tnx
jtm

4159. Re: WARC Bands Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 05:44:02 UTC
From: Buck <iam@this.site>
Message-ID: <s59741poqde0qba1ticnfgnmj7lbt85kpd@4ax.com>
Source record: 80303

On Fri, 25 Mar 2005 04:43:47 GMT, KU4YP <ku4yp@verizon.net> wrote:

>hello all,
>
> i have a question reference WARC bands dipoles. will using a common
>feed line be a problem? nothing fancy, just a three band dipole (6
>elements, 3 each side) using a common feed line and supports.
>
> just wanting to see if someone has already tried it and what their
>results were. any info will be appreciated.

I haven't actually tried it, but I haven't heard anything to indicate
a problem unless they are in beam formation in which one band becomes
a reflector in a higher band pending the spacing.

I would suggest spacing the elements 8 inches apart. That spacing
seems to make things work better than a closer spacing if the
antennas are parallel.

--
73 for now
Buck
N4PGW

4160. Re: (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 09:29:15 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d20llagmk1@titan.btinternet.com>
Source record: 80304

```
> >>What if it arcs?
>
> > It shows the voltage rating has been exceeded.
>
> But, but, but, Reg, you said "voltage has nothing
> to do with it." :-)

==============================

I'm very sorry Cec, but in future I shall have to make a modest charge
for answering your questions. In advance if you wouldn't mind.
```

4161. what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 10:05:16 UTC
From: jcooper874@webtv.net
Message-ID: <26750-4243E25C-444@storefull-3275.bay.webtv.net>
Source record: 80305

is it cw i guess new to radio

4162. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 11:05:07 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <DfS0e.15545$191.10466@trnddc02>
Source record: 80306

Could you rephrase your question so it's understandable? Perhaps use a verb,
some standard sentence syntax, and some punctuation??

Joe
W3JDR

<jcooper874@webtv.net> wrote in message
news:26750-4243E25C-444@storefull-3275.bay.webtv.net...
> is it cw i guess new to radio
>

4163. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 11:31:53 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <JES0e.12090$rL3.7426@fe2.columbus.rr.com>
Source record: 80307

Welcome aboard rraa.

" fsk " may still stand for " frequency-shift keying ", a form of frequency
modulation where one frequency is a " mark " and another is a " space ".
Combinations of marks and spaces make characters ...
--
73, Dave, N3HE
Cincinnati OH

<jcooper874@webtv.net> wrote in message
news:26750-4243E25C-444@storefull-3275.bay.webtv.net...
> is it cw i guess new to radio
>

4164. Re: (yet another) transmission line question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 11:44:29 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d20tit$o7i$1@titan.btinternet.com>
Source record: 80308

> Provided skin effect is fully operative, ie., skin depth is about
> 1/6th wire diameter or less, proximity effect increases wire
> resistance by dividing normal skin-effect resistance of a single
> straight wire by K :
>
> K = SquareRoot(1 - Square(D / S))
>
> where D is wire diameter and S is centre-to-centre wire spacing.
Note
> that resistance increases towards infinity as the pair of wires
> approach contact with each other. This is confirmed by precision
> measurements.
>
> To minimise line attenuation for any given wire spacing, maximise U
> with respect to D :
>
> U = D * InvCosh(S / D) * SquareRoot(1 - Square(D / S)) .
>
==========

Roy, having given a little more thought to it, I think that by differentiating U with respect to D and equating dU/dD to zero, things will then simplify and the value of the ratio S /D, and hence Zo, will be obtained directly.

If you still have enough enthusiasm I leave it to you to perform the differentiation.

Reg.

4165. Re: best 6 meter??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 13:00:12 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <wXT0e.2906$Pc.2078@tornado.tampabay.rr.com>
Source record: 80309

tru this site
he has the best price on loops that i have seen
http://ku4ab.com/_wsn/page3.html
but if you want the best antenna you need a yagi
good luck

chasm@texas.net wrote:
> Have decided to pull out the IC736 and put it back into service and start
> rebuilding the Ant farm
>
> will hang a DX-CC and keep the Diamond dual bander. but am interested in
> working skip or DX in 6m as it appears that a lot of people are having a lot of
> fun doing it. actually, I would like to try to nail service with a town up
> about 600 mi NW of me and doing it with 6m just seems like a hoot to me.
>
> I have been looking at reviews on the PAR OA-50 and the KB6KQ 6M Loop
> any comments on those.
>
> or any other suggestions??
>
> thanks
> chas
>
>
>
> ...

4166. (",) Do You Want To Know For Sure You Are Going To Heaven?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 13:53:03 UTC
From: Ron038655@yahoo.com
Message-ID: <1111758783.412077.230070@o13g2000cwo.googlegroups.com>
Source record: 80310

http://www.want-to-be-sure.blogspot.com << Click On Link

4167. Re: WARC Bands Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 14:29:30 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <d2178b$1252$1@f04n12.cac.psu.edu>
Source record: 80311

Hi:

That's called a "fan" dipole and it will work. A tip on tuning it up though, start with the lowest frequency antenna elements first and work your way up. There is ALOT of interaction between the elements in a fan dipole and the higher frequency ones are affected the most. If you put the elements at right angles to each other or as far apart as you can the interaction will be minimized. Because of the interaction between the elements the SWR bandwidth will be different than a single band dipole would be mostly less. Have fun!

--
John Passaneau, W3JXP
Penn State University
w3jxp@arrl.net

"KU4YP" <ku4yp@verizon.net> wrote in message
news:7GM0e.10355$Ax.1042@trnddc04...
> hello all,
>
> i have a question reference WARC bands dipoles. will using a common
> feed line be a problem? nothing fancy, just a three band dipole (6
> elements, 3 each side) using a common feed line and supports.
>
> just wanting to see if someone has already tried it and what their
> results were. any info will be appreciated.
>
> 73 mike ku4yp
>
> p.s. i already have multi band antennas which can be tuned to the above
> bands. i just wanted to experiment with dipoles cut for resonance.

4168. Re: Loading Coil Q

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 14:41:13 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <424423aa$1_1@127.0.0.1>
Source record: 80312

Asimov wrote:
> "Cecil Moore" wrote:
> CM> Helical antennas are not as efficient as
> CM> other forms of loading.
>
> Considering that sometimes efficiency isn't quite as important, like
> for example reception, are helical antennas less used simply because
> the math is a little harder or not discussed enough?

Probably a collection of reasons. A high-Q loading coil in
the center of a vertical is much more efficient than spreading
the loading out over the entire antenna. Helical antennas are
hard to wind and are generally wound on PVC pipe which also
reduces efficiency and increases wind load. Even more efficiency
is lost without a good ground plane. If one doesn't compromise
on the ground plane, why compromise on the antenna? Most of us
old timers have tried helicals and given up on them - lots of
effort to achieve a poor performance.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4169. Re: NEC Section 810 Online?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 14:59:18 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <bHV0e.66691$7z6.54165@lakeread04>
Source record: 80313

"Jim Miller" <jim@jtmiller.com> wrote
> I've not be able to find a copy of the NEC to read section 810 which
> supposedly covers amateur antennas.
>
> Anyone got a link?
>
> tnx
> jtm

Hi Jim,

The US National Electrical Code (NEC) is trademarked and copywrite property of the National Fire Protection association (NFPA). There is no official web posting of this information permitted. .

You may either purchase this information, visit your local library, or request help from readers of this group who may subscribe to the NEC and NFPA standards as I do. If you go to the library, also research Art 250 Grounding, and both 810 and 820. Various articles of the code are discussed in various electrical forums such as Mike Holt, et al.

Best regards,

Jack Painter
Virginia Beach, Virginia

4170. Re: Loading Coil Q

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 15:17:05 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d21a1h$8h7$1@sparta.btinternet.com>
Source record: 80314

"Cecil Moore" wrote
> A high-Q loading coil in
> the center of a vertical is much more efficient than spreading
> the loading out over the entire antenna.

==========

Wrong! Spreading a multi-turn coil allows a MUCH thicker wire
diameter to be used with spaced turns. Also the coil diameter can be
increased to minimise the number of turns.

Result : higher coil Q, lower coil loss, greater efficiency.

Reg.

4171. Re: Loading Coil Q

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 15:22:41 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <1148b6e51eg256b@corp.supernews.com>
Source record: 80315

Dear "Asimov" w/o a call sign:

If you look closely, you will see that the "coiled up ribbon" is a
transmission line or a pair of transmission lines. By elevating the
antenna, which must be connected to the truck through at least one
transmission line, much improved transmission range is effected.

73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net

"Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote in message
news:MSGID_1=3a167=2f133.0_42432757@fidonet.org...
> "nm5k@wt.net" bravely wrote to "All" (24 Mar 05 09:41:39)
> --- on the heady topic of "Re: Loading Coil Q"
>
<snip>
>
> Lately I've seen TV media trucks with a type of rather wide pole of
> what seems to consist of a large coiled up ribbon. When they get to a
> location they unfurl the tube and it raises the microwave antenna.
> They seem to be made out of plastic or carbon, not sure. The one I saw
> went up about 30 feet. It seems very lightweight in any case. Anyone
> here know what it is?
>
> A*s*i*m*o*v
>

4172. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 15:37:06 UTC
From: Caveat Lector <CL@watchout.com>
Message-ID: <DeW0e.694$k57.493@fed1read07>
Source record: 80316

frequency-shift keying (FSK): A modulating scheme in which the modulating signal shifts the output frequency between predetermined values. Usually, the instantaneous frequency is shifted between two discrete values termed the "mark" and "space" frequencies.

Used to transmit digital data, i.e. two different carrier frequencies are used to represent zero and one.
FSK was originally used to transmit teleprinter messages by radio (RTTY) but can be used for most other types of radio and land-line digital telegraphy

Although this a form of frequency modulation (FM),
FM is usually thought of as a voice signal that modulates the carrier.

--
CL -- I doubt, therefore I might be !

<jcooper874@webtv.net> wrote in message
news:26750-4243E25C-444@storefull-3275.bay.webtv.net...
> is it cw i guess new to radio
>

4173. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 15:38:21 UTC
From: cl <clfurent@Yahoo.Com>
Message-ID: <7hW0e.56526$NC6.36155@newsread1.mlpsca01.us.to.verio.net>
Source record: 80317

"W3JDR" <joe@roccis.com> wrote in message
news:DfS0e.15545$191.10466@trnddc02...
> Could you rephrase your question so it's understandable? Perhaps use a
> verb, some standard sentence syntax, and some punctuation??
>
> Joe
> W3JDR
>
> <jcooper874@webtv.net> wrote in message
> news:26750-4243E25C-444@storefull-3275.bay.webtv.net...
>> is it cw i guess new to radio
>>
>
>

Looks like W3JDR may be new to radio too, to have not known what FSK meant.
No further clarification was needed.

cl

4174. Re: Loading Coil Q

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 16:28:48 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42443ce3$1_2@127.0.0.1>
Source record: 80318

Reg Edwards wrote:

> "Cecil Moore" wrote
>
>>A high-Q loading coil in
>>the center of a vertical is much more efficient than spreading
>>the loading out over the entire antenna.

> Wrong! Spreading a multi-turn coil allows a MUCH thicker wire
> diameter to be used with spaced turns. Also the coil diameter can be
> increased to minimise the number of turns.
>
> Result : higher coil Q, lower coil loss, greater efficiency.

Got to disagree with you on that one, Reg. Mobile shootout
field strength measurements put all the helicals, no matter
what wire diameters were used, considerably down from the
well-designed bugcatchers and screwdrivers. That meter of
wire in each turn of the helical has more resistance than
the centimeter of radiating bottom section that it replaces
at the feedpoint.

It is well known and accepted that moving the mobile loading
coil from the center of the antenna to the base will reduce
the efficiency even though the inductance required for loading
is decreased. With a helical, part of the loading coil is
at the base and that's simply a bad idea when efficiency
is important.

One mobile, in particular, should have performed well. It
was made from 1/4 inch copper tubing with a large diameter
and proper spacing between turns but it was about equal to
a Hustler and considerably down from the top performer which
was top-loaded.

What wins the mobile shootouts is the longest possible straight
bottom section under the coil where the highest current occurs.
That maximum current occurs all up and down that straight bottom
section when a good top hat is added to the antenna. I once won
the shootout competition by putting all the loading (coil+top-hat)
at the top of the antenna using cheap stuff from my junk box.

If one wants to win a mobile shootout, one cannot afford to
install a helical coil at the maximum current section.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4175. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 18:19:47 UTC
From: jcooper874@webtv.net
Message-ID: <14063-42445643-283@storefull-3272.bay.webtv.net>
Source record: 80319

always a mother goose in a newsgroup see w3jdr good buddy.

4176. Re: Loading Coil Q

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 18:45:04 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d21m7g$i56$1@titan.btinternet.com>
Source record: 80320

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:42443ce3$1_2@127.0.0.1...
> Reg Edwards wrote:
>
> > "Cecil Moore" wrote
> >
> >>A high-Q loading coil in
> >>the center of a vertical is much more efficient than spreading
> >>the loading out over the entire antenna.
>
> > Wrong! Spreading a multi-turn coil allows a MUCH thicker wire
> > diameter to be used with spaced turns. Also the coil diameter can
be
> > increased to minimise the number of turns.
> >
> > Result : higher coil Q, lower coil loss, greater efficiency.
>
> Got to disagree with you on that one, Reg. Mobile shootout
> field strength measurements put all the helicals, no matter
> what wire diameters were used, considerably down from the
> well-designed bugcatchers and screwdrivers. That meter of
> wire in each turn of the helical has more resistance than
> the centimeter of radiating bottom section that it replaces
> at the feedpoint.
>
> It is well known and accepted that moving the mobile loading
> coil from the center of the antenna to the base will reduce
> the efficiency even though the inductance required for loading
> is decreased. With a helical, part of the loading coil is
> at the base and that's simply a bad idea when efficiency
> is important.
>
> One mobile, in particular, should have performed well. It
> was made from 1/4 inch copper tubing with a large diameter
> and proper spacing between turns but it was about equal to
> a Hustler and considerably down from the top performer which
> was top-loaded.
>
> What wins the mobile shootouts is the longest possible straight
> bottom section under the coil where the highest current occurs.
> That maximum current occurs all up and down that straight bottom
> section when a good top hat is added to the antenna. I once won
> the shootout competition by putting all the loading (coil+top-hat)
> at the top of the antenna using cheap stuff from my junk box.

>
> If one wants to win a mobile shootout, one cannot afford to
> install a helical coil at the maximum current section.
> --
==========

Cec,

(1) A mobile antenna is NOT a 1/4-wave resonant, base-fed,
ground-mounted loaded vertical which behaves reasonably predictable.

(2) A mobile antenna is a relatively-isolated-from-ground, 1/2-wave
resonant, loaded, off-centre-fed vertical dipole which defies rational
analysis.

(3) It is impossible to separate the many different behaviour modes
and effects, differentiate between them and allocate relative
magnitudes. One has to be careful to control one's imagination when
describing effects.

I've never seen one near to, but I understand "screwdriver" type
mobile antennas are akin to long helicals specially at the lowest
operating frequency.

Reg.

4177. Re: NEC Section 810 Online?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 19:36:34 UTC
From: Jim Miller <jim@jtmiller.com>
Message-ID: <1111779394.858060.138840@f14g2000cwb.googlegroups.com>
Source record: 80321

Hi Jack

I'll check out the library.

Not officially posting the information seems contrary to the aim of ensuring adequate protection in these areas...

BWDIK...

jtm

4178. Re: Loading Coil Q

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 20:07:44 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42447031$1_1@127.0.0.1>
Source record: 80322

Reg Edwards wrote:
> I've never seen one near to, but I understand "screwdriver" type
> mobile antennas are akin to long helicals specially at the lowest
> operating frequency.

All of the screwdrivers with which I am familiar use a
3-6 foot straight bottom section. The 2 foot max coil is
approximately in the center with a 3-6 foot whip. The coil
goes in and out of the 3-6 foot bottom section for tuning.

Do you subscribe to the theory that a one foot long coil
radiates approximately the same RF as a one foot long
piece of wire? With any reasonable diameter of coil, the
resistance in that one foot long coil will be greater
than the resistance in one foot of wire. For instance,
the circumference of a coil may be one meter while the
turn spacing may be one centimeter. What size wire do
you need to compensate for that 100/1 ratio?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
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4179. Re: best 6 meter??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 20:21:59 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <Hp_0e.2601$zl.777@newssvr13.news.prodigy.com>
Source record: 80323

Chas-- these are all the equivelant of a dipole bent in a circle for
more or less omni directional- and they perform about equallly.
One consideration is they often change SWR , in wet weather.,
but that is more a consideration for a mobile operator. M Squared
also makes a version , and see :

http://jonz.net/W3DHJ/6mhalo.html

and, : http://www.qsl.net/k4pwo/sloop.htm

if you want to give home brewing one a try. These are NOT gain
antennas, but on even medieocre openings on six, can work quite
a few folks. For more effective antennas, a yagi is recommended.
Have fun on six. Been there, and done that for over 40 years.
Jim NN7K

chasm@texas.net wrote:
> Have decided to pull out the IC736 and put it back into service and start
> rebuilding the Ant farm
>
> will hang a DX-CC and keep the Diamond dual bander. but am interested in
> working skip or DX in 6m as it appears that a lot of people are having a lot of
> fun doing it. actually, I would like to try to nail service with a town up
> about 600 mi NW of me and doing it with 6m just seems like a hoot to me.
>
> I have been looking at reviews on the PAR OA-50 and the KB6KQ 6M Loop
> any comments on those.
>
> or any other suggestions??
>
> thanks
> chas
>
>
>
> ...

4180. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 22:03:40 UTC
From: richardharrison@webtv.net
Message-ID: <29705-42448ABC-343@storefull-3255.bay.webtv.net>
Source record: 80324

Caveat Lector described accurately and succinctly "FSK". For more information, do a web search on RFL Electronics, and on Quindar Tones

Best regards, Richard Harrison, KB5WZI

4181. Using 2 antennas as a repeater

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 23:08:18 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <WL01e.57616$6g7.20380@bignews1.bellsouth.net>
Source record: 80225

There was a question posted to another group about connecting to a distant antenna.
The post reminded me of another article (perhaps in QST) where someone who lived behind a mountain used 2 rhombic antennas as a "passive repeater" on uhf. He mounted both antennas at the summit of the mountain with one pointed to the repeater and the other pointed into the valley where he lived. As I recall, he was then able to communicate via the repeater.
This brings up other possibilities - like doing the same thing for inside-outside of a metal bldg.

4182. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 23:21:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d226e8$35k$1@domitilla.aioe.org>
Source record: 80226

Well, the "1/4 physical, 1/2 electrical" (double quarter as my friend refers to it) will just have remain as it is.
Its' advantage of being lighter and easier to handle, while presenting less of a wind load and "leverage" again the mast and mounting hardware allows me to raise it to a greater height than the full 1/2--NOT to mention the advantage of NO ground radials. With this advantage, its performance rivals the full 1/2. Weather I am daft or not--I will be using this antenna for an omnidirectional source.
Those seeking a backpacking antenna, an emergency portable antenna, or an antenna for operation in difficult and remote areas, or those seeking stealth (just hide it in a larger diameter PVC pipe and call it a flag pole!) would, most likely, find this design can be used to their advantage.

This posting sequence has been an enlightening experience though, and well worth the trouble. I have learned that most will wage a "religious war" if they think anyone is going to challenge the generally accepted ideas and methods.
If you insist on going on, you will run the gauntlet of nay sayers and be attacked. Guffaws and slurs against your mental stability will assualt you.
If one is looking to try something new--this is NOT the place to discuss it.
Perhaps another news group, where those who seek to intimidate and "out shout" true expermenters would be banned and refused posting would be a workable alternative and more conductive to attempts to break the mold.

Regards

"John Smith" <assemblywizard@gmail.com> wrote in message
news:d1qt1tvvc1@domitilla.aioe.org...
> Actually, and back to reality:
> I am in the San Joaquin Valley in California, while this used to be one of
> the richest agricultural areas in the world, decades of double and triple
> farming has depleated the soil of many of the plentiful nutrients (salts,
> trace minerals, metals, etc.)
> Also, this area was like a tule swap before levies were built to hold back
> the water, i.e., a peat bog!
> Those who mentioned a poor and lossy ground condition might have something
> there...
> This area may naturally favor the 1/2 properties.
>
> But then too, maybe it is only those damn aliens with their mind control
> which are placing these ideas in my head! <grin> Yanno, agriculture uses
> a
> lot of those darn illegal aliens' labor!!!
>
> Regards

>
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:d1qmto$t31$1@domitilla.aioe.org...
>> Well....
>> I could have stated a less controversial design I guess.
>> Such as an antiresonate antenna cap--folded from aluminum foil, and
>> intended
>> to cancel out the moon bounced mind control rays from the aliens.
>> Since totally shielding the walls of my home with silver foil has failed
>> to
>> block the penetration of these "antenna rays" into my home, the cap might
>> be
>> just the ticket!
>> The burning question here would be what wavelength of foil the cap should
>> it
>> be folded from, and heck, I don't even think the frequency of their mind
>> control rays registers on earth meters!
>> It is a conspiracy, I TELL YA!!! <grin>
>>
>> Regards
>> "John Smith" <assemblywizard@gmail.com> wrote in message
>> news:d1lbhb$pj0$1@domitilla.aioe.org...
>>> My question(s):
>>>
>>> For an example, on the 10 meter band:
>>> If I take a 28" whip and mount it at the end of helical wound coil
>>> (wound
>>> on
>>> 1" diameter form), where the "wire length" of the coil, PLUS, the length
>>> of
>>> the whip (28" + coil wire length) is equal to 1/2 wavelength (electrical
>>> length)--BUT, the overall physical length of the antenna (top, tip of
>>> whip
>>> to base of helical wound coil) is 1/4 wavelength, what would the
>>> radiation
>>> pattern of such an antenna be?
>>>
>>> Would it favor the pattern of a 1/4 or 1/2 wave antenna--or, would the
>>> pattern be a compromise between the two--or, would the pattern be
>>> totally
>>> unrelated to either?
>>>
>>> What could I expect the impedance of such an antenna be? Would the
>>> reactance be capacitive or inductive? What would be the best way to
>>> provide
>>> a match to 50 ohm coax from such an antenna?
>>>
>>> What software is available to model such an antenna?
>>>
>>> Thanks in advance,

>>> warmest regards
>>>
>>>
>>
>>
>
>

4183. Re: Using 2 antennas as a repeater

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-25 23:54:24 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <Qw11e.15500$C47.14369@newssvr14.news.prodigy.com>
Source record: 80227

'Corse, consider that there are certain constraints-- one being that
the antenna must be within a small distance from one end of the loop.
(for passive reflectors, at microwave, believe, they state 2-3 miles
(MAX)). and two, consider that at VHF, there is an effect called
"KNIFE EDGE REFRACTION" that tends to bend a signal over a hilltop
to a distant target on the other side of that ridge of hills!
But, for cell phones in a vehicle, those thru the glass antennas
on cars, with a whip on the outside , and what looks like a PAWN
BROKERS 3 ball symbol on the inside, do exactly what you describe
(or at least are susposed to)! as info, Jim NN7K

Hal Rosser wrote:
> There was a question posted to another group about connecting to a distant
> antenna.
> The post reminded me of another article (perhaps in QST) where someone who
> lived behind a mountain used 2 rhombic antennas as a "passive repeater" on
> uhf. He mounted both antennas at the summit of the mountain with one
> pointed to the repeater and the other pointed into the valley where he
> lived. As I recall, he was then able to communicate via the repeater.
> This brings up other possibilities - like doing the same thing for
> inside-outside of a metal bldg.
>
>

4184. Re: Using 2 antennas as a repeater

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 00:08:09 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <0E11e.57701$6g7.47097@bignews1.bellsouth.net>
Source record: 80229

"Jim - NN7K" <nn7kexk7zfg@NOSPAMsbcglobal.net> wrote in message
news:Qw11e.15500$C47.14369@newssvr14.news.prodigy.com...
> 'Corse, consider that there are certain constraints-- one being that
> the antenna must be within a small distance from one end of the loop.
> (for passive reflectors, at microwave, believe, they state 2-3 miles
> (MAX)). and two, consider that at VHF, there is an effect called
> "KNIFE EDGE REFRACTION" that tends to bend a signal over a hilltop
> to a distant target on the other side of that ridge of hills!
> But, for cell phones in a vehicle, those thru the glass antennas
> on cars, with a whip on the outside , and what looks like a PAWN
> BROKERS 3 ball symbol on the inside, do exactly what you describe
> (or at least are susposed to)! as info, Jim NN7K

Hi Jim,
Yes, I've heard of knife-edge refraction, but the instance I was referring
to in the article had a real positive benefit. As I recall, the operator
went from <zero contact> to <satifactory contact> by hooking up 2 beams
back-to-back at the summit, with one beam pointing back at him - and the
other beam pointed to the otherwise unreachable distant repeater.
I wouldn't have thought something like that would work without some
signal amplification. But it does.

4185. Re: Compact 40m gain antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 00:26:48 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <4244abb9$0$3707$39cecf19@news.twtelecom.net>
Source record: 80230

Tom Ring wrote:

> I have a coworker that would like to put up a 40m antenna on his tower
> that has some gain and directivity. I have modeled a few things, and
> while they are fairly satisfactory, I wanted to see what ideas the group
> had.
>
> The approximate limitations are as follows -
>
> o Boomlength 30 feet
> o Element length 30 feet
> o Any vertical components are max -10 feet from the plane of the boom
> and elements. The reason here is that it's a crankup, and his roof
> clearance would be about 10 feet when lowered.
>
> It would be desirable to have both CW and phone covered, but phone only
> is ok.
> It will need to be coax fed.
>
> Thanks.
>
> tom
> K0TAR

So, no ideas? At all? I thought better of the group.

4186. Re: 160 meter mobile -- Reality Check

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 00:35:46 UTC
From: jgboyles@aol.com
Message-ID: <1111797346.408712.84800@g14g2000cwa.googlegroups.com>
Source record: 80231

Crazy George wrote:
> Gary:
>
> First, you are off by a decade, the Texas DPS moved from 1658 kcps.
to 42.9 Mc. in 1949. Prior to the move, they used
> (very successfully, I might add) a earlier version of Reg's antenna,
which was a 10 foot bamboo pole helically wound
> with waxed cotton insulated bell wire. IIRC, the winding was spaced
about 1 to 1½ wire diameters apart . The
> transmitter was directly connected to the base of the antenna with a
short piece of 8 gauge wire, so there was no SWR to
> worry about, and final tuning of the antenna was done in the
transmitter output pi-network. Black '41 and '48 Fords
> with 10 foot cane poles on the rear bumper brackets, brings back
memories.
>
> --
> Crazy George
> The attglobal.net address is a SPAM trap. Please change that part
to: att<dot>biz properly formatted.
> <jgboyles@aol.com> wrote in message
news:1111271411.108180.28790@l41g2000cwc.googlegroups.com...
>
> <snippety>
>
> > I read somewhere that in the 50's, law
> > enforcement 2-way radios operated close to our 160m ham band.
Wonder
> > what kind of antennas they used on the police cars. Of course the
> > distances they were interested in are different from hams.
> > Gary N4AST
> >

Hi C. George, Thanks for the interesting info. I certainly did not
know the 160m radios dated to the 40's. My memories of 1950's law
enforcement are "Highway Patrol" starring Broderick Crawford on the BW
TV. I remember watching him standing outside his police car and saying
"10-4" into the mike. Then, he would sometimes put the mike to his
ear, as if it were a speaker.
At the time I didn't wonder about the antenna on his car. I would
expect from your post it would be 43mhz. I don't remember if that show
was any good or not?
Gary N4AST

4187. Re: Using 2 antennas as a repeater

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 00:41:24 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <mmneh2-57q.ln1@p400bob.lse.com.au>
Source record: 80235

It certainly works Hal

I use to live in a half below ground block of flats that had a 1/4 wave for 2M way up on the roof. One day I experimented plugging the coax end into my field day 5 element positioned at the end of the hallway and used my handheld maybe 30ft away. Having the yagi connected vs not was in the vicinity of 12dB but this was a real rough measurement.

Recently I had cause to model a passive repeater on 400MHz. We had a situation with a base station positioned on a plateau but at maybe 1km away had a deep valley (railway cutting) that at the base of was (measured) at around -95dBm. We needed about -85 so we put up a back to back yagi at the valley edge and with it receiving an approx -10dBm signal the valley floor was now at around -80dBm at 200M away inside the cutting. Its actually pretty easy to model. Just find the pathloss of one link and add it to the other. Allow maybe 3dB loss for the passive coupling and there is your answer!

Cheers Bob VK2YQA

Hal Rosser wrote:
> There was a question posted to another group about connecting to a distant
> antenna.
> The post reminded me of another article (perhaps in QST) where someone who
> lived behind a mountain used 2 rhombic antennas as a "passive repeater" on
> uhf. He mounted both antennas at the summit of the mountain with one
> pointed to the repeater and the other pointed into the valley where he
> lived. As I recall, he was then able to communicate via the repeater.
> This brings up other possibilities - like doing the same thing for
> inside-outside of a metal bldg.
>
>

4188. Re: Parabolic reflector for Wi-Fi?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 00:42:29 UTC
From: "aunwin@insightbb.com"
Message-ID: <Vd21e.18900$fn3.10702@attbi_s01>
Source record: 80232

Nigel
I have little experience with dish antennas but I do know that to provide
the 'new' it is
one percent insparation and 99 percent persperation, so how about this
aproach:
Determine frequency of use.
Then draw a graph of frequency versus reactance change from a zero point
indicating resonance
of the prime frequency.
This curve is parabolic and would be an ideal starting point as there would
seem to be a connection
If one would move to far away from the point of resonance I would suggest
that the dish it's self
would rise in temperature as current starts to flow instead of a pure 'loss
less' reflective action.
Regards
Art

"Nigel M" <reply@thegroup.com> wrote in message
news:4dut31dsb3de8ihfj25ar7ff23n9sf4mip@4ax.com...
> I've been looking to make a linear parabolic reflector for Wi-Fi, I've
> found quite a few sources, such as:
>
> http://www.genericgeek.com/index.php?q=node/280
>
> http://www.freeantennas.com/projects/template2/index.html
>
> Those I've found all give templates for a parabola, but without any
> explanation as to why they have chosen that *particular* parabola, or
> the formula used to draw it. As a result, the drawings are a bit
> "sketchy" to say the least!
>
> I know radio amateurs are often knowledgeable on antennae, so I thought
> this was a good place to ask. I'd like to know a bit more theory, and
> the pros and cons of various parabolic shapes.
>
>
> --
> Nigel M
> "Occam's razor is not always sharp"

4189. Re: Using 2 antennas as a repeater

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 00:48:13 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <hj21e.2654$zl.757@newssvr13.news.prodigy.com>
Source record: 80233

well, yes, and no ! when still working for R.R., in the Sierras,
had such , on 2 GHz, dish's on a hillside to Colfax ,CA -- It worked-
sorta, was quite noisy, and had bad fade problems, even tho only
useing it to channel A-6 (highest freq was 32KHz for channel assignment)
and that was until coax link between the dishes leaked (water)!
A-6 is the lowest 6 channels in a multiplex system, and consider:
this was tied to a 300 channel (up to around 1.5 MHz) bandpass system!
(each channel = a voice channel, or up to 15 data channels (low speed))
To summerize, It can work, but most likely, not very effeciently.. Have
fun-- Jim NN7K

Hal Rosser wrote:
> "Jim - NN7K" <nn7kexk7zfg@NOSPAMsbcglobal.net> wrote in message
> news:Qw11e.15500$C47.14369@newssvr14.news.prodigy.com...
>
>>'Corse, consider that there are certain constraints-- one being that
>>the antenna must be within a small distance from one end of the loop.
>>(for passive reflectors, at microwave, believe, they state 2-3 miles
>>(MAX)). and two, consider that at VHF, there is an effect called
>>"KNIFE EDGE REFRACTION" that tends to bend a signal over a hilltop
>>to a distant target on the other side of that ridge of hills!
>>But, for cell phones in a vehicle, those thru the glass antennas
>>on cars, with a whip on the outside , and what looks like a PAWN
>>BROKERS 3 ball symbol on the inside, do exactly what you describe
>>(or at least are susposed to)! as info, Jim NN7K
>
>
> Hi Jim,
> Yes, I've heard of knife-edge refraction, but the instance I was referring
> to in the article had a real positive benefit. As I recall, the operator
> went from <zero contact> to <satifactory contact> by hooking up 2 beams
> back-to-back at the summit, with one beam pointing back at him - and the
> other beam pointed to the otherwise unreachable distant repeater.
> I wouldn't have thought something like that would work without some
> signal amplification. But it does.
>
>

4190. Re: Compact 40m gain antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 00:50:59 UTC
From: jgboyles@aol.com
Message-ID: <1111798259.742950.11550@o13g2000cwo.googlegroups.com>
Source record: 80234

Tom Ring wrote:
> Tom Ring wrote:
>
> > I have a coworker that would like to put up a 40m antenna on his
tower
> > that has some gain and directivity. I have modeled a few things,
and
> > while they are fairly satisfactory, I wanted to see what ideas the
group
> > had.
> >
> > The approximate limitations are as follows -
> >
> > o Boomlength 30 feet
> > o Element length 30 feet
> > o Any vertical components are max -10 feet from the plane of the
boom
> > and elements. The reason here is that it's a crankup, and his roof

> > clearance would be about 10 feet when lowered.
> >
> > It would be desirable to have both CW and phone covered, but phone
only
> > is ok.
> > It will need to be coax fed.
> >
> > Thanks.
> >
> > tom
> > K0TAR
>
> So, no ideas? At all? I thought better of the group.
You are asking near impossibility, that is why there was no response.
QST had an Article on short, loaded beams, and W4RNL has written an
excellent Article on the same. Check those out.
Are you wanting to build or buy? This group, whom you don't think
much of, is mostly about design and building.
Gary N4AST

4191. Re: Compact 40m gain antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 01:16:59 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <4244b77d$0$3712$39cecf19@news.twtelecom.net>
Source record: 80236

jgboyles@aol.com wrote:

> Tom Ring wrote:
>
>>Tom Ring wrote:
>>
>>
>>>I have a coworker that would like to put up a 40m antenna on his
>
> tower
>
>>>that has some gain and directivity. I have modeled a few things,
>
> and
>
>>>while they are fairly satisfactory, I wanted to see what ideas the
>
> group
>
>>>had.
>>>
>>>The approximate limitations are as follows -
>>>
>>>o Boomlength 30 feet
>>>o Element length 30 feet
>>>o Any vertical components are max -10 feet from the plane of the
>
> boom
>
>>>and elements. The reason here is that it's a crankup, and his roof
>
>
>>>clearance would be about 10 feet when lowered.
>>>
>>>It would be desirable to have both CW and phone covered, but phone
>
> only
>
>>>is ok.
>>>It will need to be coax fed.
>>>
>>>Thanks.
>>>
>>>tom

>>>K0TAR
>>
>>So, no ideas? At all? I thought better of the group.
>
> You are asking near impossibility, that is why there was no response.
> QST had an Article on short, loaded beams, and W4RNL has written an
> excellent Article on the same. Check those out.
> Are you wanting to build or buy? This group, whom you don't think
> much of, is mostly about design and building.
> Gary N4AST
>

I haven't asked anything impossible or even tough, since I only gave a general bound on size, gave the rough band limits desired, and said we'd like gain and directivity.

As far as building goes, I've built about 20 times more than I've bought, so that's not an issue.

And where did I say I didn't think much of the group? I think the group is a wealth of ideas, creativity, knowledge and reason when they aren't bickering. I have learned a lot here reading threads, and also learned, to my regret, how much math has slipped from my grasp from lack of use over the years.

tom
K0TAR

4192. ok survey time.what will be your dream ham shack.or antenna setup

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 01:43:16 UTC
From: jcooper874@webtv.net
Message-ID: <12102-4244BE34-350@storefull-3273.bay.webtv.net>
Source record: 80238

it don't hurt to dream .welcome all trolls .plus smart asses .

http://community.webtv.net/jcooper874/doc
click here
http://community.webtv.net/jcooper874/haveagreatday

http://community.webtv.net/jcooper874/doc0

4193. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 01:48:44 UTC
From: "aunwin@insightbb.com"
Message-ID: <0c31e.3825$NW5.2662@attbi_s02>
Source record: 80237

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:23332-424091D4-582@storefull-3254.bay.webtv.net...
> Art Unwin wrote:
> "I have just come to realize that if one drew a polygon of element
> phases in an array and all elements were 180 degrees to its companion
> element and excluding its driven element, the max gain and max front to
> back will occur at the dame frequency!"
>
> I missed a step or two between the polygon`s resultant and coincidence
> of maximum gain with maximum front to back ratio.
>
snip

What exactly did you miss?
Was it something I missed or an error or a assumption that I made?
What followed the above statement was a treatise regarding the formation
of a polygon that had been described earlier, but I did not see any
relevance or connection
to what you porport that you or I didn't understand or missed!
Regards
Art

.
>
> Best regards, Richard Harrison, KB5WZI
>

4194. Re: 160 meter mobile -- Reality Check

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 02:37:51 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <1149iobnbaabkd6@corp.supernews.com>
Source record: 80239

Chicago once dispatched their cars on a frequency of about 1700 kHz. Used to listen with a Wilcox-Gay receiver (made in Charlotte, Michigan) that had a knob used to switch from broadcast band to the MF police band. Long time ago!
I was of the opinion that the Chicago system was one way. Does anyone remember?
Some of the police HF frequencies were used on CW into at least the mid-60s. They were not allowed to use RTTY as it was thought to compete too much with The telephone company. I visited the main HF site for Ohio in the early 60s - the site was controlled from Columbus with a microwave link. The engineer liked to call it the longest IF in the world.

73, Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net

4195. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 02:44:43 UTC
From: nm5k@wt.net
Message-ID: <1111805083.578099.118350@g14g2000cwa.googlegroups.com>
Source record: 80240

This posting sequence has been an enlightening experience though, and
well
worth the trouble. I have learned that most will wage a "religious
war" if
they think anyone is going to challenge the generally accepted ideas
and
methods.
If you insist on going on, you will run the gauntlet of nay sayers and
be
attacked. Guffaws and slurs against your mental stability will
assualt you.
If one is looking to try something new--this is NOT the place to
discuss it.
Perhaps another news group, where those who seek to intimidate and
"out
shout" true expermenters would be banned and refused posting would be
a
workable alternative and more conductive to attempts to break the
mold.
.....
I think I'm going to vomit....Are you related to Art? If not,
you should be....Whine, whine, whine.... You think you are the
first one to try that? I tried that using my helical mobile
antennas years ago...Big deal...BTW...I ended up preferring the
normal 1/4 wave config for a mobile antenna...Just in case thou
art interested...I also agree with one poster...The biggest change
will be with the current distribution...
They were making CB antenna *years* ago, using that "extended winding"
type of design...Many were a 5/8's wl winding. Sheesh....Get a grip.
Quit whining...Religious war? Slurs against your stability? Will be
soon, if you don't quit this retched "poor ole maligned me" whining.
You never saw me say anything about the antenna itself. Why? Cuz
being I have tried it, I know they can work. But like I said,
I ended up not using it as the normal 1/4 wl config worked better
on my car. Trust me...The idea has been tried long ago.
There is nothing wrong with posting something new here. Although
to others, it might not be new at all.
In fact, if you are *actually* interested in if it's viable,
this is probably the best place. You won't get suger coated
bullcrap here...
Now, if you are trying to push some funky device like say the EH
antenna, yep, you probably don't wanna be here...Go to a yahoo
forum where all have to register to join. That way you can control
all the posts, and make the outcome of your "discovery" come out

any way you want. Sheesh...
MK

4196. Re: Compact 40m gain antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 02:48:44 UTC
From: Bob Schreibmaier <k3ph@ptd.net>
Message-ID: <2HOdnSecEcYWUNnfUSdV9g@ptd.net>
Source record: 80241

Hi Tom,

In article <4244b77d$0$3712$39cecf19@news.twtelecom.net>, you say...
>I haven't asked anything impossible or even tough, since I only gave a
>general bound on size, gave the rough band limits desired, and said we'd
>like gain and directivity.

Well... :-)

On a band that has a bandwidth of roughly 4% of
its center frequency, you're going to be REALLY
hard-pressed to get coverage of both phone and
CW on an antenna that is a little over 40% of
full size. So far, no manufacturer has been
able to come up with the antenna you describe.

Many years ago, Swan Antennas had a 2-element
40 meter beam that used half size elements.
As I recall, it used loading coils midway
through each element. I'm not very sure, but
I think the boom length was about 16 feet.
I think they got somewhere around 100 kHz
between 2:1 points. That wouldn't even cover
the entire phone band, and the elements are
longer than your design requirements.

So, yes, you are asking for something very tough,
if not impossible.

But, I wish you good luck in your quest! :-)

73,
Bob

--
+---+
| Bob Schreibmaier K3PH | E-mail: k3ph@ptd.net |
| Kresgeville, PA 18333 | http://www.dxis.org |
+---+

4197. Re: Compact 40m gain antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 03:40:29 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <4244d91d$0$3712$39cecf19@news.twtelecom.net>
Source record: 80242

Bob Schreibmaier wrote:

> Hi Tom,
>
> In article <4244b77d$0$3712$39cecf19@news.twtelecom.net>, you say...
>
>>I haven't asked anything impossible or even tough, since I only gave a
>>general bound on size, gave the rough band limits desired, and said we'd
>>like gain and directivity.
>
>
> Well... :-)
>
> On a band that has a bandwidth of roughly 4% of
> its center frequency, you're going to be REALLY
> hard-pressed to get coverage of both phone and
> CW on an antenna that is a little over 40% of
> full size. So far, no manufacturer has been
> able to come up with the antenna you describe.
>
> Many years ago, Swan Antennas had a 2-element
> 40 meter beam that used half size elements.
> As I recall, it used loading coils midway
> through each element. I'm not very sure, but
> I think the boom length was about 16 feet.
> I think they got somewhere around 100 kHz
> between 2:1 points. That wouldn't even cover
> the entire phone band, and the elements are
> longer than your design requirements.
>
> So, yes, you are asking for something very tough,
> if not impossible.
>
> But, I wish you good luck in your quest! :-)
>
> 73,
> Bob
>

From my original post -

"It would be desirable to have both CW and phone covered, but phone only
is ok."

tom
K0TAR

4198. Re: Compact 40m gain antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 03:43:02 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <4244d9b6$0$3712$39cecf19@news.twtelecom.net>
Source record: 80243

Bob Schreibmaier wrote:

> Hi Tom,
>
> In article <4244b77d$0$3712$39cecf19@news.twtelecom.net>, you say...
>
>>I haven't asked anything impossible or even tough, since I only gave a
>>general bound on size, gave the rough band limits desired, and said we'd
>>like gain and directivity.
>
>
> Well... :-)
>
> On a band that has a bandwidth of roughly 4% of
> its center frequency, you're going to be REALLY
> hard-pressed to get coverage of both phone and
> CW on an antenna that is a little over 40% of
> full size. So far, no manufacturer has been
> able to come up with the antenna you describe.
>
> Many years ago, Swan Antennas had a 2-element
> 40 meter beam that used half size elements.
> As I recall, it used loading coils midway
> through each element. I'm not very sure, but
> I think the boom length was about 16 feet.
> I think they got somewhere around 100 kHz
> between 2:1 points. That wouldn't even cover
> the entire phone band, and the elements are
> longer than your design requirements.
>
> So, yes, you are asking for something very tough,
> if not impossible.
>
> But, I wish you good luck in your quest! :-)
>
> 73,
> Bob
>

And also from my original post

"o Boomlength 30 feet
o Element length 30 feet "

which is a whole lot more than 16 feet.

But you are probably correct. It's impossible.

4199. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 05:52:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <%M61e.9010$BY7.4543584@news.sisna.com>
Source record: 80245

Oh yeah, I forgot to make mention of the "nuts"...

Regards

<nm5k@wt.net> wrote in message
news:1111805083.578099.118350@g14g2000cwa.googlegroups.com...
> This posting sequence has been an enlightening experience though, and
> well
> worth the trouble. I have learned that most will wage a "religious
> war" if
> they think anyone is going to challenge the generally accepted ideas
> and
> methods.
> If you insist on going on, you will run the gauntlet of nay sayers and
> be
> attacked. Guffaws and slurs against your mental stability will
> assualt you.
> If one is looking to try something new--this is NOT the place to
> discuss it.
> Perhaps another news group, where those who seek to intimidate and
> "out
> shout" true expermenters would be banned and refused posting would be
> a
> workable alternative and more conductive to attempts to break the
> mold.
> ....
> I think I'm going to vomit....Are you related to Art? If not,
> you should be....Whine, whine, whine.... You think you are the
> first one to try that? I tried that using my helical mobile
> antennas years ago...Big deal...BTW...I ended up preferring the
> normal 1/4 wave config for a mobile antenna...Just in case thou
> art interested...I also agree with one poster...The biggest change
> will be with the current distribution...
> They were making CB antenna *years* ago, using that "extended winding"
> type of design...Many were a 5/8's wl winding. Sheesh....Get a grip.
> Quit whining...Religious war? Slurs against your stability? Will be
> soon, if you don't quit this retched "poor ole maligned me" whining.
> You never saw me say anything about the antenna itself. Why? Cuz
> being I have tried it, I know they can work. But like I said,
> I ended up not using it as the normal 1/4 wl config worked better
> on my car. Trust me...The idea has been tried long ago.
> There is nothing wrong with posting something new here. Although
> to others, it might not be new at all.
> In fact, if you are *actually* interested in if it's viable,
> this is probably the best place. You won't get suger coated

> bullcrap here...
> Now, if you are trying to push some funky device like say the EH
> antenna, yep, you probably don't wanna be here...Go to a yahoo
> forum where all have to register to join. That way you can control
> all the posts, and make the outcome of your "discovery" come out
> any way you want. Sheesh...
> MK
>

4200. Re: Compact 40m gain antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 05:57:06 UTC
From: pfriedmanNoSpam <p.paulfriedmanNoSpam@comcast.net>
Message-ID: <_pCdnc6znNMYZNnfRVn-oQ@comcast.com>
Source record: 80244

"Tom Ring" <news0002@taring.org> wrote in message
news:4244d9b6$0$3712$39cecf19@news.twtelecom.net...
> Bob Schreibmaier wrote:
>
>> Hi Tom,
>>
>> In article <4244b77d$0$3712$39cecf19@news.twtelecom.net>, you say...
>>
>>>I haven't asked anything impossible or even tough, since I only gave a
>>>general bound on size, gave the rough band limits desired, and said we'd
>>>like gain and directivity.
>>
>>
>> Well... :-)
>>
>> On a band that has a bandwidth of roughly 4% of
>> its center frequency, you're going to be REALLY
>> hard-pressed to get coverage of both phone and
>> CW on an antenna that is a little over 40% of
>> full size. So far, no manufacturer has been
>> able to come up with the antenna you describe.
>>
>> Many years ago, Swan Antennas had a 2-element
>> 40 meter beam that used half size elements.
>> As I recall, it used loading coils midway
>> through each element. I'm not very sure, but
>> I think the boom length was about 16 feet.
>> I think they got somewhere around 100 kHz
>> between 2:1 points. That wouldn't even cover
>> the entire phone band, and the elements are
>> longer than your design requirements.
>>
>> So, yes, you are asking for something very tough,
>> if not impossible.
>>
>> But, I wish you good luck in your quest! :-)
>>
>> 73,
>> Bob
>>
>
>
> And also from my original post
>

> "o Boomlength 30 feet
> o Element length 30 feet "
>
> which is a whole lot more than 16 feet.
>
> But you are probably correct. It's impossible.
>

Check out the Optibeam Moxon rectangle. I think its boom length is something like 20 feet. Also, the Moxon Antenna Project web site has a program for calculating the various dimensions.

Paul AB0SI

4201. New Program RJELOOP4

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 06:19:40 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d22uts$1kt$1@titan.btinternet.com>
Source record: 80246

This program predicts approximate performance of general purpose, multiband, horizontal loop antennas of given perimeter of loop. It is not intended for precision predictions of operating data.

A loop is a continuous wire without loading coil or capacitor. It can be of any shape provided the area enclosed by the loop is not less than 2/3rds of that of a circle of the same perimeter, ie., it is not too irregular.

It is the sort of antenna which is forced on the amateur by the shape of his back garden and the pre-determined location of trees, poles, buildings or anything else from which an antenna wire can be suspended.

Analysis includes a high or low impedance feedline, a choke balun and an L-tuner. The antenna is most efficient when the perimeter is a whole number of wavelengths. It is least efficient when the perimeter is an odd-number of 1/2-wavelengths. But operation is not limited to being at, or near to, resonant frequencies.

Download in a few seconds program RJELOOP4 from website below and run immediately.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

4202. Re: 160 meter mobile -- Reality Check

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 08:05:26 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <424517C6.5020301@cableone.net>
Source record: 80247

My dad was a policeman in the 40s, right after the war, his operated 40
something mHz. About 8 yrs old and an interest in radio helped me to
remember radio things, many other things didn't have sticking power,
like english and such :o)

KF5DE

jgboyles@aol.com wrote:
> Crazy George wrote:
>
>>Gary:
>>
>>First, you are off by a decade, the Texas DPS moved from 1658 kcps.
>
> to 42.9 Mc. in 1949. Prior to the move, they used
>
>>(very successfully, I might add) a earlier version of Reg's antenna,
>
> which was a 10 foot bamboo pole helically wound
>
>>with waxed cotton insulated bell wire. IIRC, the winding was spaced
>
> about 1 to 1ï¿½ wire diameters apart . The
>
>>transmitter was directly connected to the base of the antenna with a
>
> short piece of 8 gauge wire, so there was no SWR to
>
>>worry about, and final tuning of the antenna was done in the
>
> transmitter output pi-network. Black '41 and '48 Fords
>
>>with 10 foot cane poles on the rear bumper brackets, brings back
>
> memories.
>
>>--
>>Crazy George
>>The attglobal.net address is a SPAM trap. Please change that part
>
> to: att<dot>biz properly formatted.
>
>><jgboyles@aol.com> wrote in message
>
> news:1111271411.108180.28790@l41g2000cwc.googlegroups.com...

>
>><snippety>
>>
>>> I read somewhere that in the 50's, law
>>>enforcement 2-way radios operated close to our 160m ham band.
>
> Wonder
>
>>>what kind of antennas they used on the police cars. Of course the
>>>distances they were interested in are different from hams.
>>>Gary N4AST
>>>
>
>
> Hi C. George, Thanks for the interesting info. I certainly did not
> know the 160m radios dated to the 40's. My memories of 1950's law
> enforcement are "Highway Patrol" starring Broderick Crawford on the BW
> TV. I remember watching him standing outside his police car and saying
> "10-4" into the mike. Then, he would sometimes put the mike to his
> ear, as if it were a speaker.
> At the time I didn't wonder about the antenna on his car. I would
> expect from your post it would be 43mhz. I don't remember if that show
> was any good or not?
> Gary N4AST
>

4203. Re: Compact 40m gain antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 11:59:32 UTC
From: David J Windisch <davidjw@cinci.rr.com>
Message-ID: <E8c1e.29434$cC6.11848@fe2.columbus.rr.com>
Source record: 80248

You can model this with EZNEC:

Get 2 Cushcraft 40M rotating dipoles and a boom to hold them. Tune the
dipoles separately to 7 MHz. Put them on the boom, observe operating
results, and adjust the driven element to your favorite 40M slot. The
elements interact, so the reflector may require adjustment as well, to keep
it around 7 MHZ when you adjust the driven element.
--
73, Dave, N3HE
Cincinnati OH

"Tom Ring" <news0002@taring.org> wrote in message
news:4244abb9$0$3707$39cecf19@news.twtelecom.net...
> Tom Ring wrote:
>
>> I have a coworker that would like to put up a 40m antenna on his tower
>> that has some gain and directivity. I have modeled a few things, and

4204. Ladder line loss through brick

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 12:43:39 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <VA.000000c7.004d66b2@btinternet.com>
Source record: 80249

Hi,

My doublet is fed with 300-ohm ladder line passing through a 3/4" wide, 10" long hole in the outside wall, which itself is constructed of red house-brick. Is there any data available as to how much loss I should expect from this considering that the SWR will be quite high on most HF bands? A 'Google' search brings up a lot of data on wireless LAN (GHz) losses but nothing that is of much help to me.

The antenna is of indeterminate length (although longer than a half-wave on 3.5MHz) and is matched at the transmitter by a balanced line tuner.

73 de Joe, G3LLV

4205. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 13:17:52 UTC
From: "Larry Gauthier (K8UT)" <MyCallsign@ARRL.NET>
Message-ID: <bid1e.10087$BO1.8384@fe06.lga>
Source record: 80250

No, FSK is not CW. Although others have provided a technical definition of FSK (Frequency Shift Keying), from a practical standpoint FSK is one of two methods that hams use to transmit in RTTY mode.

Unlike CW, where characters are constructed by sending combinations of short (dot) and long (dash) signals all on one transmit frequency, RTTY characters are sent by shifting your transmit frequency back and forth between a higher (mark) and lower (space) frequency. In most ham circumstances, those two frequencies are 170 cycles apart.

Hams use two popular techniques to create those 170-hertz shifted frequencies:

- FSK, in which the VFO of the transmitter "knows" to shift its frequency hi/lo in response to an input signal on the rear panel. FSK mode functions when the transceiver is in RTTY mode.

- AFSK, in which a computer, using software that controls its sound card, generates the correct tones and those tones are fed into the microphone input of the transceiver. AFSK mode functions when the transceiver is in SSB mode
--
-larry
K8UT
<jcooper874@webtv.net> wrote in message
news:26750-4243E25C-444@storefull-3275.bay.webtv.net...
> is it cw i guess new to radio
>e

4206. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 14:07:52 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <114ar5v7l6l6ee4@corp.supernews.com>
Source record: 80251

FSK=Frequency Shift Keying

Larry Gauthier (K8UT) wrote:
> No, FSK is not CW. Although others have provided a technical definition of
> FSK (Frequency Shift Keying), from a practical standpoint FSK is one of two
> methods that hams use to transmit in RTTY mode.
>
> Unlike CW, where characters are constructed by sending combinations of short
> (dot) and long (dash) signals all on one transmit frequency, RTTY characters
> are sent by shifting your transmit frequency back and forth between a higher
> (mark) and lower (space) frequency. In most ham circumstances, those two
> frequencies are 170 cycles apart.
>
> Hams use two popular techniques to create those 170-hertz shifted
> frequencies:
>
> - FSK, in which the VFO of the transmitter "knows" to shift its frequency
> hi/lo in response to an input signal on the rear panel. FSK mode functions
> when the transceiver is in RTTY mode.
>
> - AFSK, in which a computer, using software that controls its sound card,
> generates the correct tones and those tones are fed into the microphone
> input of the transceiver. AFSK mode functions when the transceiver is in SSB
> mode

4207. Re: best 6 meter??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 14:36:58 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <424572f8$0$3709$39cecf19@news.twtelecom.net>
Source record: 80252

chasm@texas.net wrote:

> HOW do you work 6m? skipping to a 6m repeater about a 1,000 mi away and hoping
> the fellow in 40m range can also reach that repeater?
> or is it all straight, plain DX with the right conditions??
>
> iow, what makes this fun? other than antennae, etc... and the Txcvr -- what
> else do I need for this game? and which way should I be going with this?
> SSB, FM or CW?
>
> finally, is there a 6m discussion list, forum, whatever???
>
> thanks
> chas
> K5DAM
>

SSB and CW are the modes you will want to use. The US SSB call frequency is 50.125, with the DX window below that. Some available propogation modes are troposcatter, F, E, aurora, auroral-E. Six is the band where almost all enhancements shop up occasionally. When the band is open, it's often wide open. Don't be discouraged if you don't hear anything for days or weeks. It's a lot like fishing. There are also seasons for some propogation types. You will soon see more E as we get into late spring.

And listen for beacons; sometimes the band is open, and no one notices for a while. Here are a couple links for beacons -
http://www.keele.ac.uk/depts/por/50.htm
http://www.g0che.co.uk/beacons.html

tom
K0TAR

4208. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 14:45:24 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <8Ae1e.4687$z.3567@newsread2.news.atl.earthlink.net>
Source record: 80253

>
> - AFSK, in which a computer, using software that controls its sound card,
> generates the correct tones and those tones are fed into the microphone
> input of the transceiver. AFSK mode functions when the transceiver is in
SSB
> mode
> --
> -larry
> K8UT

Larry you were doing good to you got to AFSK. When pure sine waves are fed into a SSB transciever audio, the output of the transmitter is the same as FSK. This is what is suspose to hapen when using the sound card.

AFSK is generated if the transmitter is in the AM or FM mode. This is used mainly on VHF and above on FM to use the digital modes such as rtty.

4209. Re: best 6 meter??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 14:53:40 UTC
From: Caveat Lector <CL@watchout.com>
Message-ID: <UHe1e.858$k57.351@fed1read07>
Source record: 80254

Some good books on six meters.

See World Radio Magazine -- URL: http://www.wr6wr.com/
Six Meters, A Guide to the Magic Band, (revised) by Ken Neubeck, WB2AMU

From The ARRL: http://www.arrl.org/catalog/?category=&words=propagation
VHF Propagation-- A Practical Guide for Radio Amateurs by Ken Neubeck,
WB2AMU & Gordon West, WB6NOA

HF+6M DXing DX101x From AC6V
http://ac6v.com/DXSAMPLE.htm

--
CL -- I doubt, therefore I might be !

>>
>> HOW do you work 6m? skipping to a 6m repeater about a 1,000 mi away and
>> hoping
>> the fellow in 40m range can also reach that repeater?
>> or is it all straight, plain DX with the right conditions??
>>
>> iow, what makes this fun? other than antennae, etc... and the Txcvr --
>> what
>> else do I need for this game? and which way should I be going with this?
>> SSB, FM or CW?
>>
>> finally, is there a 6m discussion list, forum, whatever???
>>
>> thanks
>> chas
>> K5DAM

4210. Re: best 6 meter??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 15:20:16 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <Q4f1e.15655$C47.12748@newssvr14.news.prodigy.com>
Source record: 80255

Chas-

Tom Ring wrote:

> SSB and CW are the modes you will want to use. The US SSB call
> frequency is 50.125, with the DX window below that. Some available
> propogation modes are troposcatter, F, E, aurora, auroral-E. Six is the
> band where almost all enhancements shop up occasionally. When the band
> is open, it's often wide open. Don't be discouraged if you don't hear
> anything for days or weeks. It's a lot like fishing. There are also
> seasons for some propogation types. You will soon see more E as we get
> into late spring.
>

Tom is correct, and also remember : that for FM, transmissions are
USUALLY vertically polarized (I say that because ALL fm activity
for repeaters uses vertical whips, tho in an opening, anything works).
These loops are horizontally polarized). Dont expect much in the way of
F2, or TE, for about another 8-9 years (we are on a decline in the
sunspots), but Es is the bread and butter of the six meter operator,
and as Tom says, most activity is on CW, and SSB , tho I expect that
the new digital modes will start showing up more regularly.
That opens up another can of worms, as the CW segment of 6 meters
(50.000-50.100) ,unlike all other bands (except 2 meters), is
A-1 ONLY (at least in the U.S.)! This forces these new digital modes
up to around 50.26-.29 vacinity. Another frequency to note is 50.110
this is for the DX calling freq- read that as NON US-CANADA If you hear
someone there, is is a pretty safe bet that it is a foreign station.

As to what is being heard on six meters, try :
http://www.dxworld.com/50prop.html
A real time prop. logger for 6 meters
OH2BUA has similar, but mainly followed by Europeans. Six meters will
start opening eS on a regular basis probably by the middle of april
and peaking out in August. and there is also another 2-3 week peak
around the winter solstice, but 6 can open at ANY TIME !
And one of the charms of it iswhen it opens , even the low power
stations can work a lot. Normally, 6 activity on SSB doesn't get much
above 50 250 (unless its a real barnburner of an opening). A fun band
to operate. Jim NN7K

4211. Re: Using 2 antennas as a repeater

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 15:23:23 UTC
From: Dave VanHorn <dvanhorn@dvanhorn.org>
Message-ID: <ObKdncoWntPM49jfRVn-qA@comcast.com>
Source record: 80256

> well, yes, and no ! when still working for R.R., in the Sierras,
> had such , on 2 GHz, dish's on a hillside to Colfax ,CA

Familiar territory, I used to live in Dutch Flat.

Couldn't hit anything in sacramento, but I could hit repeaters in the bay
area..
Except on a few days when I 'd knife-edge into sac.

4212. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 15:34:38 UTC
From: "aunwin@insightbb.com"
Message-ID: <iif1e.106810$Ze3.95174@attbi_s51>
Source record: 80257

Cecil

If photons have no mass I do not see how they could become entangled!
As for electrons don't they just re-orient instead of travelling?
I suppose if "curls" became active they could embrace both of the above
to simulate what apears to be an entanglement ...Grin
Was In Washington D.C. for a few days so I could not respond earlier
Art

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:4242dc2a$1_1@127.0.0.1...
> aunwin@insightbb.com wrote:
>> Yet at the same time many are anxious to find out how I managed
>> to lower the TOA.
>
> Art, I'll bet you could do something interesting using
> entangled electrons. I wonder if entangled electrons
> emit entangled photons?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> -----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
> News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000
> Newsgroups
> ---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4213. Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 16:18:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2420u$r4l$1@domitilla.aioe.org>
Source record: 80258

Anyone ever done a helical wound "Slim Jim?" Since this is a 1/2 wave antenna with a 1/4 matching section (3/4 overall), helical winding of this form into a 3/8 overall height (approx. 12 ft. @ 28Mhz) might be possible. The extremely low angle of radiation (approx. 8 degrees) would make this vertical antenna desirable...

Regards

4214. Re: ok survey time.what will be your dream ham shack.or antenna setup

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 16:27:52 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <114b3c6iam5hi62@corp.supernews.com>
Source record: 80259

I have it.
A hill on 60 acres between a 12,000 acre military reservation and a 3,000
acre cattle ranch.
Four-element SteppIR driven by an Orion and an Alpha.
Took me 42 years, but I made it.
73
H.
NQ5H

<jcooper874@webtv.net> wrote in message
news:12102-4244BE34-350@storefull-3273.bay.webtv.net...
> it don't hurt to dream .welcome all trolls .plus smart asses .
>
> http://community.webtv.net/jcooper874/doc
> click here
> http://community.webtv.net/jcooper874/haveagreatday
>
> http://community.webtv.net/jcooper874/doc0
>

4215. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 16:59:06 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4245957e$1_1@127.0.0.1>
Source record: 80260

aunwin@insightbb.com wrote:
> If photons have no mass I do not see how they could become entangled!

Photons have no *rest* mass. When they are associated
with RF waves, they are traveling at the speed of light
and thus indeed do possess mass. Experiments have been
run on entangled photons. I'm about 2/3 of the way through
entanglement, by Amir D. Aczel. Einstein's work suggested
entanglement but he said it was "too spooky" to actually exist.

Quantum physics is indeed spooky. A single bucky ball, made
up of 60 carbon atoms, has been shown to interfere with
itself in double-slit experiments. It is certainly spooky
to see a single molecule of 60 carbon atoms behave like a
wave instead of like a particle.

> As for electrons don't they just re-orient instead of travelling?

Electrons are charged particles and move in the presence
of EM fields. Since they possess mass, they move relatively
slowly compared to the speed of light. Someone recently
posted the speed of electrons in a wire.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4216. Re: Max F/b and max gain at same freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 17:11:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <go5b411cr0c2jjlpiqa26fu8kqvo39g63q@4ax.com>
Source record: 80261

On Sat, 26 Mar 2005 01:48:44 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:
>> I missed a step or two between the polygon`s resultant and coincidence
>> of maximum gain with maximum front to back ratio.
>snip
>
>What exactly did you miss?

Hi Art,

The answer to your question is found in Richard's question you
answered.

73's
Richard Clark, KB7QHC

4217. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 17:17:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <d16b41tffspnirqa1me2er1rke046lgkhd@4ax.com>
Source record: 80262

On Sat, 26 Mar 2005 08:18:39 -0800, "John Smith"
<assemblywizard@gmail.com> wrote:

>The extremely low angle of radiation

Hi John,

Rote learning comes through repetition:
The physical size in relation to wavelength dominates launch
characteristics, NOT electrical length.

As slim jims are generally applied to UHF/VHF use, line of sight
dominates both - that is why helically wound resistors (HT rubber
duckies) work as well as they do.

73's
Richard Clark, KB7QHC

4218. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 17:36:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ij6b411cbnknne423pqg50e0uo394agoa9@4ax.com>
Source record: 80263

On Fri, 25 Mar 2005 15:21:27 -0800, "John Smith"
<assemblywizard@gmail.com> wrote:

>Perhaps another news group, where those who seek to intimidate and "out
>shout" true expermenters would be banned and refused posting would be a
>workable alternative and more conductive to attempts to break the mold.

Hi John,

You will have found a very special population of scribblers at that
halcyon news group. That few who were untutored with the design of
millions of rubber duckies would be the only throng capable of hailing
true expermenters of the helical 1/2 wavelength antenna mold.

Drop us a note when you find the select. Stay away from their
kool-aid.

73's
Richard Clark, KB7QHC

4219. 1/2 wave vertical Impedance ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 18:04:23 UTC
From: bbnn <jl@fnn.gfd>
Message-ID: <d247um02d4i@enews4.newsguy.com>
Source record: 80264

I heard that a 1/2 wave vertical has a Z of about 2000 ohms at the base.
Is this the Z between the base of the vertical and ground that RF at the
resonant frequency
'sees' ?

Doesn't the height that the vertical base is above ground affect this
2000 ohm valve?
Or does then metal car roof nullify any height above ground affects on
the Z?

I've noticed that measuring the return loss of a 1/4 vertical is very low.
But measuring the return loss of a 1/2 wave or 5/8 wave antenna is
higher.?????????????

4220. Re: Compact 40m gain antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 18:28:30 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <e7mgh2-j08.ln1@p400bob.lse.com.au>
Source record: 80267

Is remote tuning an option?

Thinking helically loaded elements with an adjustable piece of short
metal pipe around each element half, or a metal rod inside the turns .
Move the pipe(s) towards or away from the feedpoint/centre. Using string
of course!

Could also put an adjustable C across the feedpoint?

Cheers Bob VK2YQA

>> Bob
>>
>
> From my original post -
>
> "It would be desirable to have both CW and phone covered, but phone only
> is ok."
>
> tom
> K0TAR

4221. Re: best 6 meter??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 18:57:35 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <e3cb415qqpa2qmil6c3dgflsje8ki5kjio@4ax.com>
Source record: 80265

On Sat, 26 Mar 2005 12:01:35 -0600, chasm@texas.net wrote:

>
>thanks to all again. still want to go look for an elist or other on 6m.
>
>cheers
>chas
>K5DAM

Just do a google search for "6 meters" -- lots of sites & lists

bob
k5qwg

>
>
>
>...

4222. Re: 1/2 wave vertical Impedance ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 19:05:04 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1111863904.226187.254630@g14g2000cwa.googlegroups.com>
Source record: 80266

Yes, if the base is above ground, it will affect the impedance.
Consider that the feedpoint impedance of any vertical (any length, any
diameter) fed against a perfect ground plane in freespace will be
exactly half the impedance of the same vertical fed against a mirror
image of itself in freespace (in other words, a symmetrical dipole).
The closer the base is to being a ground plane, the less effect there
will be because of its height. How big is that car roof compared to a
wavelength of the frequency you're interested in? Since the impedance
of a halfwave fed against whatever counterpoise you have will depend a
lot on the diameter of the halfwave element, you'd probably better just
tune your matching network to get acceptable match to whatever you're
using to feed the antenna.

If there's no matching network between your "return loss measurer" and
the antenna feedpoint, I'd expect a better match for the quarter wave
than for the half wave, assuming an instrument calibrated for 50 ohms
(or even 75 ohms). A better match would be a higher return loss. Are
you interpreting the numbers correctly? What do you get when you put a
50 ohm load on your instrument? What do you get when you put a 1000 or
2000 ohm load on it?

Cheers,
Tom

4223. Re: 1/2 wave vertical Impedance ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 20:44:57 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d24hk9$2bc$1@hercules.btinternet.com>
Source record: 80268

"bbnn" wrote -
.
> I heard that a 1/2 wave vertical has a Z of about 2000 ohms at the
base.
> Is this the Z between the base of the vertical and ground that RF at
the
> resonant frequency
> 'sees' ?
>
> Doesn't the height that the vertical base is above ground affect
this
> 2000 ohm valve?
> Or does then metal car roof nullify any height above ground affects
on
> the Z?
>
> I've noticed that measuring the return loss of a 1/4 vertical is
very low.
> But measuring the return loss of a 1/2 wave or 5/8 wave antenna is
> higher.?????????????
==========

It is important to ask the right questions. The right questions are those to which there are answers and practical measurements can be made to confirm them.

For example, there is no answer to the question what is the impedance between the lower end of a half-wave dipole and ground when the lower end is at a height above ground.

It is impossible to make such a measurement directly because the impedance meter MUST be associated with a length of wire which reaches between the bottom end of the antenna and ground. This length of wire MUST form part of the antenna and the antenna length is then no longer a 1/2-wave dipole.

If the impedance meter is connected directly to the bottom of the antenna then the measurement is no longer with respect to ground but with respect to ground PLUS the impedance of that length of wire whatever impedance it may have.

I hope, but I doubt it, whether I have made myself clear.

To understand what is going on it is necessary to resort to theoretical arguments. Only the arguments are real - not the measurements.

Thre is a 1/2-wave dipole isolated in space. It doesn't matter whether it is horizontal or vertical. It is possible theoretically to calculate from its length, diameter and frequency its input impedance at one end.

But relative to what? To measure it is impossible. To where is the other side of the meter to be connected? Nevertheless we mustn't allow this stumbling block to get in our way. The theoretical, perhaps approximate, calculated value can be used in further calculations to answer real and very practical questions.

The input resistance of a half-wave vertical near to ground is 2 or 3 thousand ohms. It is uncertain because it depends on wire/conductor diameter and on the conductivity and permittivity of the soil. Because of its high value it is also sensitive to the antenna's environment, trees, etc.

When fed at its base, near to ground, its input resistance can be considered to be its radiation resistance. Because of its high value relative to the ground connection resistance, very high power efficiency can be expected.

Incidentally, half-wave or 5/8ths-wave verticals (not critical) have the lowest radiation angles and are therefore good DX antennas preferable to 1/2-wave horizontal dipoles at HF.

Reg, G4FGQ

4224. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 20:57:48 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <g1k1e.2949$zl.235@newssvr13.news.prodigy.com>
Source record: 80269

John Smith wrote:
> Oh yeah, I forgot to make mention of the "nuts"...
>
> Regards
>
> <nm5k@wt.net> wrote in message
> news:1111805083.578099.118350@g14g2000cwa.googlegroups.com...
>
>>This posting sequence has been an enlightening experience though, and
>>well
>>worth the trouble. I have learned that most will wage a "religious
>>war" if
>>they think anyone is going to challenge the generally accepted ideas
>>and
>>methods.
>>If you insist on going on, you will run the gauntlet of nay sayers and
>>be
>>attacked. Guffaws and slurs against your mental stability will
>>assualt you.
>>If one is looking to try something new--this is NOT the place to
>>discuss it.
>>Perhaps another news group, where those who seek to intimidate and
>>"out
>>shout" true expermenters would be banned and refused posting would be
>>a
>>workable alternative and more conductive to attempts to break the
>>mold.
>>.....
>>I think I'm going to vomit....Are you related to Art? If not,
>>you should be....Whine, whine, whine.... You think you are the
>>first one to try that? I tried that using my helical mobile
>>antennas years ago...Big deal...BTW...I ended up preferring the
>>normal 1/4 wave config for a mobile antenna...Just in case thou
>>art interested...I also agree with one poster...The biggest change
>>will be with the current distribution...
>>They were making CB antenna *years* ago, using that "extended winding"
>>type of design...Many were a 5/8's wl winding. Sheesh....Get a grip.
>>Quit whining...Religious war? Slurs against your stability? Will be
>>soon, if you don't quit this retched "poor ole maligned me" whining.
>>You never saw me say anything about the antenna itself. Why? Cuz
>>being I have tried it, I know they can work. But like I said,
>>I ended up not using it as the normal 1/4 wl config worked better
>>on my car. Trust me...The idea has been tried long ago.
>>There is nothing wrong with posting something new here. Although

>>to others, it might not be new at all.
>>In fact, if you are *actually* interested in if it's viable,
>>this is probably the best place. You won't get suger coated
>>bullcrap here...
>>Now, if you are trying to push some funky device like say the EH
>>antenna, yep, you probably don't wanna be here...Go to a yahoo
>>forum where all have to register to join. That way you can control
>>all the posts, and make the outcome of your "discovery" come out
>>any way you want. Sheesh...
>>MK
>>
>
>
>

Mark is right. This is an ancient antenna. Anyone interested can
look up the article on normal-mode helical antennas in the
Antenna Engineering Handbook and get some references at the
end of the chapter for further study. Most of references date from the
'60s and '70s.
73,
Tom Donaly, KA6RUH

4225. New group

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 21:17:58 UTC
From: Mama Bear <MamaBear@NoSpam.noo>
Message-ID: <Xns9625917A03EFFMama@216.196.97.142>
Source record: 80270
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna

http://groups.yahoo.com/group/Short_Wave-and-Amateur_Radio/

--
- Mama Bear

4226. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 21:37:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d24v5t$o4p$1@domitilla.aioe.org>
Source record: 80177

Line of sight is certainly what I had in mind. The purpose of shortening an antenna and making it easier to handle and less of a wind load, stronger, etc. would be to make it possible to elevate this antenna to greater heights and be able to withstand more demanding weather conditions.
Indeed, the 8 degree angle of radiation, which you state is ONLY factor of physical length, is what one would hope could be manipulated and brought into play--this low angle of radiation suggests itself to line of sight naturally.
If this antenna is light enough and disguised (painted gray as opposed to gleaming metal in sunlight) it might be possible to utilize very heavy fishline or weed-eater line to elevate this antenna to expanded heights using existing structures.
Since even a 20 meter version of this design would only fall in the 20+ ft length--respectable height would certainly be possible with these means--between two tall trees, placed at the top of tower, top of a tall mast, an existing guy line strung between telephone poles, etc.

The rubber duckie antenna is certainly useful for some situations, however, it is better if it stays on the walkie-talkie and we use another design for portable or base use.

Regards

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:d16b41tffspnirqa1me2er1rke046lgkhd@4ax.com...
> On Sat, 26 Mar 2005 08:18:39 -0800, "John Smith"
> <assemblywizard@gmail.com> wrote:
>
>>The extremely low angle of radiation
>
> Hi John,
>
> Rote learning comes through repetition:
> The physical size in relation to wavelength dominates launch
> characteristics, NOT electrical length.
>
> As slim jims are generally applied to UHF/VHF use, line of sight
> dominates both - that is why helically wound resistors (HT rubber
> duckies) work as well as they do.
>
> 73's
> Richard Clark, KB7QHC

4227. Re: Feeding Ladderline thru window

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 22:29:41 UTC
From: Ted Bruce <kilocycles**@**yahoo.com>
Message-ID: <9unb41trstihksuilgk0p3mbtv70tiqbql@4ax.com>
Source record: 80271

Cecil,
FB on the thick Plexiglas! I was thinking along the lines of window pane thickness. I put a couple of 2 x 4 feet 1/8" Plexiglas panels on the back porch to keep the dog from clawing the screen out. She made very quick work of those :)

I went back to Home Depot and replaced them with Lexan, and nooo problem!

I have your page bookmarked, Cecil...I'll go there and take a look.

As I said before, Lexan is a trade name for polycarbonate. That's the stuff I curse at when trying to open a package that typically hangs on hooks in a store. Even using scissors, it's very tough to cut. A few year ago, when my son had an RC car, the bodies were made out of polycarbonate, and you painted them on the inside. Very indestructable in that applicaton.

On Wed, 23 Mar 2005 09:13:34 -0600, Cecil Moore <w5dxp@hotmail.com> wrote:

>Ted Bruce wrote:
>> Cecil,
>> I'm pretty sure that Plexiglass is a trade name for acrylic panels.
>> That stuff is not at all durable.
>
>There's a picture of the Plexiglasï¿½ panel on my web page that
>was taken ten years ago in Arizona and I'm still using it.
>It's the 1/2 inch thick stuff, is still in good shape, and
>is still performing its function perfectly. My Piper Plastics
>properties chart says the effect of sunlight on Acrylic is "nil".
>The main reason that I used acrylic was - it was a 50 cent piece
>of stuff from the odds and ends box at a plastics place in Phoenix.
>I also used it and some acrylic rods to build an air-core mobile
>loading coil about 15 years ago. That coil is still in good shape.
>
>> On the othe hand, Lexan (trade
>> name) is polycarbonate, which is very durable.
>
>Yep, Lexanï¿½ is the stuff used in Airplane windows and is easy
>to machine. It is superior to acrylic in every way. If I had
>used polycarbonate, it would probably still be performing its
>function perfectly. (My '96 GMC Sierra Pickup with 180,000 miles
>on it is still performing its function perfectly. :-)

4228. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 22:31:18 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <Wol1e.25514$hU7.1115@newssvr33.news.prodigy.com>
Source record: 80272

Ralph,
Works in SSB too...
'Doc

4229. Ping W7EL - Re: Was: Feeding Ladderline thru window

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 22:34:07 UTC
From: Ted Bruce <kilocycles**@**yahoo.com>
Message-ID: <rjob41lgg4j32ma21bk20rfn93ef96fl13@4ax.com>
Source record: 80273

Roy,
What wiould be the property of a polymer like acrilic or polycarbonate
to determine its effectiveness as an insulator or a dielectric?
Volume resistivity?

Tnx,
Ted KX4OM

On Fri, 18 Mar 2005 17:23:36 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

---snip---

4230. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 23:22:56 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_4245f6ad@fidonet.org>
Source record: 80186

"aunwin@insightbb.com" bravely wrote to "All" (26 Mar 05 15:34:38)
--- on the heady topic of "Re: Interesting Antennas"

au> From: "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com>
au> Xref: aeinews rec.radio.amateur.antenna:27288

au> Cecil

au> If photons have no mass I do not see how they could become entangled!
au> As for electrons don't they just re-orient instead of travelling?

The term entanglement, as used in particle physics, has nothing to do
with mass but rather a state or spin. Electrons are a bare charge
surrounded by a shield of photons. What we measure is the leakage that
gets through. Since light is affected by gravity, doesn't this show a
link between gravity and electromotive force?

BTW Cecil's body is made up of baryons.

A*s*i*m*o*v

... "But, your honor, the light had dopplered to green."

4231. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 23:43:19 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <rsm1e.9456$S46.6609@newsread3.news.atl.earthlink.net>
Source record: 80274

"'Doc" <w5lz@cwis.net> wrote in message
news:Wol1e.25514$hU7.1115@newssvr33.news.prodigy.com...
> Ralph,
> Works in SSB too...
> 'Doc

Doc, you must not have understood what I sent. When a ssb transmitter is fed audio tones in to the mic input for digital modes such as rtty you are not using AFSK but FSK. It is AM or FM modes that feeding into the mic input that you generate AFSK.

YOu do not normally generate AFSK by feeding audio into the mic input of a SSB transmitter, you generate FSK. If a single audio tone is fed into a ssb transmitter you get a single frequency output. If it is changed in frequency you get another single frequency output. This is FSK even though you are using audio into the mic input.

If you feed a single tone into the mic of an AM transmitter , you get a carrier on the frequency and two sidebands (upper and lower) of the frequency of the tone. This is AFSK.

4232. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-26 23:56:26 UTC
From: Ron G <ron@gould.net>
Message-ID: <d24snk02ta9@news3.newsguy.com>
Source record: 80175

Frequency Shift Keying.
It was used allot when I was in the Navy (1950's) for Teletype Machines.
For all I know, it still is used.

I seem to remember "R-Y" as two letters I could type, and it would make the
Teletype Machine go from one extreme function to the opposite extreme
function, in the printer and machine and the code functions.
We used to use that as a way to check out if a machine was functioning
properly, as that would put it through all it's steps.
With age, I am wondering if I am right or wrong on it being R-Y.
Was it R-(?) ??
Best to all----
Ron

<jcooper874@webtv.net> wrote in message
news:26750-4243E25C-444@storefull-3275.bay.webtv.net...
> is it cw i guess new to radio
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.859 / Virus Database: 585 - Release Date: 2/14/05

4233. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 00:24:55 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <r3n1e.6254$z.1862@newsread2.news.atl.earthlink.net>
Source record: 80176

> I seem to remember "R-Y" as two letters I could type, and it would make
the
> Teletype Machine go from one extreme function to the opposite extreme
> function, in the printer and machine and the code functions.
> We used to use that as a way to check out if a machine was functioning
> properly, as that would put it through all it's steps.
> With age, I am wondering if I am right or wrong on it being R-Y.
> Was it R-(?) ??
> Best to all----
> Ron
>
>
You are correct in the RY. Those two letters are the reverse of each other and should move the mechanical selectors from one extreme to the other . It is possible to have the receiver set to the wrong sideband or the demodulator reverse switch set to the wrong position and you will receive YR instead of RY. This makes for interesting problems for the new to rtty person. If a transmission starts off with a line or two of RYs and you are receiving YRs, when the main body starts up you will receive jumbled characters.

4234. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 00:41:47 UTC
From: Jim - NN7K <nn7kexk7zfg@NOSPAMsbcglobal.net>
Message-ID: <ejn1e.3068$zl.1676@newssvr13.news.prodigy.com>
Source record: 80178

>>With age, I am wondering if I am right or wrong on it being R-Y.
>>Was it R-(?) ??
>>Best to all----
>>Ron
>>
>>
>
> You are correct in the RY. Those two letters are the reverse of each other
> and should move the mechanical selectors from one extreme to the other . It
> is possible to have the receiver set to the wrong sideband or the
> demodulator reverse switch set to the wrong position and you will receive YR
> instead of RY. This makes for interesting problems for the new to rtty
> person. If a transmission starts off with a line or two of RYs and you are
> receiving YRs, when the main body starts up you will receive jumbled
> characters.

Altho , this is with the old 5 level code. For ASCII, there is no such
test, tho the closest you can get is the " J * " characters (J, then
upper case 8) as explained by an old boss and teletype mechanic.
and to compound it, the ASCII characters can use 1, or 2 stop bits at
the end of the characters! As info, Jim NN7K

4235. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 01:26:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2m2c41dell6r11g0pq4027qq6ejf65p2ev@4ax.com>
Source record: 80179

On Sat, 26 Mar 2005 13:37:12 -0800, "John Smith"
<assemblywizard@gmail.com> wrote:

>The rubber duckie antenna is certainly useful for some situations, however,
>it is better if it stays on the walkie-talkie and we use another design for
>portable or base use.

Hi John,

Given this opprobrium, what makes its cousin for 20M more suitable?
[20M is not noted for being line-of-sight either.] The principle
annoyance to erecting antennas is in matching them, beyond that, any
radiator from 0.1 to 0.625 wavelengths pretty much has the same gain
in the same direction. The difference being that some are harder to
interface to a transmitter than others.

73's
Richard Clark, KB7QHC

4236. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 01:43:53 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2534krpq1@domitilla.aioe.org>
Source record: 80180

Hey, have you ever built any antennas? I know it is tempting to go buy a standard issue one and ask everyone else why they bother, sometimes, I am even tempted myself...

Regards

"Richard Clark" <kb7qhc@comcast.net> wrote in message news:2m2c41dell6r11g0pq4027qq6ejf65p2ev@4ax.com...
> On Sat, 26 Mar 2005 13:37:12 -0800, "John Smith"
> <assemblywizard@gmail.com> wrote:
>
>>The rubber duckie antenna is certainly useful for some situations,
>>however,
>>it is better if it stays on the walkie-talkie and we use another design
>>for
>>portable or base use.
>
> Hi John,
>
> Given this opprobrium, what makes its cousin for 20M more suitable?
> [20M is not noted for being line-of-sight either.] The principle
> annoyance to erecting antennas is in matching them, beyond that, any
> radiator from 0.1 to 0.625 wavelengths pretty much has the same gain
> in the same direction. The difference being that some are harder to
> interface to a transmitter than others.
>
> 73's
> Richard Clark, KB7QHC

4237. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 01:44:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9m3c41pgg3g3kkhn3qn8s8ud1bra68u49l@4ax.com>
Source record: 80181

On Sun, 27 Mar 2005 00:41:47 GMT, Jim - NN7K
<nn7kexk7zfg@NOSPAMsbcglobal.net> wrote:

>use 1, or 2 stop bits at the end of the characters!

Hi Jim,

Also 1ï¿½ stop bits (unless I'm confusing this with RS-232).

When I was in San Diego for Instructor Training, one of my Radioman buddies told me how their final was given in the form of a box of RTTY parts that they had to assemble into a complete working machine. He also suggested that a wandering ET (my rating) would, on occasion (and hidden from view), donate extra parts to random boxes.

No doubt, the endowed RM striker would mutter some other meaning for FSK.

73's
Richard Clark, KB7QHC

4238. Re: 1/2 wave vertical Impedance ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 01:53:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d253m0$s8v$1@domitilla.aioe.org>
Source record: 80182

This is pretty much what I have run into from hands on experience, when a half wave is elevated above ground a 50 to 800 ohm stepup autotransformer constructed on a toroid usually is sufficient to get the SWR to a resonable level, infrequently a 1600 ohm tap works better (sometimes a match is had with a 4:1 balun, go figure.)
Anyway, I find impedance can be greatly affected by relatively small changes in antenna height...

Regards

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:d24hk9$2bc$1@hercules.btinternet.com...
>
> "bbnn" wrote -
> .
>> I heard that a 1/2 wave vertical has a Z of about 2000 ohms at the
> base.
>> Is this the Z between the base of the vertical and ground that RF at
> the
>> resonant frequency
>> 'sees' ?
>>
>> Doesn't the height that the vertical base is above ground affect
> this
>> 2000 ohm valve?
>> Or does then metal car roof nullify any height above ground affects
> on
>> the Z?
>>
>> I've noticed that measuring the return loss of a 1/4 vertical is
> very low.
>> But measuring the return loss of a 1/2 wave or 5/8 wave antenna is
>> higher.?????????????
> ==============================
>
> It is important to ask the right questions. The right questions are
> those to which there are answers and practical measurements can be
> made to confirm them.
>
> For example, there is no answer to the question what is the impedance
> between the lower end of a half-wave dipole and ground when the lower
> end is at a height above ground.
>
> It is impossible to make such a measurement directly because the
> impedance meter MUST be associated with a length of wire which reaches

> between the bottom end of the antenna and ground. This length of wire
> MUST form part of the antenna and the antenna length is then no longer
> a 1/2-wave dipole.
>
> If the impedance meter is connected directly to the bottom of the
> antenna then the measurement is no longer with respect to ground but
> with respect to ground PLUS the impedance of that length of wire
> whatever impedance it may have.
>
> I hope, but I doubt it, whether I have made myself clear.
>
> To understand what is going on it is necessary to resort to
> theoretical arguments. Only the arguments are real - not the
> measurements.
>
> Thre is a 1/2-wave dipole isolated in space. It doesn't matter whether
> it is horizontal or vertical. It is possible theoretically to
> calculate from its length, diameter and frequency its input impedance
> at one end.
>
> But relative to what? To measure it is impossible. To where is the
> other side of the meter to be connected? Nevertheless we mustn't
> allow this stumbling block to get in our way. The theoretical, perhaps
> approximate, calculated value can be used in further calculations to
> answer real and very practical questions.
>
> The input resistance of a half-wave vertical near to ground is 2 or 3
> thousand ohms. It is uncertain because it depends on wire/conductor
> diameter and on the conductivity and permittivity of the soil.
> Because of its high value it is also sensitive to the antenna's
> environment, trees, etc.
>
> When fed at its base, near to ground, its input resistance can be
> considered to be its radiation resistance. Because of its high value
> relative to the ground connection resistance, very high power
> efficiency can be expected.
>
> Incidentally, half-wave or 5/8ths-wave verticals (not critical) have
> the lowest radiation angles and are therefore good DX antennas
> preferable to 1/2-wave horizontal dipoles at HF.
> ----
> Reg, G4FGQ
>
>

4239. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 01:53:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <q14c41hmv934m8am9uskbglko8jch9hi9l@4ax.com>
Source record: 80183

On Sat, 26 Mar 2005 17:43:53 -0800, "John Smith"
<assemblywizard@gmail.com> wrote:

>Hey, have you ever built any antennas?

Hi John,

Hoist your own petard, bucko. I display my call, I am among my peers
and do not post anonymously (not that your veil hasn't been penetrated
Brett).

Now, the question again:
>>Given this opprobrium, what makes its cousin for 20M more suitable?

73's
Richard Clark, KB7QHC

4240. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 02:00:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2543tslk1@domitilla.aioe.org>
Source record: 80184

Rather, back to my original question (your ADD--attention defecit disorder
is showing), "Anyone ever done a helical wound "Slim Jim?""

Regards

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:q14c41hmv934m8am9uskbglko8jch9hi9l@4ax.com...
> On Sat, 26 Mar 2005 17:43:53 -0800, "John Smith"
> <assemblywizard@gmail.com> wrote:
>
>>Hey, have you ever built any antennas?
>
> Hi John,
>
> Hoist your own petard, bucko. I display my call, I am among my peers
> and do not post anonymously (not that your veil hasn't been penetrated
> Brett).
>
> Now, the question again:
>>>Given this opprobrium, what makes its cousin for 20M more suitable?
>
> 73's
> Richard Clark, KB7QHC

4241. Re: best 6 meter??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 02:39:37 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <42461cea$0$3708$39cecf19@news.twtelecom.net>
Source record: 80185

chasm@texas.net wrote:

> thanks to Tom and Jim both. I am running a Cc: to a buddy up on the caprock
> as we are hustling to get our antennas up. I am looking at a 21' Diamond
> and a Par OA-50. next year, as $$ loosen up, it is a tailtwister or other and
> paired yagi's in both orientations.
>
> thanks to all again. still want to go look for an elist or other on 6m.
>
> cheers
> chas
> K5DAM
>

If you meant that you would be putting up a vertical beam along with a
horizontal, I would recommend against the vertical as a waste of money.
There is little useful DX on 6M FM as a percentage, especially when
you consider contests, WAS, WAC, etc. When the band is open I can
almost guarantee that you will not switch to FM.

tom
K0TAR

4242. The Greatest News Ever!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 03:08:00 UTC
From: Ron_Grossi_038@yahoo.com
Message-ID: <1111892880.782967.70960@g14g2000cwa.googlegroups.com>
Source record: 80187

http://www.jcil.blogspot.com << The Greatest News Ever!

4243. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 04:31:11 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <424637b3$1_2@127.0.0.1>
Source record: 80188

Asimov wrote:
> BTW Cecil's body is made up of baryons.
> A*s*i*m*o*v

For the record, Asimov has never been near my
body - unless she is a female. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4244. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 04:35:00 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42463897$1_2@127.0.0.1>
Source record: 80189

Richard Clark wrote:
> No doubt, the endowed RM striker would mutter some other meaning for
> FSK.

If I remember correctly, the Teletype ASR-3x designer
committed suicide.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4245. Re: Compact 40m gain antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 04:36:19 UTC
From: kyle <moxon_dude@nospam.com>
Message-ID: <42463841.BB278FE5@nospam.com>
Source record: 80190

Smaller then a yagi but similar gains,

the moxon could be a solution.

http://www.cebik.com/moxon/moxpage.html

Tom wrote:

> I have a coworker that would like to put up a 40m antenna on his tower
> that has some gain and directivity. I have modeled a few things, and
> while they are fairly satisfactory, I wanted to see what ideas the group
> had.
>
> The approximate limitations are as follows -
>
> o Boomlength 30 feet
> o Element length 30 feet
> o Any vertical components are max -10 feet from the plane of the boom
> and elements. The reason here is that it's a crankup, and his roof
> clearance would be about 10 feet when lowered.
>
> It would be desirable to have both CW and phone covered, but phone only
> is ok.
> It will need to be coax fed.
>
> Thanks.
>
> tom
> K0TAR

4246. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 07:17:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3cnc4196alsc2jin06ije0p8445bn576it@4ax.com>
Source record: 80191

On Sat, 26 Mar 2005 18:00:30 -0800, "John Smith"
<assemblywizard@gmail.com> wrote:
>Rather, back to my original question (your ADD--attention defecit disorder
>is showing), "Anyone ever done a helical wound "Slim Jim?""

Hi "Jack,"

I suppose it has to be said if this is going anywhere: Yes.

Is this 20 questions, or do you have any answers for yourself?

73's
Richard Clark, KB7QHC

4247. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 09:31:48 UTC
From: nm5k@wt.net
Message-ID: <1111915908.683079.268280@z14g2000cwz.googlegroups.com>
Source record: 80192

Mark is right. This is an ancient antenna. Anyone interested can
look up the article on normal-mode helical antennas in the
Antenna Engineering Handbook and get some references at the
end of the chapter for further study. Most of references date from the

'60s and '70s.

Of course it is. It often amuses me how often stuff is
"reinvented". Heck, I've even done it myself by accident...
But I never had any thoughts of filing a patent, or
whatever...I never had any delusions that surely no one
else in the world had thought of it, and it ended up as such.
I think people forget just how much antenna
experimentation has already been done. There was loads
of experimentation done from the 30's thru the 50's,
covering nearly everything imaginable. Ole John calls
me a nut, but if I hear someone say, "they all think
all is known about antennas" one more time, I'm gonna
puke. He and Art sound like the same whiny broke record.
Almost exactly to the word. Of course, no one here thinks
all is known about antennas. But I can assure you that
most all the theory has been pretty much etched in stone
for quite a few years. No one is going to come up with some
new gadjit that is going to break all the rules. Just
ain't gonna happen. Sure, minor touch ups of theory will
surely occur, but nothing major is going to be changed,
or it would have by now. It's comparible to the field of
aeronautics/aircraft,etc... People will continue to design
new aircraft, but no one is going to design something that
breaks all the rules. I've got a large walk in closet full of
QST's going back to the middle 30's. Thumbing through a few
of those 30's thru 50's issues might surprise some as to
how much was known even at that time. Nothing major as far
as theory as changed since that time, and that was a half
century ago. These days, if someone tries something that is
truly new, you can bet it will be pretty "out there". But
it won't break any rules of theory. It will just be a new
method of applying it. Unfortunately for John, what he is
doing is old news...But at least it's not something silly..
It is a viable antenna. And thus, not to say it's not worth
messing with...Everything I use is old news...Some of the
old news, will always be the best news...IE: no one is going
to be able to improve much on the efficiency of a simple
coax fed dipole on HF...MK

4248. 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 10:22:06 UTC
From: ts440@webtv.net
Message-ID: <5557-4246894E-4@storefull-3277.bay.webtv.net>
Source record: 80193

the band we truckers,took over we dont need big hf radios like keenwood etc.we use low cost radios with big power.also the high power black radio people are makeing there way up 28hz.the new super bowl .we black,white folks are meeting togeter.untiy day is here on 28mhz

4249. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 12:39:14 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_4246acc6@fidonet.org>
Source record: 80130

"nm5k@wt.net" bravely wrote to "All" (27 Mar 05 01:31:48)
--- on the heady topic of "Re: physical 1/4, electrical 1/2 wavelength"

nm> From: nm5k@wt.net
nm> Xref: aeinews rec.radio.amateur.antenna:27324

nm> Of course, no one here thinks
nm> *all* is known about antennas. But I can assure you that
nm> most all the theory has been pretty much etched in stone
nm> for quite a few years. No one is going to come up with some
nm> new gadjit that is going to break all the rules. Just
nm> ain't gonna happen. Sure, minor touch ups of theory will
nm> surely occur, but nothing major is going to be changed,
nm> or it would have by now. It's comparible to the field of

And then along comes an amateur wannabe physicist like Albert Einstein and turns theory on its ear... bringing the world kicking and screaming into the atomic age of satellites and relativity. The Nobel review folk didn't even know what to make of most his papers and gave him a kupiedoll for describing the photoelectric effect. This amateur wannabe generated more change than had been accomplished in the previous 1,000 years. And new ramifications are still being found for e=mc^2. Every scientist in 1905 was sure nothing major could be found too. We are in 2005 now and some geek in a broom closet is just about to unleash a comparable cataclysmic change to our world and one better count on it!

A*s*i*m*o*v

... The manure is sure to impact the rotary ventilator...

4250. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 12:52:14 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_4246acc5@fidonet.org>
Source record: 80131

"Cecil Moore" bravely wrote to "All" (26 Mar 05 22:31:11)
--- on the heady topic of "Re: Interesting Antennas"

CM> From: Cecil Moore <w5dxp@hotmail.com>
CM> Xref: aeinews rec.radio.amateur.antenna:27320

CM> Asimov wrote:
> BTW Cecil's body is made up of baryons.
> *A*s*i*m*o*v

CM> For the record, Asimov has never been near my
CM> body - unless she is a female. :-)

It was a generalization. BTW I meant to ask this some time ago, but
isn't "Cecil" a girlie sort of name? :-) I can easily imagine you
might have had a traumatic school experience as kids can be brutal.
I suppose you may have compensated by growing up to become a
lumberjack or a marines sargent?

A*s*i*m*o*f*f

... May you find the light and walk the mountain tops.

4251. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 13:16:20 UTC
From: chuck <chuck@nospam.net>
Message-ID: <4246b260_3@newsfeed.slurp.net>
Source record: 80194

Surely this is not correct. There is no conventional way of
doing RTTY on AM or FM.

The distinction between FSK and AFSK is that the former
operates directly on the transmitter's frequency-determining
oscillator, while the latter works first through the audio
stages of an SSB rig to achieve the same on-the-air signals.

Chuck

Ralph Mowery wrote:
> "'Doc" <w5lz@cwis.net> wrote in message
> news:Wol1e.25514$hU7.1115@newssvr33.news.prodigy.com...
>
>>Ralph,
>> Works in SSB too...
>> 'Doc
>
>
> Doc, you must not have understood what I sent. When a ssb transmitter is
> fed audio tones in to the mic input for digital modes such as rtty you are
> not using AFSK but FSK. It is AM or FM modes that feeding into the mic
> input that you generate AFSK.
>
> YOu do not normally generate AFSK by feeding audio into the mic input of a
> SSB transmitter, you generate FSK. If a single audio tone is fed into a ssb
> transmitter you get a single frequency output. If it is changed in
> frequency you get another single frequency output. This is FSK even though
> you are using audio into the mic input.
>
> If you feed a single tone into the mic of an AM transmitter , you get a
> carrier on the frequency and two sidebands (upper and lower) of the
> frequency of the tone. This is AFSK.
>
>
>
>
>

4252. Feeding a 3 element end fire array ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 13:21:40 UTC
From: Caveat Lector <CL@watchout.com>
Message-ID: <Ery1e.1151$k57.621@fed1read07>
Source record: 80195

A friend asked me this question and he is not on the NG's, can someone here advise him.
His e-mail is tomkf8dx@att.net
or I will relay any responses that are posted here. - Thanks

"My question is the proper way to feed a 3 element end fire array.
What I have now is 3 dipoles 122 ft. total length. (61ft. per side) fed with 450 0hm ladderline, and spaced at 121 ft separation. I'm using 0.975 for velocity factor. the 450 ohm ladderline is NOT transposed. I'm feeding the array at the center dipole. What I need to know is , is this correct or should I transpose at out side dipoles, the feed line. The whole array is 242 ft. long. And is up at 85 ft. Nobody seems to know if I should change feed line or not. If you could help I'd very much appreciate."
Thanks es 73's Tom Weller KF8DX tomkf8dx@att.net

--
CL -- I doubt, therefore I might be !

4253. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 13:27:09 UTC
From: chuck <chuck@nospam.net>
Message-ID: <4246b4e2$1_5@newsfeed.slurp.net>
Source record: 80196

Well, maybe I was half-right. It appears that years ago,
AFSK did mean exactly what Ralph described with both AM and FM.

Today, AFSK has come to mean the use of audio tones to shift
the carrier frequency.

Sorry, and thanks for the opportunity to learn something
about changing customs!

73,

Chuck

chuck wrote:
> Surely this is not correct. There is no conventional way of doing RTTY
> on AM or FM.
>
> The distinction between FSK and AFSK is that the former operates
> directly on the transmitter's frequency-determining oscillator, while
> the latter works first through the audio stages of an SSB rig to achieve
> the same on-the-air signals.
>
> Chuck
>
> Ralph Mowery wrote:
>
>> "'Doc" <w5lz@cwis.net> wrote in message
>> news:Wol1e.25514$hU7.1115@newssvr33.news.prodigy.com...
>>
>>> Ralph,
>>> Works in SSB too...
>>> 'Doc
>>
>>
>>
>> Doc, you must not have understood what I sent. When a ssb transmitter is
>> fed audio tones in to the mic input for digital modes such as rtty
>> you are
>> not using AFSK but FSK. It is AM or FM modes that feeding into the mic
>> input that you generate AFSK.
>>
>> YOu do not normally generate AFSK by feeding audio into the mic input
>> of a
>> SSB transmitter, you generate FSK. If a single audio tone is fed into
>> a ssb
>> transmitter you get a single frequency output. If it is changed in

>> frequency you get another single frequency output. This is FSK even
>> though
>> you are using audio into the mic input.
>>
>> If you feed a single tone into the mic of an AM transmitter , you get a
>> carrier on the frequency and two sidebands (upper and lower) of the
>> frequency of the tone. This is AFSK.
>>
>>
>>
>>
>>

4254. Re: 1/2 wave vertical Impedance ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 13:52:00 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4246bad7_1@newsfeed.slurp.net>
Source record: 80197

"Reg Edwards" wrote
> The input resistance of a half-wave vertical near to ground is 2 or 3
> thousand ohms. It is uncertain because it depends on wire/conductor
> diameter and on the conductivity and permittivity of the soil.
> Because of its high value it is also sensitive to the antenna's
> environment, trees, etc.

Terman (Radio Engineer's Handbook, p 846) shows a chart for the radiation resistance and reactance ranges for five, guyed MW broadcast towers, as measured against a good radial ground system--an ohm or two above true earth. For electrically 1/2-wave radiators, R ranged from 300 ohms to 450 ohms and Z ranged from about -100 ohms to -350 ohms.

RF

4255. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 14:57:59 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4246ca9d$1_2@127.0.0.1>
Source record: 80198

nm5k@wt.net wrote:
> But I can assure you that
> most all the theory has been pretty much etched in stone
> for quite a few years. No one is going to come up with some
> new gadjit that is going to break all the rules. Just
> ain't gonna happen.

Assume a future antenna emitting entangled photons and
explain to us how present antenna theory handles non-locality.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4256. Re: 1/2 wave vertical Impedance ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 15:04:01 UTC
From: Ron McConnell <rcmcc@earthlink.net>
Message-ID: <BXz1e.6584$z.2354@newsread2.news.atl.earthlink.net>
Source record: 80199

Check for the works by the late Dr. Branko Popovic,
who was a consultant to European broadcasters
on tall (> 1/4 wave length) vertical antenna array design.

He was my PhD research advisor at Virginia Tech
in 1968 and 1969. He was on an exchange plan
from Belgrade. I was his first PhD candidate.
He worked from physical reality on antennas
and was an inspiration to me.

Cheers,

Ron McConnell
w2iol@arrl.net

Ronald C. McConnell, PhD

WGS-84: N 40ï¿½ 46' 57.9" +/-0.1"
W 74ï¿½ 41' 21.3" +/-0.1"
FN20ps.77GU96 +/-
V +5058 H +1504

<http://home.earthlink.net/~rcmcc>

Imagine if we had only Roman numerals for mathematics...
- RCMcC

4257. Re: Feeding a 3 element end fire array ?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 15:05:32 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4246cc60$1_1@127.0.0.1>
Source record: 80200

Caveat Lector wrote:

> A friend asked me this question and he is not on the NG's, can someone here
> advise him.
> His e-mail is tomkf8dx@att.net
> or I will relay any responses that are posted here. - Thanks
>
> "My question is the proper way to feed a 3 element end fire array.
> What I have now is 3 dipoles 122 ft. total length. (61ft. per side) fed with
> 450 0hm ladderline, and spaced at 121 ft separation. I'm using 0.975 for
> velocity factor. the 450 ohm ladderline is NOT transposed. I'm feeding the
> array at the center dipole. What I need to know is , is this correct or
> should I transpose at out side dipoles, the feed line. The whole array is
> 242 ft. long. And is up at 85 ft. Nobody seems to know if I should change
> feed line or not. If you could help I'd very much appreciate."
> Thanks es 73's Tom Weller KF8DX tomkf8dx@att.net

The description seems unclear to me. EZNEC can probably answer
the question. A free demo version is available at:

http://www.eznec.com
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4258. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 15:42:08 UTC
From: SideBand <AINO8SPAMW@cac.net>
Message-ID: <kvA1e.11766$ZB6.2091@newssvr19.news.prodigy.com>
Source record: 80201

Ralph Mowery wrote:
> "'Doc" <w5lz@cwis.net> wrote in message
> news:Wol1e.25514$hU7.1115@newssvr33.news.prodigy.com...
>
>>Ralph,
>> Works in SSB too...
>> 'Doc
>
>
> Doc, you must not have understood what I sent. When a ssb transmitter is
> fed audio tones in to the mic input for digital modes such as rtty you are
> not using AFSK but FSK. It is AM or FM modes that feeding into the mic
> input that you generate AFSK.
>
> YOu do not normally generate AFSK by feeding audio into the mic input of a
> SSB transmitter, you generate FSK. If a single audio tone is fed into a ssb
> transmitter you get a single frequency output. If it is changed in
> frequency you get another single frequency output. This is FSK even though
> you are using audio into the mic input.
>
> If you feed a single tone into the mic of an AM transmitter , you get a
> carrier on the frequency and two sidebands (upper and lower) of the
> frequency of the tone. This is AFSK.
>
>
>
>
>
Apparently someone doesn't understand how AM works, or FM, or SSB for
that matter..

-C

4259. Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 16:20:58 UTC
From: "aunwin@insightbb.com"
Message-ID: <K3B1e.8558$NW5.7100@attbi_s02>
Source record: 80202

As gain increases with a yagi design the forward
lobe narrows . With high gain yagi's the lobe
becomes so narrow it is deemed to be a hinderence
instead of an advantage. To overcome this perceived
problem one has to know what causes it.
So to the gurus of this group, what actualy creates
the narrowing of the forward lobes ?
End effects perhaps!
Regards
Art

4260. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 16:32:37 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <pind41dd1uvqqpbfrem2emmnq09cikvn02@4ax.com>
Source record: 80203

On Sun, 27 Mar 2005 16:20:58 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>As gain increases with a yagi design the forward
>lobe narrows .

Let's certainly hope so.

>With high gain yagi's the lobe
>becomes so narrow it is deemed to be a hinderence
> instead of an advantage.

Huh, I didn't know this...for several decades now I've thought it was
an advantage.

For example my EME friends and I have always believed that focusing
the available transmit power on the moon on transmit and rejecting
stellar background noise on receive was desirable. How did we go so
wrong?

4261. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 16:39:56 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <wlB1e.15986$C47.5299@newssvr14.news.prodigy.com>
Source record: 80204

Cecil Moore wrote:
> nm5k@wt.net wrote:
>
>> But I can assure you that
>> most all the theory has been pretty much etched in stone
>> for quite a few years. No one is going to come up with some
>> new gadjit that is going to break all the rules. Just
>> ain't gonna happen.
>
>
> Assume a future antenna emitting entangled photons and
> explain to us how present antenna theory handles non-locality.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> -----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
> News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000
> Newsgroups
> ---= East/West-Coast Server Farms - Total Privacy via Encryption =---

Go ahead, Cecil, prove the world wrong. Be the first on your block to
design a real-world antenna based on particle physics, but remember the
correspondance principle.
73,
Tom Donaly, KA6RUH

4262. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 16:44:43 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4jod415nkg7q4upbhhequq88md7ib4imae@4ax.com>
Source record: 80205

On Sun, 27 Mar 2005 16:20:58 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:
>To overcome this perceived problem one has to know what causes it.

Hi Art,

Replace the defective yagi with an omni. To re-obtain gain without
perceived problem - add amplification.
>So to the gurus of this group, what actualy creates the narrowing of the forward lobes ?
Sinus pressure.

73's
Richard Clark, KB7QHC

4263. Re: 1/2 wave vertical Impedance ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 17:02:54 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d26ovu$5vk$1@hercules.btinternet.com>
Source record: 80207

"Richard Fry" wrote -
> "Reg Edwards" wrote
> > The input resistance of a half-wave vertical near to ground is 2
or 3
> > thousand ohms. It is uncertain because it depends on
wire/conductor
> > diameter and on the conductivity and permittivity of the soil.
> > Because of its high value it is also sensitive to the antenna's
> > environment, trees, etc.
> ----------------
>
> Terman (Radio Engineer's Handbook, p 846) shows a chart for the
radiation
> resistance and reactance ranges for five, guyed MW broadcast towers,
as
> measured against a good radial ground system--an ohm or two above
true
> earth. For electrically 1/2-wave radiators, R ranged from 300 ohms
to 450
> ohms and Z ranged from about -100 ohms to -350 ohms.
>
> RF

==========

As I said, 1/2-wave antenna input impedance is a function of conductor diameter. It is not a relatively fixed value (around 36 ohms) as is a 1/4-wave vertical.

Impedance decreases as diameter increases. Or as the ratio of height/diameter decreases.

Terman's LF and MF towers (not wires) have extrordinary thick conductors (probably latttice masts) compared with a low antenna height in terms of wavelengths. Hence the low input impedances in his examples.

If I remember correctly, Terman makes no reference to height/diameter ratio and is therefore misleading by using tower antennas as typical examples. He tells only half the story. Terman should not always be used as the Bible.

EZNEC can be used to estimate input impedances of the more common 1/2-wave wire antennas at HF when very near to ground. Which is what amateurs are interested in. They usually fall in the range 1500 to 3500 ohms.

At VHF and UHF with short, fat, thick rods for conductors, (similar in proportion to LF lattice towers) input impedances can fall to several hundred ohms or smaller.

Input impedance values of isolated dipoles are theoretically calculable but are impossible to measure. Nevertheless, calculated values are very useful in antenna system design. Couldn't do without them!

Maths takes precedence over measurements. Without maths, experimenters flounder about in the dark.

Reg, G4FGQ

4264. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 17:03:50 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <uapd41pgcrhr8t619b2msbv8t3bjlnr629@4ax.com>
Source record: 80206

On Sun, 27 Mar 2005 16:39:56 GMT, "Tom Donaly"
<dtdonaly@sbcglobal.net> wrote:

>but remember the correspondance principle.

C'Mon Tom,

You're calling CQ to the photon QTH of monkeyshines and you expect
principles? May as well drop this high-heel boot:
Entangled Electrons use their own return address for correspondence.

73's
Richard Clark, KB7QHC

4265. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 17:17:15 UTC
From: dplatt@radagast.org
Message-ID: <114dqkr94omvnce@corp.supernews.com>
Source record: 80209

In article <K3B1e.8558$NW5.7100@attbi_s02>,
aunwin@insightbb.com <aunwin@insightbb.com@insightbb.com> wrote:

>As gain increases with a yagi design the forward
>lobe narrows . With high gain yagi's the lobe
>becomes so narrow it is deemed to be a hinderence
> instead of an advantage. To overcome this perceived
>problem one has to know what causes it.
>So to the gurus of this group, what actualy creates
>the narrowing of the forward lobes ?
>End effects perhaps!

Conservation of energy.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4266. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 17:17:25 UTC
From: "aunwin@insightbb.com"
Message-ID: <FUB1e.8710$NW5.8590@attbi_s02>
Source record: 80208

"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:pind41dd1uvqqpbfrem2emmnq09cikvn02@4ax.com...
> On Sun, 27 Mar 2005 16:20:58 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>>As gain increases with a yagi design the forward
>>lobe narrows .
>
> Let's certainly hope so. But if you knew the answer you could
then use the knoweledge to extend the narrowing to provide more gain.
All is known about antennas isn't it?

It doesn't with my antenna where the lobe gets larger
as radiation is deflected to the forward direction.
Obviously with a yagi cancellation is occuring as well as addition.

>
>>With high gain yagi's the lobe
>>becomes so narrow it is deemed to be a hinderence
>> instead of an advantage.
>
> Huh, I didn't know this...for several decades now I've thought it was

> an advantage.

You are not alone as I thought it meant quieter contacts but it is said
(ARRL publication) that it then becomes more difficult to aim, ala the
rombic.
That's why I see my antenna's flattening of the main lobe without loss in
beam
width an advantage.

>
> For example my EME friends and I have always believed that focusing
> the available transmit power on the moon on transmit and rejecting
> stellar background noise on receive was desirable. How did we go so
> wrong?
>
>

But back to the question.

Do you know what creates the narrowing of the main lobe ?
It only takes one diffinitive post from a real guru to explain and then
the others will follow. Until the real guru comes forward with an

explanation
all others will procrastinate and avoid the question without giving
a hint that they do not know and are awaiting the explanation from a real
guru.

If you actually know Wes then jump in so others may follow.

Regards
Art

.

4267. Where Did My Web Page URL Go?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 17:22:23 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <umqd41dr5hbre65dgkd5uoqm638gs1kb29@4ax.com>
Source record: 80210

On 3-14 or 3-15 I started a thread concerning a new url for my web page at walt@w2du.com. After the original post I added two more. Then a few days ago I started to add another post, but the thread had disappeared.

Can anyone tell me how a thread disappears? Can it be deleted? By just anyone?

Walt Maxwell, W2DU

4268. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 17:28:25 UTC
From: "aunwin@insightbb.com"
Message-ID: <Z2C1e.8726$NW5.635@attbi_s02>
Source record: 80211

Richard
Why do you feel compelled to post when you apparently do not know the
answer.
Your response is pure rubbish
Why not wait for the real guru to post so you can float in on his or her's
coatails ?
You seem to have a penchant for posting in such oblique language in the hope
that
others will see you as possibly knoweledgable but not understood by the
lesser educated.
Your degree in Shakespeare has sure muddled your thinking with respect to
engineering.
Art

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:4jod415nkg7q4upbhhequq88md7ib4imae@4ax.com...
> On Sun, 27 Mar 2005 16:20:58 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>>To overcome this perceived problem one has to know what causes it.
>
> Hi Art,
>
> Replace the defective yagi with an omni. To re-obtain gain without
> perceived problem - add amplification.
>>So to the gurus of this group, what actualy creates the narrowing of the
>>forward lobes ?
> Sinus pressure.
>
> 73's
> Richard Clark, KB7QHC

4269. Re: The Greatest News Ever!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 17:31:19 UTC
From: John <ac5tx@sbcglobal.net>
Message-ID: <H5C1e.4075$yq2.2936@newssvr12.news.prodigy.com>
Source record: 80212

Peter said, "Repent and be baptized....for the forgiveness or your sins"
Acts 2:38
<Ron_Grossi_038@yahoo.com> wrote in message
news:1111892880.782967.70960@g14g2000cwa.googlegroups.com...
> http://www.jcil.blogspot.com << The Greatest News Ever!
>

4270. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 17:42:48 UTC
From: dplatt@radagast.org
Message-ID: <114ds4o4bq46691@corp.supernews.com>
Source record: 80213

In article <FUB1e.8710$NW5.8590@attbi_s02>,
aunwin@insightbb.com <aunwin@insightbb.com@insightbb.com> wrote:

>It doesn't with my antenna where the lobe gets larger
>as radiation is deflected to the forward direction.

There is a harsh limit, imposed by physics, as to how much gain that approach can give you.

If all of the energy from one hemisphere is redirected into the other hemisphere, and if the forward-direction pattern shape does not change (the forward lobe is not narrowed), then you have a forward gain of 3 dB (2:1 power ratio increase). You *cannot* have more, as this would require that the antenna be radiating more power than it receives from its input.

A Moxon antenna is, to a first approximation, a pretty good example of this approach - it has very little energy in the rear hemisphere, and a broad forward lobe. There are various two-driven-element array designs which achieve a similar pattern and result.

> Obviously with a yagi cancellation is occuring as well as addition.

You are trying to draw a distinction between "deflection" and "cancellation" which I believe is invalid. Both are simply ways of describing the result of the "sum of vectors" effects of having energy from multiple radiators (driven or passive) combining in different phases at different locations. Same math, two different words.

>Do you know what creates the narrowing of the main lobe ?

Conservation of energy *requires* that the main lobe be narrowed, if you wish to achieve more gain than you can get by simply redistibuting the rear-ward energy in the forward direction.

A super-high-gain antenna *cannot* have a wide, uniform beam-width in both azimuth and elevation.

As usual for your postings, Art, it's impossible to tell whether your claims for your antenna are plausible, because you refuse to disclose *anything* (either the invention, or the results you claim) in any halfway-tanglible form (e.g. models, specific numbers, etc.).

Until you do, I really think it would be to everyone's relief if you'd follow through with your recent statement that you were going to stop posting. You're achieving no good result for yourself by contining as you are.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4271. Re: Where Did My Web Page URL Go?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 17:48:17 UTC
From: dplatt@radagast.org
Message-ID: <114dsf1kh91va65@corp.supernews.com>
Source record: 80214

>On 3-14 or 3-15 I started a thread concerning a new url for my web page at
>walt@w2du.com. After the original post I added two more. Then a few days ago I
>started to add another post, but the thread had disappeared.
>
>Can anyone tell me how a thread disappears? Can it be deleted? By just anyone?

There's no universal mechanism for a "thread". It depends on your
news server and your newsreader.

Threads are often based on headers placed in the newsgroup articles...
when one posts a followup, the newsreader usually adds a "references:"
header which gives the article-ID of whatever message you're posting a
followup to. Newsreader programs, or Web-based newsreading services
can use these "references:" headers to deduce the linear or tree
structure of a thread of articles.

Some newsreaders don't use this information, and try to deduce the
thread structure by looking at the 'Subject' headers.

In either case, there's no standard for how a system maintains a 'list
of active threads', and there is no centralized registry. Each system
which stores and processes USENET news (Giganews, Supernews, Google,
and numerous smaller servers) has the ability to maintain its own
thread database, makes its own decisions about how such databases are
constructed, and makes its own decision about how long to store the
thread information and the underlying articles themselves.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4272. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 18:05:03 UTC
From: Clarence_A <no@No.com>
Message-ID: <jBC1e.16013$C47.6273@newssvr14.news.prodigy.com>
Source record: 80215

"H J" <ts440@webtv.net> wrote in message
news:5557-4246894E-4@storefull-3277.bay.webtv.net...
> the band we truckers,took over we dont need big hf radios like
keenwood
> etc.we use low cost radios with big power.also the high power
black
> radio people are makeing there way up 28hz.the new super bowl
.we
> black,white folks are meeting togeter.untiy day is here on 28mhz

Can't spell, can not clearly communicate, and will spend serious
time in prison for operation on 10Meters. The fine is $10,000 a
Day, and the prison time is up to 10 years per infraction. NOT
SMART!

4273. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 18:06:40 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7qrd41d806pqamdfq3op18r59lc07mpgbn@4ax.com>
Source record: 80216

On Sun, 27 Mar 2005 17:28:25 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>Richard
> Why do you feel compelled to post

Hi Art,

Because straightforward, simple answers seem to baffle you so
outright. See? Each and every post offers what is YOUR
responsibility to discuss, and by your choice you litter the landscape
with thrashing over style instead of content:

>Your response is pure rubbish

Let's call it entangled correspondence. Really, Art, you need to go
back to your disclaimers with each posting so we can tell when you
aren't serious.

>Why not wait for the real guru to post so you can float in on his or her's
>coatails ?

-Whew!- And here I thought you had reserved your venom of "guru" for
me alone. Thanx, that makes me feel so much better that you have
elevated me above that ill-bred population you so love to spit on.

>others will see you as possibly knoweledgable but not understood by the
>lesser educated.

Well, let's test that by returning to the topic and see which side you
occupy:

Now, do you dispute that sinus pressure DOES NOT create narrowing of
frontal lobes? Even the lesser educated know this for a fact, Art.
Are you suggesting that perceived problems of yagis cannot be cured
with an omni with amplification? Something tells me you already had
an answer for that hidden up your sleeve (without data of course but
perfectly proven with chords and tangents).

I await your Euclidean gymnastics. ;-)

73's
Richard Clark, KB7QHC

4274. Re: Where Did My Web Page URL Go?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 18:14:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vjtd41dvakodln117hd0mt82lb7s661ubt@4ax.com>
Source record: 80217

On Sun, 27 Mar 2005 17:22:23 GMT, Walter Maxwell <w2du@iag.net> wrote:

>On 3-14 or 3-15 I started a thread concerning a new url for my web page at
>walt@w2du.com. After the original post I added two more. Then a few days ago I
>started to add another post, but the thread had disappeared.
>
>Can anyone tell me how a thread disappears? Can it be deleted? By just anyone?
>
>Walt Maxwell, W2DU

Hi Walt,

I've seen all your threads. I've visited you site to review your
papers (re-read the one on sourze C). You populated one thread with
three postings, one after the other (not duplicate postings however).
Visit:
http://groups-beta.google.com/group/rec.radio.amateur.antenna?hl=en&lr=&ie=UTF-8
and search against your name to confirm what has made it into the Web.
If you see more than your ISP has delivered, your ISP may have a
broken News chain.

73's
Richard Clark, KB7QHC

4275. Re: Compact 40m gain antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 18:29:09 UTC
From: Bob Schreibmaier <k3ph@ptd.net>
Message-ID: <b6mcne6P7IzpZtvfUSdV9g@ptd.net>
Source record: 80218

In article <4244d91d$0$3712$39cecf19@news.twtelecom.net>, news0002@taring.org says...
>
>
>Bob Schreibmaier wrote:
>
>> Hi Tom,
>>
>> In article <4244b77d$0$3712$39cecf19@news.twtelecom.net>, you say...
>>
>>>I haven't asked anything impossible or even tough, since I only gave a
>>>general bound on size, gave the rough band limits desired, and said we'd
>>>like gain and directivity.
>>
>>
>> Well... :-)
>>
>> On a band that has a bandwidth of roughly 4% of
>> its center frequency, you're going to be REALLY
>> hard-pressed to get coverage of both phone and
>> CW on an antenna that is a little over 40% of
>> full size. So far, no manufacturer has been
>> able to come up with the antenna you describe.
>>
>> Many years ago, Swan Antennas had a 2-element
>> 40 meter beam that used half size elements.
>> As I recall, it used loading coils midway
>> through each element. I'm not very sure, but
>> I think the boom length was about 16 feet.
>> I think they got somewhere around 100 kHz
>> between 2:1 points. That wouldn't even cover
>> the entire phone band, and the elements are
>> longer than your design requirements.
>>
>> So, yes, you are asking for something very tough,
>> if not impossible.
>>
>> But, I wish you good luck in your quest! :-)
>>
>> 73,
>> Bob
>>
>
> From my original post -

>
>"It would be desirable to have both CW and phone covered, but phone only
>is ok."

From my original post -

I think they got somewhere around 100 kHz
between 2:1 points. That wouldn't even cover
the entire phone band, and the elements are
longer than your design requirements.

73,
Bob

--
+---+
| Bob Schreibmaier K3PH | E-mail: k3ph@ptd.net |
| Kresgeville, PA 18333 | http://www.dxis.org |
+---+

4276. Re: 1/2 wave vertical Impedance ???

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 18:42:09 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4246fed7_3@newsfeed.slurp.net>
Source record: 80219

"Reg Edwards" wrote:
> As I said, 1/2-wave antenna input impedance is a function of conductor
> diameter. It is not a relatively fixed value (around 36 ohms) as is a
> 1/4-wave vertical.

Terman's chart, which I scanned and emailed to you, shows a 1/4-wave vertical with an ~R of 31 ohms to 48 ohms, and ~j of -15 ohms to -40 ohms for the five MW towers. This range actually is about the same by % change as shown for the 1/2-wave radiator (~R of 300 ohms to 450 ohms, ~j of -100 ohms to -350 ohms).

> Maths takes precedence over measurements. Without maths,
> experimenters flounder about in the dark.

Both techniques should give about the same results, when both are done correctly.

RF

4277. Re: Compact 40m gain antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 18:58:46 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <GnD1e.6844$z.470@newsread2.news.atl.earthlink.net>
Source record: 80221

"Tom Ring" <news0002@taring.org> wrote in message
news:42419b8e$0$3708$39cecf19@news.twtelecom.net...
> I have a coworker that would like to put up a 40m antenna on his tower
> that has some gain and directivity. I have modeled a few things, and
> while they are fairly satisfactory, I wanted to see what ideas the group
> had.
>
> The approximate limitations are as follows -
>
> o Boomlength 30 feet
> o Element length 30 feet
> o Any vertical components are max -10 feet from the plane of the boom
> and elements. The reason here is that it's a crankup, and his roof
> clearance would be about 10 feet when lowered.
>
> It would be desirable to have both CW and phone covered, but phone only
> is ok.
> It will need to be coax fed.
>
> Thanks.
>
> tom
> K0TAR

Check out the scans of the antenna here:

http://home.earthlink.net/~rmowery28146/data/

It is from the 1981 Handbook. It is slightly larger than specified but may
be usable. The Files are about 1 and 2 meg in size.

4278. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 18:58:52 UTC
From: drwxr-xr-x <bit-bucket@config.com>
Message-ID: <slrnd4e0jc.66h.bit-bucket@shell.config.com>
Source record: 80220

```
On Sun, 27 Mar 2005 18:05:03 GMT, Clarence_A wrote:
>
> "H J" <ts440@webtv.net> wrote in message
> news:5557-4246894E-4@storefull-3277.bay.webtv.net...
>> the band we truckers,took over we dont need big hf radios like
> keenwood
>> etc.we use low cost radios with big power.also the high power
> black
>> radio people are makeing there way up 28hz.the new super bowl
> .we
>> black,white folks are meeting togeter.untiy day is here on 28mhz
>
> Can't spell, can not clearly communicate, and will spend serious
> time in prison for operation on 10Meters. The fine is $10,000 a
> Day, and the prison time is up to 10 years per infraction.
> NOT SMART!

What is really *NOT SMART* is replying to a TROLL.
```

4279. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 18:59:42 UTC
From: "aunwin@insightbb.com"
Message-ID: <uoD1e.110018$Ze3.66917@attbi_s51>
Source record: 80222

"Dave Platt" <dplatt@radagast.org> wrote in message
news:114ds4o4bq46691@corp.supernews.com...
> In article <FUB1e.8710$NW5.8590@attbi_s02>,
> aunwin@insightbb.com <aunwin@insightbb.com@insightbb.com> wrote:
>
>>It doesn't with my antenna where the lobe gets larger
>>as radiation is deflected to the forward direction.
>
> There is a harsh limit, imposed by physics, as to how much gain that
> approach can give you.
Agreed... Do you know what those limits are ?

>
> If all of the energy from one hemisphere is redirected into the other
> hemisphere, and if the forward-direction pattern shape does not change
> (the forward lobe is not narrowed), then you have a forward gain of 3
> dB (2:1 power ratio increase). You *cannot* have more, as this would
> require that the antenna be radiating more power than it receives from
> its input.

Absolutely incorrect. If I place the air of two balloons ,which reflect the
figure
eight,into one single balloon and where the laws of partial pressures do not
intervene
then you will have a balloon that is round and not elongated as the antenna
books
would have you suggest. "Gain" is a term used to to quantify a small
portion of the
energy contained in the mythical ball of energy. Since the collection of
energy comes
from different directions and phases the energy collection is layered
depending on
the influence of the earth. Thus the layers of radiation are distorted
where one layer
can be squeezed outwards further than other layers, thus the terminology
of "gain"
If you are going to interelate the terms of "gain" and "power" then you must
define
the parameters used to allow that.

>
> A Moxon antenna is, to a first approximation, a pretty good example of
> this approach - it has very little energy in the rear hemisphere, and
> a broad forward lobe. There are various two-driven-element array
> designs which achieve a similar pattern and result.

And the resulting "gain" is ....what?
I have difficulty in getting beyond 16 dbi as any additional energy from the
rear
has very little effect on the diameter of the frontal lobe.

>
>> Obviously with a yagi cancellation is occuring as well as addition.
>

> You are trying to draw a distinction between "deflection" and
> "cancellation" which I believe is invalid. Both are simply ways of
> describing the result of the "sum of vectors" effects of having energy
> from multiple radiators (driven or passive) combining in different
> phases at different locations. Same math, two different words.

Yes I agree because of conservation laws e.t.c . When cancellation occurs
then energy creats energy in another direction similar to pulling steel
apart in tension
(or using compression) the steel becomes narrower before severing occurrs.
This thinning or "waisting" is created by the additional forces created at
90 degrees
to the tensile forces and where the break actually occurrs at 45 degrees
and not at right angles.
>
>>Do you know what creates the narrowing of the main lobe ?

>
> Conservation of energy *requires* that the main lobe be narrowed, if
> you wish to achieve more gain than you can get by simply redistibuting
> the rear-ward energy in the forward direction.

This is what you alluded to before and it is still incorrect
What "requires" what ? And how is this conclusion generating
an elongated lobe?

>
> A super-high-gain antenna *cannot* have a wide, uniform beam-width in
> both azimuth and elevation.

Don't know how you can say that unless somehow you generated a single lobe.
Now that would be interesting

>
> As usual for your postings, Art, it's impossible to tell whether your
> claims for your antenna are plausible, because you refuse to disclose
> *anything* (either the invention, or the results you claim) in any
> halfway-tanglible form (e.g. models, specific numbers, etc.).

My antenna is somewhat related thus my interest in what creates an elongated
lobe
which is formed using Yagi principles.
The question however, is specifically related to Yagi's
and its narrowed lobes.
Do you know what it is that creats an elongated lobe

on a high gain yagi i.e not totally round.?
Nothing more, nothing less.
Regards
Art

>
> Until you do, I really think it would be to everyone's relief if you'd
> follow through with your recent statement that you were going to stop
> posting. You're achieving no good result for yourself by contining as
> you are.
I have not posted as you have inferred. The question is about Yagi design

AE6EO
> Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

4280. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 19:13:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <k41e41t6j9hg2tktraml2vr1u44h1pber2@4ax.com>
Source record: 80224

On Sun, 27 Mar 2005 18:59:42 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

the problem:
>My antenna is somewhat related thus my interest in what creates an elongated lobe
the answer:
>which is formed using Yagi principles.

Hi Art,

Your question already answers your question. You have a tendency to
just blow right on taking no notice of this to create the SAME
question again:
>The question however, is specifically related to Yagi's
>and its narrowed lobes.
> Do you know what it is that creats an elongated lobe
>on a high gain yagi i.e not totally round.?
formed using Yagi principles. (to quote you)
>Nothing more, nothing less.
Exactly.

Now, are we going to be treated by another round of your complaints
about Shakespeare and the quality of gurus; or are you going to stick
with technical discussion and respond to the obvious points?

73's
Richard Clark, KB7QHC

4281. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 19:13:49 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <42470643_2@newsfeed.slurp.net>
Source record: 80223

"aunwin@insightbb.com wrote:
> As gain increases with a yagi design the forward
> lobe narrows. So to the gurus of this group, what
> actualy creates the narrowing of the forward lobes ?

A good analogy that needs no math to understand is that of squeezing an inflated balloon from its normally spherical shape into whatever shape is more appropriate for the application. There is a given volume of air in that balloon. If you want the surface of the balloon to extend further from the origin of its original sphere, the new shape must be narrower in one or more planes than the original shape.

The shape changes can come from squeezing the balloon (pattern) horizontally, vertically, or in combination -- which, in antenna hardware is accomplished by an appropriate array of, and feed system for, its radiating elements.

RF

4282. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 19:35:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d271ue$t09$1@domitilla.aioe.org>
Source record: 80125

"Freebanding" is quite common these days.
However, from my observations, you are much more likely to find a ham on CB having fun and rabble-rousing with the truckers and "country folk" than a trucker on the 10 meter band.
Be it as it is... truckers probably well outnumber hams in the US... and CERTAINLY provide a much more valuable service.

Regards

"drwxr-xr-x" <bit-bucket@config.com> wrote in message news:slrnd4e0jc.66h.bit-bucket@shell.config.com...
> On Sun, 27 Mar 2005 18:05:03 GMT, Clarence_A wrote:
>>
>> "H J" <ts440@webtv.net> wrote in message
>> news:5557-4246894E-4@storefull-3277.bay.webtv.net...
>>> the band we truckers,took over we dont need big hf radios like
>> keenwood
>>> etc.we use low cost radios with big power.also the high power
>> black
>>> radio people are makeing there way up 28hz.the new super bowl
>> .we
>>> black,white folks are meeting togeter.untiy day is here on 28mhz
>>
>> Can't spell, can not clearly communicate, and will spend serious
>> time in prison for operation on 10Meters. The fine is $10,000 a
>> Day, and the prison time is up to 10 years per infraction.
>> NOT SMART!
>
> What is really *NOT SMART* is replying to a TROLL.

4283. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 19:43:11 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42470d74$1_1@127.0.0.1>
Source record: 80126

aunwin@insightbb.com wrote:
> So to the gurus of this group, what actualy creates
> the narrowing of the forward lobes ?

The narrowing of the forward lobes is
caused by constructive interference
during superposition of EM waves.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4284. antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 19:44:58 UTC
From: Angela & Gary <gmbelcas@charter.net>
Message-ID: <gmbelcas-AB358A.11445827032005@comcast.dca.giganews.com>
Source record: 80127

I'm looking for plans to build a balanced tuner for ladderline without a balun. In the past, I've seen schematics for tuners with ganged inductors. Can't seem to stumble back upon these on a web search. Any ideas and thanks in advance.

Gary

4285. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 19:53:27 UTC
From: Brian Howie <brian@nospam.demon.co.uk>
Message-ID: <JH93LeC38wRCFw6T@b-howie.demon.co.uk>
Source record: 80132

In message <K3B1e.8558$NW5.7100@attbi_s02>, "aunwin@insightbb.com"
<aunwin@insightbb.com.invalid> writes
>As gain increases with a yagi design the forward
>lobe narrows . With high gain yagi's the lobe
>becomes so narrow it is deemed to be a hinderence
> instead of an advantage. To overcome this perceived
>problem one has to know what causes it.
>So to the gurus of this group, what actualy creates
>the narrowing of the forward lobes ?
>End effects perhaps!

My tuppence worth

It is a fundamental energy conservation effect.

There is an invariant A * Omega , where A is the capture area of the
antenna, proportional to gain and Omega is the solid angle of the lobe.

So as A goes up, Omega must come down.

One way to reduce the effect is to use a number of vertically stacked
low gain yagis. The lobe becomes narrow in the vertical plane , but
remains broad in the horizontal plane. This is fairly common technique
for VHF/UHF contesters, where a narrow horizontal beam can cause missed
contacts

Brian

--
Brian Howie

4286. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 19:53:44 UTC
From: "aunwin@insightbb.com"
Message-ID: <cbE1e.107805$r55.43901@attbi_s52>
Source record: 80128

Richard.
No one has come up with a explanation BUT there are real gurus out there,
It's just that those who qualify as gurus have just thinned out a bit.
The question still pertains to Yagis and the narrowing of lobes
You have posted twice now and added nothing that relates to a possible
answer.
Tho there are many who perceive themselves as experts and then consistently
show
what they really are. I can think of one or two who can really address this
question
with a logical answer. Cecil, Roy and a couple of others qualify and have
yet to respond
You have disqualified yourself based on your responses, so like myself you
will have to wait to learn. Yagi's have been studied in depth and for many
years by many
tho apparently not by you or others that have replied so far.
Place your bets on who is the real guru of this group that comes forward
to explain with logic and to the point You Richard, can read your old QST's
in a hurry
and surely find the answer to get back into the ratings as I don't think
that new
knoweledge is around the bend, just a small manipulation of "old" knoweledge
will
surely suffice. Think "end effect" and "none- resistive residuals" along
coupled radiating
elements for starters.If that draws a blank then assuredly you wear no
clothes

Art

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:k41e41t6j9hg2tktraml2vr1u44h1pber2@4ax.com...
> On Sun, 27 Mar 2005 18:59:42 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
> the problem:
>>My antenna is somewhat related thus my interest in what creates an
>>elongated lobe
> the answer:
>>which is formed using Yagi principles.
>
> Hi Art,
>
> Your question already answers your question. You have a tendency to
> just blow right on taking no notice of this to create the SAME

> question again:
>>The question however, is specifically related to Yagi's
>>and its narrowed lobes.
>> Do you know what it is that creats an elongated lobe
>>on a high gain yagi i.e not totally round.?
> formed using Yagi principles. (to quote you)
>>Nothing more, nothing less.
> Exactly.
>
> Now, are we going to be treated by another round of your complaints
> about Shakespeare and the quality of gurus; or are you going to stick
> with technical discussion and respond to the obvious points?
>
> 73's
> Richard Clark, KB7QHC

4287. Re: antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 19:54:24 UTC
From: Dan Richardson <dwr@mailinator.com>
Message-ID: <ip3e41h2ho8llsj9jkltnpd5msdgjf3dbj@4ax.com>
Source record: 80129

On Sun, 27 Mar 2005 11:44:58 -0800, Angela & Gary
<gmbelcas@charter.net> wrote:

>
>
>I'm looking for plans to build a balanced tuner for ladderline without a
>balun. In the past, I've seen schematics for tuners with ganged
>inductors. Can't seem to stumble back upon these on a web search. Any
>ideas and thanks in advance.
>
>Gary

See

http://www.somis.org/bbat.html

But it still requires a balun. If you wish to use no balun then you'll
need to build a link type tuner.

Danny, K6MHE

4288. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 20:03:20 UTC
From: "aunwin@insightbb.com"
Message-ID: <bkE1e.110371$Ze3.24514@attbi_s51>
Source record: 80133

"Richard Fry" <rfry@adams.net> wrote in message
news:42470643_2@newsfeed.slurp.net...
> "aunwin@insightbb.com wrote:
>> As gain increases with a yagi design the forward
>> lobe narrows. So to the gurus of this group, what
>> actualy creates the narrowing of the forward lobes ?
> ----------------------
>
> A good analogy that needs no math to understand is that of squeezing an
> inflated balloon from its normally spherical shape into whatever shape is
> more appropriate for the application. There is a given volume of air in
> that balloon. If you want the surface of the balloon to extend further
> from the origin of its original sphere, the new shape must be narrower in
> one or more planes than the original shape.
>
> The shape changes can come from squeezing the balloon (pattern)
> horizontally, vertically, or in combination -- which, in antenna hardware
> is accomplished by an appropriate array of, and feed system for, its
> radiating elements.

Right..... so what creats it, this "squeezing" that you talk about and from
where
does this "squeezing force come from in an "appropiate"array?
That's what I was asking not a discussion of what the
Yagi array produces. Why does the lobe narrow?
Art

>
> RF

4289. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 20:04:06 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4247125c_2@127.0.0.1>
Source record: 80134

Tom Donaly wrote:

> Cecil Moore wrote:
>> Assume a future antenna emitting entangled photons and
>> explain to us how present antenna theory handles non-locality.

> Go ahead, Cecil, prove the world wrong. Be the first on your block to
> design a real-world antenna based on particle physics, but remember the
> correspondance principle.

Maxwell and Einstein assumed the locality principle which
has now been disproved by quantum physics. Anyone want to
predict the effect of non-locality on Maxwell's equations?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4290. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 20:08:51 UTC
From: "aunwin@insightbb.com"
Message-ID: <npE1e.110389$Ze3.24993@attbi_s51>
Source record: 80135

Yes Cecil I can go along with that otherwise the resultant volume would be spherical.
What is the scenario that encapsulates this "constructive interference" event? Is it residual reactance where its underpinning reside?
Art
Art
"Cecil Moore" <w5dxp@hotmail.com> wrote in message news:42470d74$1_1@127.0.0.1...
> aunwin@insightbb.com wrote:
>> So to the gurus of this group, what actualy creates
>> the narrowing of the forward lobes ?
>
> The narrowing of the forward lobes is
> caused by constructive interference
> during superposition of EM waves.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
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> News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000
> Newsgroups
> ---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4291. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 20:09:22 UTC
From: Clarence_A <no@No.com>
Message-ID: <SpE1e.2214$FN4.1937@newssvr21.news.prodigy.com>
Source record: 80136
Body handling: HTML body converted to readable text

"drwxr-xr-x" wrote
> Clarence_A wrote:
> > "H J" wrote in message

> >> the band we truckers,took over we dont need big hf radios
like
> > keenwood
> >> etc.we use low cost radios with big power.also the high power
> > black
> >> radio people are makeing there way up 28hz.the new super bowl
> > .we
> >> black,white folks are meeting togeter.untiy day is here on
28mhz
> >
> > Can't spell, can not clearly communicate, and will spend
serious
> > time in prison for operation on 10Meters. The fine is
$10,000 a
> > Day, and the prison time is up to 10 years per infraction.
> > NOT SMART!
>
> What is really *NOT SMART* is replying to a TROLL.

SO I should not reply to YOU? I'll keep it in mind.

4292. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 20:15:50 UTC
From: cl <clfurentN@Syahoo.com>
Message-ID: <mwE1e.57663$NC6.30543@newsread1.mlpsca01.us.to.verio.net>
Source record: 80138

"John Smith" <assemblywizard@gmail.com> wrote in message
news:d271ue$t09$1@domitilla.aioe.org...
> "Freebanding" is quite common these days.
> However, from my observations, you are much more likely to find a ham on
> CB
> having fun and rabble-rousing with the truckers and "country folk" than a
> trucker on the 10 meter band.
> Be it as it is... truckers probably well outnumber hams in the US... and
> CERTAINLY provide a much more valuable service.
>
> Regards
>

Yes they do provide a valuable service, however, that does not give them the right to disobey the law - be it the FCC's laws or even speed laws. What you seem to be implying is that their service gives them carte blanch to do as they please.

Maybe Hams do go on CB bands, so what! As long as it is with Type accepted equipment, meaning a "legal" CB set, there is nothing wrong with that picture. IF they are using HAM gear to talk out of Ham bands, then it too is illegal. To go into the ham bands with out a license is also illegal.

There's no other way to cut it - you either operate within the law or contrary to it. IF contrary, then you have no claim in your defense, as they do not accept the "ignorance" excuse. The law is the law until someone decides to change it.

With all the disobedience in this country, no wonder it is going to hell in a hand basket.

cl

4293. Re: Where Did My Web Page URL Go?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 20:16:49 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42471557$1_1@127.0.0.1>
Source record: 80137

Walter Maxwell wrote:
> On 3-14 or 3-15 I started a thread concerning a new url for my web page at
> walt@w2du.com. After the original post I added two more. Then a few days ago I
> started to add another post, but the thread had disappeared.
>
> Can anyone tell me how a thread disappears? Can it be deleted? By just anyone?

Are the threads still available on Google? If so, you can
add that additional post through Google and it will show up
here.

Threads can be canceled by the poster. Graphics postings
to text-only newsgroups are automatically deleted. Obscene
material is often deleted. Server problems can cause loss of
threads. On some usenet news servers, there is an option to allow
a posting to expire after N days. For instance, the announcement
of a hamfest should expire after the hamfest is over.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4294. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 20:23:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <JCE1e.97$Gd4.1065020@news.sisna.com>
Source record: 80139

My post was simply a list of facts as they appear to me. The use of communications to assist in the delivery of medicine, food, clothing, building materials, etc. is of more importance than the use of airways for recreation.
Since most would accept that the law of "...the greatest good for the greatest number..." would apply, if push came to shove--the truckers would probably end up with the frequencies in question...

Regards

"cl" <clfurentN@Syahoo.com> wrote in message
news:mwE1e.57663$NC6.30543@newsread1.mlpsca01.us.to.verio.net...
>
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:d271ue$t09$1@domitilla.aioe.org...
>> "Freebanding" is quite common these days.
>> However, from my observations, you are much more likely to find a ham on
>> CB
>> having fun and rabble-rousing with the truckers and "country folk" than a
>> trucker on the 10 meter band.
>> Be it as it is... truckers probably well outnumber hams in the US... and
>> CERTAINLY provide a much more valuable service.
>>
>> Regards
>>
>
> Yes they do provide a valuable service, however, that does not give them
> the right to disobey the law - be it the FCC's laws or even speed laws.
> What you seem to be implying is that their service gives them carte blanch
> to do as they please.
>
> Maybe Hams do go on CB bands, so what! As long as it is with Type accepted
> equipment, meaning a "legal" CB set, there is nothing wrong with that
> picture. IF they are using HAM gear to talk out of Ham bands, then it too
> is illegal. To go into the ham bands with out a license is also illegal.
>
> There's no other way to cut it - you either operate within the law or
> contrary to it. IF contrary, then you have no claim in your defense, as
> they do not accept the "ignorance" excuse. The law is the law until
> someone decides to change it.
>
> With all the disobedience in this country, no wonder it is going to hell
> in a hand basket.
>
> cl

>

4295. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 20:23:54 UTC
From: chuck <chuck@nospam.net>
Message-ID: <4247166b_1@newsfeed.slurp.net>
Source record: 80140

Well, I have a "latency" problem between typing out postings
and engaging my brain; hence the nonsense in my previous two
posts.

Here's what I now think, and I agree with Ralph. AFSK refers
to a type of modulating signal that switches between two
audio frequencies. In other words, the audio frequency is
shifted to key the transmitter. It doesn't mean (as I
suggested earlier) that audio is used to shift the carrier
frequency, although that is the result when you modulate an
SSB transmitter with AFSK tones.

When applied to an AM or FM transmitter, the notion of AFSK
modulation still makes sense. It produces something other
than FSK, of course. But with the proper detection to
recover the modulating tones, there is no reason you
couldn't use AFSK with AM or FM transmitters for RTTY. And
indeed, AFSK is used this way on FM and AM rigs (as someone
has pointed out), although not usually for RTTY.

So the semantics seems to hinge on whether FSK and AFSK
refer to the resulting RF waveform, or to the modulating
signal. The latter notion is broader, and is what I now
understand Ralph was saying.

Thanks, Ralph.

Chuck

SideBand wrote:
> Ralph Mowery wrote:
>
>> "'Doc" <w5lz@cwis.net> wrote in message
>> news:Wol1e.25514$hU7.1115@newssvr33.news.prodigy.com...
>>
>>> Ralph,
>>> Works in SSB too...
>>> 'Doc
>>
>>
>>
>> Doc, you must not have understood what I sent. When a ssb transmitter is
>> fed audio tones in to the mic input for digital modes such as rtty
>> you are
>> not using AFSK but FSK. It is AM or FM modes that feeding into the mic
>> input that you generate AFSK.

>>
>> YOu do not normally generate AFSK by feeding audio into the mic input
>> of a
>> SSB transmitter, you generate FSK. If a single audio tone is fed into
>> a ssb
>> transmitter you get a single frequency output. If it is changed in
>> frequency you get another single frequency output. This is FSK even
>> though
>> you are using audio into the mic input.
>>
>> If you feed a single tone into the mic of an AM transmitter , you get a
>> carrier on the frequency and two sidebands (upper and lower) of the
>> frequency of the tone. This is AFSK.
>>
>>
>>
>>
>>
> Apparently someone doesn't understand how AM works, or FM, or SSB for
> that matter..
>
> -C

4296. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 20:31:52 UTC
From: Clarence_A <no@No.com>
Message-ID: <YKE1e.2219$FN4.2082@newssvr21.news.prodigy.com>
Source record: 80141

"John Smith" <assemblywizard@gmail.com> wrote in message
news:JCE1e.97$Gd4.1065020@news.sisna.com...
> My post was simply a list of facts as they appear to me.
> The use of
> communications to assist in the delivery of medicine, food,
> clothing,
> building materials, etc. is of more importance than the
> use of airways for recreation.

There is a nation wide radio service for truckers and what the truckers are doing when they go to Radio Amateur frequencies is a crime. These frequencies are used for many different things including emergency communications in disasters, the HFers simply do not belong there!

Regardless of your poorly reasoned opine.

4297. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 20:40:07 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <ONE1e.72944$Q83.42628@bignews5.bellsouth.net>
Source record: 80142

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:42470d74$1_1@127.0.0.1...
> aunwin@insightbb.com wrote:
> > So to the gurus of this group, what actualy creates
> > the narrowing of the forward lobes ?
>
> The narrowing of the forward lobes is
> caused by constructive interference
> during superposition of EM waves.
> --
> 73, Cecil http://www.qsl.net/w5dxp

Darn - I thought it was pure magic.
Now we hear all about induced currents and interference patterns cancelling in the rearward and the sides, but constructively interferring in the forward direction. All in an attempt to become the chosen guru of the original poster.
If nominated, I will not run - if elected - I will not serve.

4298. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 20:41:24 UTC
From: dplatt@radagast.org
Message-ID: <114e6jk8b2q9ta0@corp.supernews.com>
Source record: 80143

In article <uoD1e.110018$Ze3.66917@attbi_s51>,
aunwin@insightbb.com <aunwin@insightbb.com@insightbb.com> wrote:

>> There is a harsh limit, imposed by physics, as to how much gain that
>> approach can give you.

>Agreed... Do you know what those limits are ?

Sure. The simplest way to state it is "the total amount of power
delivered by the antenna, summed over all of the possible angles of
radiation, must equal the total amount of power radiated by the
antenna."

>>
>> If all of the energy from one hemisphere is redirected into the other
>> hemisphere, and if the forward-direction pattern shape does not change
>> (the forward lobe is not narrowed), then you have a forward gain of 3
>> dB (2:1 power ratio increase). You *cannot* have more, as this would
>> require that the antenna be radiating more power than it receives from
>> its input.
>
>Absolutely incorrect. If I place the air of two balloons ,which reflect the
>figure
>eight,into one single balloon and where the laws of partial pressures do not
>intervene
>then you will have a balloon that is round and not elongated as the antenna
>books
> would have you suggest. "Gain" is a term used to to quantify a small
>portion of the
>energy contained in the mythical ball of energy. Since the collection of
>energy comes
>from different directions and phases the energy collection is layered
>depending on
> the influence of the earth. Thus the layers of radiation are distorted
>where one layer
>can be squeezed outwards further than other layers, thus the terminology
>of "gain"

Jeez, Art, do you have any idea of just how thoroughly your response
qualifies as "Authentic frontier gibberish" (as a Mel Brooks character
once said)?

I'm sorry, guy, but I believe that you are trying to stretch analogies
far beyond the point where they actually apply to the physical
phenomena we're discussing. Your concept of "layers of radiation" (as
applied to the gain pattern of an antenna) simply doesn't add up.

>If you are going to interelate the terms of "gain" and "power" then you must
>define
>the parameters used to allow that.

OK, let's do just that.

"Power" is very well defined - it's the rate at which energy is delivered. Pick your units for energy and time as you choose. It's conventional to use watts for power, joules for energy and seconds for time. One watt, equals a rate of energy delivery of one joule per second.

"Gain" is a ratio. In discussions dealing with antennas, the gain describes the ratio between the amount of power delivered by a given antenna in a given direction, to the amount of power delivered in that same direction by a "reference" antenna (a dipole in the case of a dBd gain number, and an "isotropic" antenna in the case of a dBi gain number). The gain figures in dB are logarithmic.

Those are the definitions everyone uses, I believe.

If you, personally, are using different definitions than these, then our discussion (you vs. everyone else) should probably stop right here.

Here's my rationale behind the statement I made about the limitations of your approach:

- An isotropic antenna has a gain of 0 dBi, by definition.

- If you "cut off" the entire rear side of an isotropic antenna's pattern (so that it radiates no power backwards), and precisely overlay this power (energy flow) onto the forward half, you'll end up with a "half-isospheric" antenna. It's radiating exactly the same amount of power, but over only half as much target area. The power (energy flow) towards each point in that targeted hemisphere will be exactly twice as much as in the isotropic antenna.

This antenna has a gain of 3 dBi plus a hair.

It cannot have *more* gain in any direction (more power into a sub-portion of the hemisphere) unless it has *less* gain in another portion of that hemisphere... in other words, unless is starts exhibiting some form of lobing/nulling.

If it *could*, it would be trivial to demonstrate that the antenna was delivering more power (more energy over time) into its loads, than it was accepting from its transmitter.

The same line of logic applies even if you start with a dipole. If you begin with a dipole, and then magically "deflect" all of the power from the rear towards the front and overlay the patterns exactly, you'll exactly double the power in each forward-lying half of the sphere, and create a gain of 3 dB over the dipole. In order to have *more* forward gain in any direction in the forward direction, you must necessarily have *less* in another, and this either narrows the

pattern in the forward direction or creates partial or complete nulls.

To claim otherwise, is to claim an antenna which can be shown to deliver more power than it accepts as input... in other words, one which violates the conservation of energy.

The same basic rule applies for any situation in which you take a bidirectional antenna (one which has a symmetrical forward-and-backward gain pattern) and then "deflect" all of the rearward energy into a forward direction. This will gain you at most 3 dB over the basic gain pattern of the antenna you started with. Any further maximum forward gain, over the antenna you were starting with, can *only* be achieved by decreasing the gain somewhere in the pattern (narrowing or weakening the main lobe or one of the sidelobes).

>> A Moxon antenna is, to a first approximation, a pretty good example of
>> this approach - it has very little energy in the rear hemisphere, and
>> a broad forward lobe. There are various two-driven-element array
>> designs which achieve a similar pattern and result.
>
>And the resulting "gain" is ....what?

According to Cebik's web site, a 2-meter Moxon shows a maximum forward gain of about 10.7 dBi, or a bit more than 8 dB over a dipole. One could gain at most 3 dB due to the forward "deflection" of rear-hemisphere energy, and hence the remaining 5 dB or so of gain over a dipole must come from a narrowing of the antenna's pattern in either azimuth or elevation or both.

>Yes I agree because of conservation laws e.t.c . When cancellation occurs
>then energy creats energy in another direction similar to pulling steel
>apart in tension
>(or using compression) the steel becomes narrower before severing occurrs.
>This thinning or "waisting" is created by the additional forces created at
>90 degrees
>to the tensile forces and where the break actually occurrs at 45 degrees
>and not at right angles.

Art, I think your analogies between radiation patterns, balloons, stretching metal, etc. are leading you astray more than they are helping you.

>> Conservation of energy *requires* that the main lobe be narrowed, if
>> you wish to achieve more gain than you can get by simply redistibuting
>> the rear-ward energy in the forward direction.
>
>This is what you alluded to before and it is still incorrect
>What "requires" what ? And how is this conclusion generating
>an elongated lobe?

>> A super-high-gain antenna *cannot* have a wide, uniform beam-width in
>> both azimuth and elevation.
>

>Don't know how you can say that

I say that because the opposite case would contradict the law of conservation of energy.

If you have an antenna which puts all of its power, uniformly, into a forward beam which covers only 1/10 of the sphere, then that forward beam will carry 10 times as much power per angle, for a gain of 10 dBi.

If you squeeze the beam down in size so that it covers only 1/100 of the sphere, it will carry 100 times as much power per angle, for a gain of 20 dB.

You can't have a broad forward lobe (say, one which covers a full 1/10 of the sphere), and achieve a high gain of 20 dB (100 times as much power per angle) without violating the law of conservation of energy.

THAT is the fundamental limit I'm talking about, Art.

>> As usual for your postings, Art, it's impossible to tell whether your
>> claims for your antenna are plausible, because you refuse to disclose
>> *anything* (either the invention, or the results you claim) in any
>> halfway-tanglible form (e.g. models, specific numbers, etc.).
>
>
>My antenna is somewhat related

You DID IT AGAIN, Art. You said "is somewhat related", you didn't say related to *what*, you didn't give any details whatsoever.

>The question however, is specifically related to Yagi's
>and its narrowed lobes.
> Do you know what it is that creats an elongated lobe
>on a high gain yagi i.e not totally round.?
>Nothing more, nothing less.

You're acting as though the lobe were a physical object, and that something is "putting pressure" on it to squeeze it out of shape like a physical balloon.

That is a FALSE ANALOGY, Art. It's meaningless.

The "shape" of the lobe is simply a way of plotting numbers on a graph. It depends on the scaling of the graph, and it's a *relative* scale. A dipole's lobes may look perfectly round on one sort of graph, elliptical on another, and lumpy on a third, depending on whether the plot's axes are logarithmic, linear, or somewhere in between the two.

Fundamentally, the reason that the shape of the lobe (on a conventional plot) changes from somewhat-circular to more-eliptical is due to the fact that the antenna is sending more of its power in a favored direction (to achieve gain), at the expense of sending less in

other directions. Period.

The *mechanism* by which this is done, in a Yagi (or an actively-
driven set of phased radiators), is simply one of dividing up the
power being radiated so that it's radiated (or re-radiated) from
multiple points, in different spatial and phase relationships, so that
the resulting waves cancel out in certain directions and reinforce in
others.

If you really want to know the details, I suggest that you dig up and
read the original papers by Uda and Yagi.
>> Until you do, I really think it would be to everyone's relief if you'd
>> follow through with your recent statement that you were going to stop
>> posting. You're achieving no good result for yourself by contining as
>> you are.

>I have not posted as you have inferred. The question is about Yagi design

It all seems to come down to the same thing with you, Art.

I suppose I should just killfile you and completely ignore your
postings. I'm sorry, I've tried my best to steer you in directions
that I think will actually help your efforts, but it seems quite futile.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4299. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 20:43:58 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d275uevuo1@domitilla.aioe.org>
Source record: 80144

Actually, the use of bandwidth for recreational purposes provides NO real
revenue for local, state or federal government. With the outstanding costs
of government--it would be most logical to switch much of this wasted
bandwidth over to private enterprise where real tax revenue could be
recovered...
Recreational communications are probably much better suited to the internet,
again, where the greatest numbers receive the greatest benefit.
My "faulty" logic is indicating to me that this is the direction things will
go, when finally these issues are put under a microscope and examined.
Since my crystal ball is cloudy at the present time--I will await the future
for confirmation...

Regards

"Clarence_A" <no@No.com> wrote in message
news:YKE1e.2219$FN4.2082@newssvr21.news.prodigy.com...
>
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:JCE1e.97$Gd4.1065020@news.sisna.com...
>> My post was simply a list of facts as they appear to me.
>> The use of
>> communications to assist in the delivery of medicine, food,
>> clothing,
>> building materials, etc. is of more importance than the
>> use of airways for recreation.
>
> There is a nation wide radio service for truckers and what the
> truckers are doing when they go to Radio Amateur frequencies is a
> crime. These frequencies are used for many different things
> including emergency communications in disasters, the HFers simply
> do not belong there!
>
> Regardless of your poorly reasoned opine.
>
>

4300. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 20:46:04 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <42471be2_2@newsfeed.slurp.net>
Source record: 80145

"aunwin@insightbb.com" wrote:
>> The shape changes can come from squeezing the balloon (pattern)
>> horizontally, vertically, or in combination -- which, in antenna hardware
>> is accomplished by an appropriate array of, and feed system for, its
>> radiating elements.
>
> Right..... so what creats it, this "squeezing" that you talk about and
> from where does this "squeezing force come from in an "appropiate"array?
> That's what I was asking not a discussion of what the Yagi array
> produces. Why does the lobe narrow?

Narrowing is the natural result of the vector addition of the separate EM waves radiated from the individual sources comprising the Yagi (or any other kind of directional array).

RF

4301. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 20:48:41 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42471ccf$1_1@127.0.0.1>
Source record: 80146

Asimov wrote:
> It was a generalization. BTW I meant to ask this some time ago, but
> isn't "Cecil" a girlie sort of name? :-)

Cecil is from Welsh "Seissylt" from Roman "Sextus". There
are about ten men named "Cecil" in my home town of 4000
people. Remember the director, Cecil B. deMille?

Cecilio is Spanish masculine. Cecilia is Spanish feminine.
Cecile is French feminine. I have never heard of a female
named "Cecil".

> I can easily imagine you
> might have had a traumatic school experience as kids can be brutal.

Kids suffering from ignorance do have a tendency to be brutal.

> I suppose you may have compensated by growing up to become a
> lumberjack or a marines sargent?

I compensated by growing up to be six foot four. Judge Cecil
Neeley was indeed a marine corps general before he retired.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4302. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 20:50:42 UTC
From: cl <clfurentN@Syahoo.com>
Message-ID: <11F1e.57666$NC6.49887@newsread1.mlpsca01.us.to.verio.net>
Source record: 80147

I doubt it..... just because a "group" wants something, doesn't mean they'll get it. Your group may be in numbers due to the job they do, but not in other avenues as well - nor does it give them the right to break laws. Again, the law IS the law - until someone changes it. Given there are many truckers who are also VALID hams, its doubtful they would vote in your favor. They don't break the law, they got their license unlike others who are too lazy to get up off their ass and make the effort to learn what little it takes to get a license. A few years ago, it was tough for those who had no inclination to learn. Many years ago, you even had to draw schematics and even before that - BUILD a circuit. Given the poor poor pitiful me act which someone had enacted for stupidity's sake, now the tests are made so it's almost impossible to fail. Try studying, get your license, then use H.F. to your hearts content. The use of communications for what you mention, can be left with the CB band, it works just as well right there. If you guys would quit running power, echo boxes, etc to drown each other out and splatter all 40 channels, maybe more could talk and get the communication through. A clean signal gets through every bit as good or better than one filled with garbage. Try it sometime. The only one's you'll be competing with are your buds who still talk with the garbage. Too bad the FCC hasn't thought of setting up shop at the Weigh Stations. They could bust the truckers for illegal radios while the cops are busting them for bad mechanical problems, poor log books and so on. The FCC "has" busted a few truckers, just not enough. NO JOB - I don't care what you do - gives you the right to break the law or think you're special. I know a trucking company who just lost most of their hauls due to the oil prices. Now the loads go by Train. So DO NOT THINK - you are so on top of the world. It could come crashing down.

cl

"John Smith" <assemblywizard@gmail.com> wrote in message
news:JCE1e.97$Gd4.1065020@news.sisna.com...
> My post was simply a list of facts as they appear to me. The use of
> communications to assist in the delivery of medicine, food, clothing,
> building materials, etc. is of more importance than the use of airways for
> recreation.
> Since most would accept that the law of "...the greatest good for the
> greatest number..." would apply, if push came to shove--the truckers would
> probably end up with the frequencies in question...
>
> Regards
>
> "cl" <clfurentN@Syahoo.com> wrote in message
> news:mwE1e.57663$NC6.30543@newsread1.mlpsca01.us.to.verio.net...
>>

>> "John Smith" <assemblywizard@gmail.com> wrote in message
>> news:d271ue$t09$1@domitilla.aioe.org...
>>> "Freebanding" is quite common these days.
>>> However, from my observations, you are much more likely to find a ham on
>>> CB
>>> having fun and rabble-rousing with the truckers and "country folk" than
>>> a
>>> trucker on the 10 meter band.
>>> Be it as it is... truckers probably well outnumber hams in the US... and
>>> CERTAINLY provide a much more valuable service.
>>>
>>> Regards
>>>
>>
>> Yes they do provide a valuable service, however, that does not give them
>> the right to disobey the law - be it the FCC's laws or even speed laws.
>> What you seem to be implying is that their service gives them carte
>> blanch to do as they please.
>>
>> Maybe Hams do go on CB bands, so what! As long as it is with Type
>> accepted equipment, meaning a "legal" CB set, there is nothing wrong with
>> that picture. IF they are using HAM gear to talk out of Ham bands, then
>> it too is illegal. To go into the ham bands with out a license is also
>> illegal.
>>
>> There's no other way to cut it - you either operate within the law or
>> contrary to it. IF contrary, then you have no claim in your defense, as
>> they do not accept the "ignorance" excuse. The law is the law until
>> someone decides to change it.
>>
>> With all the disobedience in this country, no wonder it is going to hell
>> in a hand basket.
>>
>> cl
>>
>
>

4303. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 20:52:38 UTC
From: dplatt@radagast.org
Message-ID: <114e78m76n4h668@corp.supernews.com>
Source record: 80148

In article <bkE1e.110371$Ze3.24514@attbi_s51>,
aunwin@insightbb.com <aunwin@insightbb.com@insightbb.com> wrote:

>Right..... so what creats it, this "squeezing" that you talk about and from
>where
>does this "squeezing force come from in an "appropiate"array?

There is no "force" in the usual sense of pressure on a physical
balloon. That's because the "balloon" is not an object. It's simply
a mathematical abstraction - a drawing of lines of equal RF power
levels on a graph having a certain set of axes.

To think that there's a specific 'force' squeezing the 'balloon', is
somewhat like trying to travel from east to west by pulling yourself
along the lines of longitude. Hey, the lines are there on the globe,
they're there on the map, why can't I just walk along the lines?

There's nothing "pushing" on the "boundaries" of the lobe, because
there is no lobe in the physical sense. It's not a separate and
distinct object.

To understand why there's a change in the shape that we visualize (and
that's all that the lobe shape is - a selective visualization), we
have to step down to the underlying phenomenon and see what's changing.

Because the conventional "lobe shape" is simply the result of plotting
the strength of the RF energy coming from the antenna, the answer is
simple. The lobe's shape is changing, because the amount of RF energy
being transmitted in the different directions is changing...

... and *that* happens because the phase-and-location details of the
various radiators (and re-radiators) in the antenna system are being
altered.

Different radiator and re-radiator locations, intensities, and phases...

... cause different "sum of vectors" results ...

... which changes the strength of the RF received ...

... which, when we walk around and try to locate the points
having equal RF field strength, means that we walk along
different paths ...

... which means that we draw the lines on the map in
different places ...

... which means that the "lobes" now have a different
shape.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4304. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 20:52:50 UTC
From: cl <clfurentN@Syahoo.com>
Message-ID: <03F1e.57667$NC6.10181@newsread1.mlpsca01.us.to.verio.net>
Source record: 80149

Um,,,,,,,, when the power goes out and phone lines go down, how is the
computer going to help? It won't.
You'll be sitting there with your thumbs stuck up your ass while those with
radios are able to talk. You're right about one thing, your logic is faulty.

cl

"John Smith" <assemblywizard@gmail.com> wrote in message
news:d275uevuo1@domitilla.aioe.org...
> Actually, the use of bandwidth for recreational purposes provides NO real
> revenue for local, state or federal government. With the outstanding
> costs
> of government--it would be most logical to switch much of this wasted
> bandwidth over to private enterprise where real tax revenue could be
> recovered...
> Recreational communications are probably much better suited to the
> internet,
> again, where the greatest numbers receive the greatest benefit.
> My "faulty" logic is indicating to me that this is the direction things
> will
> go, when finally these issues are put under a microscope and examined.
> Since my crystal ball is cloudy at the present time--I will await the
> future
> for confirmation...
>
> Regards
>
> "Clarence_A" <no@No.com> wrote in message
> news:YKE1e.2219$FN4.2082@newssvr21.news.prodigy.com...
>>
>> "John Smith" <assemblywizard@gmail.com> wrote in message
>> news:JCE1e.97$Gd4.1065020@news.sisna.com...
>>> My post was simply a list of facts as they appear to me.
>>> The use of
>>> communications to assist in the delivery of medicine, food,
>>> clothing,
>>> building materials, etc. is of more importance than the
>>> use of airways for recreation.
>>
>> There is a nation wide radio service for truckers and what the
>> truckers are doing when they go to Radio Amateur frequencies is a
>> crime. These frequencies are used for many different things
>> including emergency communications in disasters, the HFers simply
>> do not belong there!
>>

>> Regardless of your poorly reasoned opine.
>>
>>
>
>

4305. Re: The Greatest News Ever!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 20:58:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <v7F1e.98$Hx5.1194088@news.sisna.com>
Source record: 80150

I HAVE REPENTED!!! I CONTINUE TO REPENT!!! I have spent untold dollars on tranceivers and linears--and still my signal is less than S9 in Heaven... :(

Regards

"John" <ac5tx@sbcglobal.net> wrote in message
news:H5C1e.4075$yq2.2936@newssvr12.news.prodigy.com...
> Peter said, "Repent and be baptized....for the forgiveness or your sins"
> Acts 2:38
> <Ron_Grossi_038@yahoo.com> wrote in message
> news:1111892880.782967.70960@g14g2000cwa.googlegroups.com...
>> http://www.jcil.blogspot.com << The Greatest News Ever!
>>
>
>

4306. Re: antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 21:00:56 UTC
From: dplatt@radagast.org
Message-ID: <114e7o85ckai475@corp.supernews.com>
Source record: 80151

In article <gmbelcas-AB358A.11445827032005@comcast.dca.giganews.com>,
Angela & Gary <gmbelcas@charter.net> wrote:

>I'm looking for plans to build a balanced tuner for ladderline without a
>balun. In the past, I've seen schematics for tuners with ganged
>inductors. Can't seem to stumble back upon these on a web search. Any
>ideas and thanks in advance.

You'll need some form of inductively coupled ("link-coupled") tuner to
do this. The most popular of these at the moment seems to be the
"Z-match" - it has good although not perfect current balance on the
outputs.

Most of the Z-match designs I've seen can be implemented with two
variable capacitors, and one fixed inductor. There's a "two coil"
Z-match but I gather that it doesn't really have advantages over the
one-coil variety. The coils can be either air-wound, or wound on a
powdered-metal toroid.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4307. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 21:11:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <IjF1e.100$2d5.1151036@news.sisna.com>
Source record: 80152

And the oil with last forever (however, they told the gold miners the gold
would last forever--the lumberjacks the timber would last forever--and that
the water was without end...)
Hams are probably the smallest minority on the planet...
Of course if you ignore the above--ham radio will last forever!!!!

Regards

"cl" <clfurentN@Syahoo.com> wrote in message
news:11F1e.57666$NC6.49887@newsread1.mlpsca01.us.to.verio.net...
>I doubt it..... just because a "group" wants something, doesn't mean
>they'll get it. Your group may be in numbers due to the job they do, but
>not in other avenues as well - nor does it give them the right to break
>laws. Again, the law IS the law - until someone changes it. Given there are
>many truckers who are also VALID hams, its doubtful they would vote in your
>favor. They don't break the law, they got their license unlike others who
>are too lazy to get up off their ass and make the effort to learn what
>little it takes to get a license. A few years ago, it was tough for those
>who had no inclination to learn. Many years ago, you even had to draw
>schematics and even before that - BUILD a circuit. Given the poor poor
>pitiful me act which someone had enacted for stupidity's sake, now the
>tests are made so it's almost impossible to fail. Try studying, get your
>license, then use H.F. to your hearts content. The use of communications
>for what you mention, can be left with the CB band, it works just as well
>right there. If you guys would quit running power, echo boxes, etc to drown
>each other out and splatter all 40 channels, maybe more could talk and get
>the communication through. A clean signal gets through every bit as good or
>better than one filled with garbage. Try it sometime. The only one's you'll
>be competing with are your buds who still talk with the garbage. Too bad
>the FCC hasn't thought of setting up shop at the Weigh Stations. They could
>bust the truckers for illegal radios while the cops are busting them for
>bad mechanical problems, poor log books and so on. The FCC "has" busted a
>few truckers, just not enough. NO JOB - I don't care what you do - gives
>you the right to break the law or think you're special. I know a trucking
>company who just lost most of their hauls due to the oil prices. Now the
>loads go by Train. So DO NOT THINK - you are so on top of the world. It
>could come crashing down.
>
> cl
>
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> news:JCE1e.97$Gd4.1065020@news.sisna.com...
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>> communications to assist in the delivery of medicine, food, clothing,
>> building materials, etc. is of more importance than the use of airways

>> for recreation.
>> Since most would accept that the law of "...the greatest good for the
>> greatest number..." would apply, if push came to shove--the truckers
>> would probably end up with the frequencies in question...
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>> Regards
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>> "cl" <clfurentN@Syahoo.com> wrote in message
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>>>
>>> "John Smith" <assemblywizard@gmail.com> wrote in message
>>> news:d271ue$t09$1@domitilla.aioe.org...
>>>> "Freebanding" is quite common these days.
>>>> However, from my observations, you are much more likely to find a ham
>>>> on CB
>>>> having fun and rabble-rousing with the truckers and "country folk" than
>>>> a
>>>> trucker on the 10 meter band.
>>>> Be it as it is... truckers probably well outnumber hams in the US...
>>>> and
>>>> CERTAINLY provide a much more valuable service.
>>>>
>>>> Regards
>>>>
>>>
>>> Yes they do provide a valuable service, however, that does not give them
>>> the right to disobey the law - be it the FCC's laws or even speed laws.
>>> What you seem to be implying is that their service gives them carte
>>> blanch to do as they please.
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>>> accepted equipment, meaning a "legal" CB set, there is nothing wrong
>>> with that picture. IF they are using HAM gear to talk out of Ham bands,
>>> then it too is illegal. To go into the ham bands with out a license is
>>> also illegal.
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>>> There's no other way to cut it - you either operate within the law or
>>> contrary to it. IF contrary, then you have no claim in your defense, as
>>> they do not accept the "ignorance" excuse. The law is the law until
>>> someone decides to change it.
>>>
>>> With all the disobedience in this country, no wonder it is going to hell
>>> in a hand basket.
>>>
>>> cl
>>>
>>
>>
>
>

4308. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 21:29:59 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4247262d_1@newsfeed.slurp.net>
Source record: 80153

"Richard Clark" wrote:
>... any radiator from 0.1 to 0.625 wavelengths pretty much
> has the same gain in the same direction.

This will be news to the FCC and AM broadcast stations, all of whom understand that the ground wave from radiators of the heights you mention above varies WIDELY, as demonstrated by empirical measurements going back some 70 years.

For example, a 0.1 lambda radiator has about 54% of the groundwave field as one of 0.625 wavelength, assuming a very good ground system for each (1 ohm or so).

A matched radiator of 0.1 lambda height would need about 3-1/2X as much input power as a 0.625 lambda matched radiator in order to generate the same ground wave field strength over the same radio path.

RF

4309. Re: Where Did My Web Page URL Go?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 21:33:59 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <bu8e41li2gi5hpd1uvtn8ksdg9pmdjjb98@4ax.com>
Source record: 80154

On Sun, 27 Mar 2005 10:14:57 -0800, Richard Clark <kb7qhc@comcast.net> wrote:

>On Sun, 27 Mar 2005 17:22:23 GMT, Walter Maxwell <w2du@iag.net> wrote:
>
>>On 3-14 or 3-15 I started a thread concerning a new url for my web page at
>>walt@w2du.com. After the original post I added two more. Then a few days ago I
>>started to add another post, but the thread had disappeared.
>>
>>Can anyone tell me how a thread disappears? Can it be deleted? By just anyone?
>>
>>Walt Maxwell, W2DU
>
>Hi Walt,
>
>I've seen all your threads. I've visited you site to review your
>papers (re-read the one on sourze C). You populated one thread with
>three postings, one after the other (not duplicate postings however).
>Visit:
>http://groups-beta.google.com/group/rec.radio.amateur.antenna?hl=en&lr=&ie=UTF-8
>and search against your name to confirm what has made it into the Web.
>If you see more than your ISP has delivered, your ISP may have a
>broken News chain.
>
>73's
>Richard Clark, KB7QHC
Hi Dave, Richard, and Cecil,

Richard, I checked the url you gave above and the thread I initiated on the 14th or 15th doesn't appear there either. Evidently it's gone--disappeared a little more than a week after being initiated. I've never seen this happen before with any posting. I've often gone back to various posts several months later to review them and they're still there. And God knows I didn't delete my own--I don't know how to do it.

I believe the three postings you said I made are the three that have disappeared, but the one I posted today is there. Cecil said posts can be deleted by the poster, but can they be deleted by someone else? Guess I'll just have to believe mine were eaten by the cyberspace monster and fuhgeddaboudid.

Incidentally, Richard, which paper did you re-read that you called 'sourze C'?

Walt

4310. Re: what does fsk mode mean

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 21:41:27 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <bMF1e.10150$S46.8527@newsread3.news.atl.earthlink.net>
Source record: 80155

"chuck" <chuck@nospam.net> wrote in message
news:4247166b_1@newsfeed.slurp.net...
> Well, I have a "latency" problem between typing out postings
> and engaging my brain; hence the nonsense in my previous two
> posts.
>
> Here's what I now think, and I agree with Ralph. AFSK refers
> to a type of modulating signal that switches between two
> audio frequencies. In other words, the audio frequency is
> shifted to key the transmitter. It doesn't mean (as I
> suggested earlier) that audio is used to shift the carrier
> frequency, although that is the result when you modulate an
> SSB transmitter with AFSK tones.
>
> When applied to an AM or FM transmitter, the notion of AFSK
> modulation still makes sense. It produces something other
> than FSK, of course. But with the proper detection to
> recover the modulating tones, there is no reason you
> couldn't use AFSK with AM or FM transmitters for RTTY. And
> indeed, AFSK is used this way on FM and AM rigs (as someone
> has pointed out), although not usually for RTTY.
>
> So the semantics seems to hinge on whether FSK and AFSK
> refer to the resulting RF waveform, or to the modulating
> signal. The latter notion is broader, and is what I now
> understand Ralph was saying.
>
> Thanks, Ralph.
>
> Chuck
>
Now you seem to be getting what I was trying to say. For example if I feed
a sound card output into my Icom 706 and have it set for AM then a receiver
has to be set up for AM to receive the AFSK I am generating at the RF output
of the rig. Same as for FM.
If I then switch to SSB. I will now be generating FSK at the output of the
transmitter. I can slso put the Icom in the rtty position and feed data
into the data port and it will generate FSK by directly varing the output
frequency. This is the same result as using the mic input to the Icom and
using ssb.

I have not looked at the rules lately but it used not to be leagl to use
AFSK below 50 mhz. That does not mean you can not use a sound card, but you
must have the rig in the SSB position so the resluting transmission will be

FSK.

About 20 years ago I was using a ST-6 into a 220 mhz FM transimtter along with about 20 others in the local area. By switching the audio leads to the low band rig, we could also use FSK by running the lowband rigs in the lsb position.

73 de KU4PT

4311. Walter Maxwell's Missing Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 21:47:38 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <42472a50_1@newsfeed.slurp.net>
Source record: 80156

Walter Maxwell wrote:

On 3-14 or 3-15 I started a thread concerning a new url for my web page at walt@w2du.com. After the original post I added two more. Then a few days ago I
started to add another post, but the thread had disappeared.

Can anyone tell me how a thread disappears? Can it be deleted? By just anyone?

Walt Maxwell, W2DU

Walter, your posts still show on my PC, but that may be the result of caching. Here they are again, anyway (below). /RF

+ + + +

#1

Subject: New URL for W2DU Web Page plus Quadrifilar Helix in Reflections 2

The new URL for my web page is w2du.com. My new email address is walt@w2du.com.
>
> Please use my new web page URL when accessing it. My page will soon
> have new material added, but for now it has only selected chapters
> from Reflections 2, which include the R&D report of my RCA research on
> the quadrifilar helix antenna flying on all TIROS-N NOAA
> polar-orbiting weather spacecraft. The research included antenna
> pattern and impedance measurements I made on more than a thousand
> different electrical and physical configurations of the antenna in the
> late 1970's that produced the one used on the TIROS-N spacecraft. A
> picture of the test model used in the measurements appears in my R&D
> report.
>
> Walt Maxwell, W2DU

#2

Sorry to report that as of Sunday Mar 6, several of my reference pages are no longer found on my web page. I am investigating as to the reason for their disappearance. It's especially disturbing that the pages referring to the quadrifilar helix antenna research are among the missing. I will get the missing files back on the web page as soon as possible.

Sorry for the inconvenience to those who are looking for the QHA data.

#3

As of 3-13-05 my web page is up an running again. There has been a modification to make it more friendly, and with some new added material. During the next few weeks I will be placing even more information on the page that I hope will be entertaining, and it will also include historical material concerning early space exploration.

My new email address is there for those of you who have questions.

Enjoy.

Walt Maxwell, W2DU

4312. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 21:48:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d279mg$3kf$1@domitilla.aioe.org>
Source record: 80157

Well, that could happen...
But I would suppose they will run an electrical cord over to the hams
generator and keep on communicating...

Regards

"cl" <clfurentN@Syahoo.com> wrote in message
news:03F1e.57667$NC6.10181@newsread1.mlpsca01.us.to.verio.net...
> Um,,,,,,,, when the power goes out and phone lines go down, how is the
> computer going to help? It won't.
> You'll be sitting there with your thumbs stuck up your ass while those
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> cl
>
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> news:d275uevuo1@domitilla.aioe.org...
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>> revenue for local, state or federal government. With the outstanding
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>> of government--it would be most logical to switch much of this wasted
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>> Recreational communications are probably much better suited to the
>> internet,
>> again, where the greatest numbers receive the greatest benefit.
>> My "faulty" logic is indicating to me that this is the direction things
>> will
>> go, when finally these issues are put under a microscope and examined.
>> Since my crystal ball is cloudy at the present time--I will await the
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>> "Clarence_A" <no@No.com> wrote in message
>> news:YKE1e.2219$FN4.2082@newssvr21.news.prodigy.com...
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>>> "John Smith" <assemblywizard@gmail.com> wrote in message
>>> news:JCE1e.97$Gd4.1065020@news.sisna.com...
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>>>> The use of
>>>> communications to assist in the delivery of medicine, food,
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>>>> building materials, etc. is of more importance than the
>>>> use of airways for recreation.
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>>> truckers are doing when they go to Radio Amateur frequencies is a
>>> crime. These frequencies are used for many different things
>>> including emergency communications in disasters, the HFers simply
>>> do not belong there!
>>>
>>> Regardless of your poorly reasoned opine.
>>>
>>>
>>
>>
>
>

4313. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 22:01:19 UTC
From: "aunwin@insightbb.com"
Message-ID: <P2G1e.110904$Ze3.11791@attbi_s51>
Source record: 80158

"Dave Platt" <dplatt@radagast.org> wrote in message
news:114e6jk8b2q9ta0@corp.supernews.com...
>
> In article <uoD1e.110018$Ze3.66917@attbi_s51>,
> aunwin@insightbb.com <aunwin@insightbb.com@insightbb.com> wrote:
>
>>> There is a harsh limit, imposed by physics, as to how much gain that
>>> approach can give you.
>
>>Agreed... Do you know what those limits are ?
>
> Sure. The simplest way to state it is "the total amount of power
> delivered by the antenna, summed over all of the possible angles of
> radiation, must equal the total amount of power radiated by the
> antenna."
>
>>>
>>> If all of the energy from one hemisphere is redirected into the other
>>> hemisphere, and if the forward-direction pattern shape does not change
>>> (the forward lobe is not narrowed), then you have a forward gain of 3
>>> dB

But the forward pattern DOES change with a YAGI design. In fact it inferes
unequal pressures within the pattern. I would have no problem with a lot of
what you say
BUT the YAGI does not follow the theoretical aproach that you supplied thus
what you say regarding a yagi is based on a straw man augument.
My question was for the Yagi pattern which does not follow your aproach
You cannot relate gain and power since with a yagi tho power is an all
encompasing term
(three dimensional) gain is not. What you stated earlier regarding gain as a
ratio
is correct but for a Yagi its parameters must be defined which is not by the
term power.
as you have used it.

(2:1 power ratio increase). You *cannot* have more, as this would
>>> require that the antenna be radiating more power than it receives from
>>> its input.
>>
>>Absolutely incorrect. If I place the air of two balloons ,which reflect
>>the
>>figure
>>eight,into one single balloon and where the laws of partial pressures do
>>not

>>intervene
>>then you will have a balloon that is round and not elongated as the
>>antenna
>>books
>> would have you suggest. "Gain" is a term used to to quantify a small
>>portion of the
>>energy contained in the mythical ball of energy. Since the collection of
>>energy comes
>>from different directions and phases the energy collection is layered
>>depending on
>> the influence of the earth. Thus the layers of radiation are distorted
>>where one layer
>>can be squeezed outwards further than other layers, thus the terminology
>>of "gain"
>
> Jeez, Art, do you have any idea of just how thoroughly your response
> qualifies as "Authentic frontier gibberish" (as a Mel Brooks character
> once said)?
>
> I'm sorry, guy, but I believe that you are trying to stretch analogies
> far beyond the point where they actually apply to the physical
> phenomena we're discussing. Your concept of "layers of radiation" (as
> applied to the gain pattern of an antenna) simply doesn't add up.
>
>>If you are going to interelate the terms of "gain" and "power" then you
>>must
>>define
>>the parameters used to allow that.
>
> OK, let's do just that.
>
> "Power" is very well defined - it's the rate at which energy is
> delivered. Pick your units for energy and time as you choose. It's
> conventional to use watts for power, joules for energy and seconds for
> time. One watt, equals a rate of energy delivery of one joule per
> second.
>
> "Gain" is a ratio. In discussions dealing with antennas, the gain
> describes the ratio between the amount of power delivered by a given
> antenna in a given direction, to the amount of power delivered in that
> same direction by a "reference" antenna (a dipole in the case of a dBd
> gain number, and an "isotropic" antenna in the case of a dBi gain
> number). The gain figures in dB are logarithmic.
>
> Those are the definitions everyone uses, I believe.

I can go along with that

>
> If you, personally, are using different definitions than these, then
> our discussion (you vs. everyone else) should probably stop right here.

>
> Here's my rationale behind the statement I made about the limitations
> of your approach:
>
> - An isotropic antenna has a gain of 0 dBi, by definition.
>
> - If you "cut off" the entire rear side of an isotropic antenna's
> pattern (so that it radiates no power backwards), and precisely
> overlay this power (energy flow) onto the forward half, you'll end
> up with a "half-isospheric" antenna. It's radiating exactly the
> same amount of power, but over only half as much target area. The
> power (energy flow) towards each point in that targeted hemisphere
> will be exactly twice as much as in the isotropic antenna.
>
> This antenna has a gain of 3 dBi plus a hair.

As you say, when you are refering to isentropic

>
> It cannot have *more* gain in any direction (more power into a
> sub-portion of the hemisphere) unless it has *less* gain in another
> portion of that hemisphere...
For the isotropic aproach which has little relationship to the real world of
yagis
that some how narrows not only the main lobe but also the other lobes all
of which have seperate gains created by the movement of energy from the rear
and not constrained by your theoretical 3 db aproach

in other words, unless is starts
> exhibiting some form of lobing/nulling.
>
> If it *could*, it would be trivial to demonstrate that the antenna
> was delivering more power (more energy over time) into its loads,
> than it was accepting from its transmitter.
>
> The same line of logic applies even if you start with a dipole. If
> you begin with a dipole, and then magically "deflect" all of the power
> from the rear towards the front and overlay the patterns exactly,
> you'll exactly double the power in each forward-lying half of the
> sphere, and create a gain of 3 dB over the dipole. In order to have
> *more* forward gain in any direction in the forward direction, you
> must necessarily have *less* in another, and this either narrows the
> pattern in the forward direction or creates partial or complete nulls.
>
> To claim otherwise, is to claim an antenna which can be shown to
> deliver more power than it accepts as input... in other words, one
> which violates the conservation of energy.
>
> The same basic rule applies for any situation in which you take a
> bidirectional antenna (one which has a symmetrical forward-and-
> backward gain pattern) and then "deflect" all of the rearward energy

> into a forward direction. This will gain you at most 3 dB over the
> basic gain pattern of the antenna you started with. Any further
> maximum forward gain, over the antenna you were starting with, can
> *only* be achieved by decreasing the gain somewhere in the pattern
> (narrowing or weakening the main lobe or one of the sidelobes).
>
>>> A Moxon antenna is, to a first approximation, a pretty good example of
>>> this approach - it has very little energy in the rear hemisphere, and
>>> a broad forward lobe. There are various two-driven-element array
>>> designs which achieve a similar pattern and result.
>>
>>And the resulting "gain" is ....what?
>
> According to Cebik's web site, a 2-meter Moxon shows a maximum forward
> gain of about 10.7 dBi, or a bit more than 8 dB over a dipole. One
> could gain at most 3 dB due to the forward "deflection" of rear-
> hemisphere energy, and hence the remaining 5 dB or so of gain over a
> dipole must come from a narrowing of the antenna's pattern in either
> azimuth or elevation or both.
>
>>Yes I agree because of conservation laws e.t.c . When cancellation occurs
>>then energy creats energy in another direction similar to pulling steel
>>apart in tension
>>(or using compression) the steel becomes narrower before severing occurrs.
>>This thinning or "waisting" is created by the additional forces created at
>>90 degrees
>>to the tensile forces and where the break actually occurrs at 45 degrees
>>and not at right angles.
>
> Art, I think your analogies between radiation patterns, balloons,
> stretching metal, etc. are leading you astray more than they are
> helping you.
>
>>> Conservation of energy *requires* that the main lobe be narrowed, if
>>> you wish to achieve more gain than you can get by simply redistibuting
>>> the rear-ward energy in the forward direction.
>>
>>This is what you alluded to before and it is still incorrect
>>What "requires" what ? And how is this conclusion generating
>>an elongated lobe?
>
>>> A super-high-gain antenna *cannot* have a wide, uniform beam-width in
>>> both azimuth and elevation.
>>
>>Don't know how you can say that
>
> I say that because the opposite case would contradict the law of
> conservation of energy.
>
> If you have an antenna which puts all of its power, uniformly, into a

> forward beam which covers only 1/10 of the sphere, then that forward
> beam will carry 10 times as much power per angle, for a gain of 10
> dBi.
>
> If you squeeze the beam down in size so that it covers only 1/100 of
> the sphere, it will carry 100 times as much power per angle, for a
> gain of 20 dB.
>
> You can't have a broad forward lobe (say, one which covers a full 1/10
> of the sphere), and achieve a high gain of 20 dB (100 times as much
> power per angle) without violating the law of conservation of energy.
>
> *THAT* is the fundamental limit I'm talking about, Art.
>
>
>>> As usual for your postings, Art, it's impossible to tell whether your
>>> claims for your antenna are plausible, because you refuse to disclose
>>> *anything* (either the invention, or the results you claim) in any
>>> halfway-tanglible form (e.g. models, specific numbers, etc.).
>>
>>
>>My antenna is somewhat related
>
> You DID IT AGAIN, Art. You said "is somewhat related", you didn't say
> related to *what*, you didn't give any details whatsoever.

Oh come on Dave, don't twist things around. I have stated that my antenna,
which is not a yagi, when transposing pattern volume from the rear to the
front
does it in an orderly fashion by expansion of the receiving vessel in a
circular form.
. Thus the gain increased as the rear volume decreased with a diminishing
increase in gain.
The yagi does something different as other vectorial interferences is
creating
"outward pressures" on the so called balloon to NARROW the beam width.
Disregarding any effects that can be attributed to other antennas my
question is
related to the YAGI design which actually creates a narrowing beam as
progress is made
in transposing energy from the front to the rear. This is a fact , thus the
question "why"
a question that is pertinent to the YAGI design and not any other design or
multiple
arrangements of such..
You have supplied plenty of dots regarding antennas but none that remotely
relates to the question

>
>>The question however, is specifically related to Yagi's
>>and its narrowed lobes.

>> Do you know what it is that creats an elongated lobe
>>on a high gain yagi i.e not totally round.?
>>Nothing more, nothing less.
>
> You're acting as though the lobe were a physical object, and that
> something is "putting pressure" on it to squeeze it out of shape like
> a physical balloon.
>
> That is a FALSE ANALOGY, Art. It's meaningless.
>
> The "shape" of the lobe is simply a way of plotting numbers on a
> graph. It depends on the scaling of the graph, and it's a *relative*
> scale. A dipole's lobes may look perfectly round on one sort of
> graph, elliptical on another, and lumpy on a third, depending on
> whether the plot's axes are logarithmic, linear, or somewhere in
> between the two.
>
> Fundamentally, the reason that the shape of the lobe (on a
> conventional plot) changes from somewhat-circular to more-eliptical is
> due to the fact that the antenna is sending more of its power in a
> favored direction (to achieve gain), at the expense of sending less in
> other directions. Period.
>
> The *mechanism* by which this is done, in a Yagi (or an actively-
> driven set of phased radiators), is simply one of dividing up the
> power being radiated so that it's radiated (or re-radiated) from
> multiple points, in different spatial and phase relationships, so that
> the resulting waves cancel out in certain directions and reinforce in
> others.
>
> If you really want to know the details, I suggest that you dig up and
> read the original papers by Uda and Yagi.
>>> Until you do, I really think it would be to everyone's relief if you'd
>>> follow through with your recent statement that you were going to stop
>>> posting. You're achieving no good result for yourself by contining as
>>> you are.
>
>>I have not posted as you have inferred. The question is about Yagi design
>
> It all seems to come down to the same thing with you, Art.
>
> I suppose I should just killfile you and completely ignore your
> postings. I'm sorry, I've tried my best to steer you in directions
> that I think will actually help your efforts, but it seems quite futile.

By all means put me on your kill file. I asked a simple question and you
want to reply to a different question of your liking and place your
question
as one preferable to mine.
No one has been able to supply the answer to my question,

Using your words ,what steers the pattern away from a circular
form from a natural circular form. I am not asking for the extraneious
information
that all feel they are compelled to supply to make their posting look
informative.
Regards
Art

>
>
> --
> Dave Platt <dplatt@radagast.org> AE6EO
> Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

4314. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 22:08:11 UTC
From: "aunwin@insightbb.com"
Message-ID: <f9G1e.110951$Ze3.64685@attbi_s51>
Source record: 80159

Great! I would disagree with respect to "any other type of directional array
but I would like a further insight to the mechanics of vector array that
produces
this phenomina. I would like to reproduce this effect else where if I could.
Regards
Art

"Richard Fry" <rfry@adams.net> wrote in message
news:42471be2_2@newsfeed.slurp.net...
> "aunwin@insightbb.com" wrote:
>>> The shape changes can come from squeezing the balloon (pattern)
>>> horizontally, vertically, or in combination -- which, in antenna
>>> hardware is accomplished by an appropriate array of, and feed system
>>> for, its radiating elements.
>>
>> Right..... so what creats it, this "squeezing" that you talk about and
>> from where does this "squeezing force come from in an "appropiate"array?
>> That's what I was asking not a discussion of what the Yagi array
>> produces. Why does the lobe narrow?
> _____________
>
> Narrowing is the natural result of the vector addition of the separate EM
> waves radiated from the individual sources comprising the Yagi (or any
> other kind of directional array).
>
> RF

4315. Re: New group

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 22:10:51 UTC
From: David Stinson <arc5@ix.netcom.com>
Message-ID: <LbG1e.24558$191.20548@trnddc02>
Source record: 80160
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna

Not another....sigh

Mama Bear wrote:

> http://groups.yahoo.com/group/Short_Wave-and-Amateur_Radio/
>
>
>

4316. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 22:15:24 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <424730d2_1@newsfeed.slurp.net>
Source record: 80161

"aunwin@insightbb.com" wrote
> Great! I would disagree with respect to "any other type of directional
> array' but I would like a further insight to the mechanics of vector
> array that produces this phenomina. I would like to reproduce this
> effect else where if I could.

Suggest you get this background from a good read of just about any of the many antenna textbooks available. It's a bit much to deal with in a NG forum.

RF

4317. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 23:00:06 UTC
From: ts440@webtv.net
Message-ID: <18504-42473AF6-96@storefull-3275.bay.webtv.net>
Source record: 80163

haaaa only got 12 peolpe .not bad for a troll the freeband peolpe spend a lot of money buying those hf rigs and use it only on the freeband.not to smart.anyway suckers 73s from the big bam

4318. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 23:06:28 UTC
From: "aunwin@insightbb.com"
Message-ID: <U%G1e.108847$r55.87530@attbi_s52>
Source record: 80162

Hal I think you are right
It is magic!.
I think that this subject has been pushed to one side during the last
century in the event
anybody should come along and say all is known about antennas
so we can put them in their place.
Someday, someone will come along with an answer and then we can all jump on
him
and ask him to prove it so the monkey is not on our backs.
The post did attract a lot of interest tho even if there was not a cigar
supplied.
It really is amazing what photons can do when they become all entangled.
Time to get back to what SWR really entails when all can put their two
pennies
worth in.
I've got to now draw a circle with a compass and observe how the shape
changes when
replotted with logrithmic and other types of graph paper

Regards
Art

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:ONE1e.72944$Q83.42628@bignews5.bellsouth.net...
>
> "Cecil Moore" <w5dxp@hotmail.com> wrote in message
> news:42470d74$1_1@127.0.0.1...
>> aunwin@insightbb.com wrote:
>> > So to the gurus of this group, what actualy creates
>> > the narrowing of the forward lobes ?
>>
>> The narrowing of the forward lobes is
>> caused by constructive interference
>> during superposition of EM waves.
>> --
>> 73, Cecil http://www.qsl.net/w5dxp
>
> Darn - I thought it was pure magic.
> Now we hear all about induced currents and interference patterns
> cancelling
> in the rearward and the sides, but constructively interferring in the
> forward direction. All in an attempt to become the chosen guru of the
> original poster.
> If nominated, I will not run - if elected - I will not serve.
>

>

4319. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-27 23:38:34 UTC
From: Adair Winter <drummer_adair@mail.com>
Message-ID: <_tH1e.4111$yq2.3558@newssvr12.news.prodigy.com>
Source record: 80164

"John Smith" <assemblywizard@gmail.com> wrote in message
> Actually, the use of bandwidth for recreational purposes provides NO real
> revenue for local, state or federal government. With the outstanding
> costs
> of government--it would be most logical to switch much of this wasted
> bandwidth over to private enterprise where real tax revenue could be
> recovered...
> Recreational communications are probably much better suited to the
> internet,
> again, where the greatest numbers receive the greatest benefit.
> My "faulty" logic is indicating to me that this is the direction things
> will
> go, when finally these issues are put under a microscope and examined.
> Since my crystal ball is cloudy at the present time--I will await the
> future
> for confirmation...
>
> Regards

If you can't see the value in amateur radio than you are a idiot. anyone who thinks it's ok to operate in a band they are not licensed to be in because they are doing something good is messed up. what's worse is if you think it would be ok to give up the band because a trucker is doing something productive? geez.. Listen around there is ALOT more going on the amateur bands than pure recreation.

Adair - KD5DYP

4320. Re: antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 00:01:36 UTC
From: jimbo <jimbo62@spamex.com>
Message-ID: <1111968096.360933.283200@z14g2000cwz.googlegroups.com>
Source record: 80165

There are a few balanced tuners available for purchase. I assume you just want the building experience? If not, Johnson Matchbox tuners are sometimes available on Ebay and other sites. And MFJ has two current models. And Palstar has one current balanced tuner.

Good luck, jimbo

Angela & Gary wrote:
> I'm looking for plans to build a balanced tuner for ladderline without a
> balun. In the past, I've seen schematics for tuners with ganged
> inductors. Can't seem to stumble back upon these on a web search. Any
> ideas and thanks in advance.
>
> Gary

4321. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 00:32:38 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <7fl1e.84287$5T6.34250@bignews4.bellsouth.net>
Source record: 80166

> I've got to now draw a circle with a compass and observe how the shape
> changes when
> replotted with logrithmic and other types of graph paper
>
> Regards
> Art

Be sure to give us a report on creating the logarithmic graph paper.
If I heard someone was looking to replot circles on log graph paper, I would say he must be a ham.
Then I would think about writing a Java program to do it, as I slipped into sleep while listening to 'Coast-to-coast-AM' on the radio.

4322. Flagpole verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 00:42:05 UTC
From: "Dan, danl, danny boy, Redbeard, actually Greybeard now" <danl4x@charter.net>
Message-ID: <dkke41tobuccnocp4ufculap9b8d602ddm@4ax.com>
Source record: 80167

Anyone had any luck with a commercial or home built one?

A friend of mine is moving to a restricted location and was wondering.
danl4x@charter.net
Remove the x for e-mail reply
www.outdoorfrontiers.com
www.SecretWeaponLures.com
A proud charter member of "PETAF", People for Eating Tasty Animals and Fish!!!

4323. +1000s of real girls and guys online! Broadcasting right now via webcams!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 00:51:37 UTC
From: yumi <ariel4578@yahoo.com>
Message-ID: <1111971097.236175.43560@g14g2000cwa.googlegroups.com>
Source record: 80168

Hi There! Come and watch +1000s of real girls and guys online!
Broadcasting right now via webcams! Check it out at
http://streamlivecams.tripod.com You will have the best experience
ever!

4324. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 01:02:15 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <eple41992nvvb5a6jdj5mnj1ioc23acd77@4ax.com>
Source record: 80169

Dave, you are amazing. Such a well-reasoned and complete post. Too
bad it was a total waste of your time.

Regards,

Wes

On Sun, 27 Mar 2005 20:41:24 -0000, dplatt@radagast.org (Dave Platt)
wrote:

>
>In article <uoD1e.110018$Ze3.66917@attbi_s51>,
>aunwin@insightbb.com <aunwin@insightbb.com@insightbb.com> wrote:
>
>>> There is a harsh limit, imposed by physics, as to how much gain that
>>> approach can give you.
>
>>Agreed... Do you know what those limits are ?
>
>Sure. The simplest way to state it is "the total amount of power
>delivered by the antenna, summed over all of the possible angles of
>radiation, must equal the total amount of power radiated by the
>antenna."
>
>>>
>>> If all of the energy from one hemisphere is redirected into the other
>>> hemisphere, and if the forward-direction pattern shape does not change
>>> (the forward lobe is not narrowed), then you have a forward gain of 3
>>> dB (2:1 power ratio increase). You *cannot* have more, as this would
>>> require that the antenna be radiating more power than it receives from
>>> its input.
>>
>>Absolutely incorrect. If I place the air of two balloons ,which reflect the
>>figure
>>eight,into one single balloon and where the laws of partial pressures do not
>>intervene
>>then you will have a balloon that is round and not elongated as the antenna
>>books
>> would have you suggest. "Gain" is a term used to to quantify a small
>>portion of the
>>energy contained in the mythical ball of energy. Since the collection of
>>energy comes
>>from different directions and phases the energy collection is layered
>>depending on
>> the influence of the earth. Thus the layers of radiation are distorted

>>where one layer
>>can be squeezed outwards further than other layers, thus the terminology
>>of "gain"
>
>Jeez, Art, do you have any idea of just how thoroughly your response
>qualifies as "Authentic frontier gibberish" (as a Mel Brooks character
>once said)?
>
>I'm sorry, guy, but I believe that you are trying to stretch analogies
>far beyond the point where they actually apply to the physical
>phenomena we're discussing. Your concept of "layers of radiation" (as
>applied to the gain pattern of an antenna) simply doesn't add up.
>
>>If you are going to interelate the terms of "gain" and "power" then you must
>>define
>>the parameters used to allow that.
>
>OK, let's do just that.
>
>"Power" is very well defined - it's the rate at which energy is
>delivered. Pick your units for energy and time as you choose. It's
>conventional to use watts for power, joules for energy and seconds for
>time. One watt, equals a rate of energy delivery of one joule per
>second.
>
>"Gain" is a ratio. In discussions dealing with antennas, the gain
>describes the ratio between the amount of power delivered by a given
>antenna in a given direction, to the amount of power delivered in that
>same direction by a "reference" antenna (a dipole in the case of a dBd
>gain number, and an "isotropic" antenna in the case of a dBi gain
>number). The gain figures in dB are logarithmic.
>
>Those are the definitions everyone uses, I believe.
>
>If you, personally, are using different definitions than these, then
>our discussion (you vs. everyone else) should probably stop right here.
>
>Here's my rationale behind the statement I made about the limitations
>of your approach:
>
>- An isotropic antenna has a gain of 0 dBi, by definition.
>
>- If you "cut off" the entire rear side of an isotropic antenna's
> pattern (so that it radiates no power backwards), and precisely
> overlay this power (energy flow) onto the forward half, you'll end
> up with a "half-isospheric" antenna. It's radiating exactly the
> same amount of power, but over only half as much target area. The
> power (energy flow) towards each point in that targeted hemisphere
> will be exactly twice as much as in the isotropic antenna.
>

> This antenna has a gain of 3 dBi plus a hair.
>
> It cannot have *more* gain in any direction (more power into a
> sub-portion of the hemisphere) unless it has *less* gain in another
> portion of that hemisphere... in other words, unless is starts
> exhibiting some form of lobing/nulling.
>
> If it *could*, it would be trivial to demonstrate that the antenna
> was delivering more power (more energy over time) into its loads,
> than it was accepting from its transmitter.
>
>The same line of logic applies even if you start with a dipole. If
>you begin with a dipole, and then magically "deflect" all of the power
>from the rear towards the front and overlay the patterns exactly,
>you'll exactly double the power in each forward-lying half of the
>sphere, and create a gain of 3 dB over the dipole. In order to have
>*more* forward gain in any direction in the forward direction, you
>must necessarily have *less* in another, and this either narrows the
>pattern in the forward direction or creates partial or complete nulls.
>
>To claim otherwise, is to claim an antenna which can be shown to
>deliver more power than it accepts as input... in other words, one
>which violates the conservation of energy.
>
>The same basic rule applies for any situation in which you take a
>bidirectional antenna (one which has a symmetrical forward-and-
>backward gain pattern) and then "deflect" all of the rearward energy
>into a forward direction. This will gain you at most 3 dB over the
>basic gain pattern of the antenna you started with. Any further
>maximum forward gain, over the antenna you were starting with, can
>*only* be achieved by decreasing the gain somewhere in the pattern
>(narrowing or weakening the main lobe or one of the sidelobes).
>
>>> A Moxon antenna is, to a first approximation, a pretty good example of
>>> this approach - it has very little energy in the rear hemisphere, and
>>> a broad forward lobe. There are various two-driven-element array
>>> designs which achieve a similar pattern and result.
>>
>>And the resulting "gain" is ....what?
>
>According to Cebik's web site, a 2-meter Moxon shows a maximum forward
>gain of about 10.7 dBi, or a bit more than 8 dB over a dipole. One
>could gain at most 3 dB due to the forward "deflection" of rear-
>hemisphere energy, and hence the remaining 5 dB or so of gain over a
>dipole must come from a narrowing of the antenna's pattern in either
>azimuth or elevation or both.
>
>>Yes I agree because of conservation laws e.t.c . When cancellation occurs
>>then energy creats energy in another direction similar to pulling steel
>>apart in tension

>>(or using compression) the steel becomes narrower before severing occurrs.
>>This thinning or "waisting" is created by the additional forces created at
>>90 degrees
>>to the tensile forces and where the break actually occurrs at 45 degrees
>>and not at right angles.
>
>Art, I think your analogies between radiation patterns, balloons,
>stretching metal, etc. are leading you astray more than they are
>helping you.
>
>>> Conservation of energy *requires* that the main lobe be narrowed, if
>>> you wish to achieve more gain than you can get by simply redistibuting
>>> the rear-ward energy in the forward direction.
>>
>>This is what you alluded to before and it is still incorrect
>>What "requires" what ? And how is this conclusion generating
>>an elongated lobe?
>
>>> A super-high-gain antenna *cannot* have a wide, uniform beam-width in
>>> both azimuth and elevation.
>>
>>Don't know how you can say that
>
>I say that because the opposite case would contradict the law of
>conservation of energy.
>
>If you have an antenna which puts all of its power, uniformly, into a
>forward beam which covers only 1/10 of the sphere, then that forward
>beam will carry 10 times as much power per angle, for a gain of 10
>dBi.
>
>If you squeeze the beam down in size so that it covers only 1/100 of
>the sphere, it will carry 100 times as much power per angle, for a
>gain of 20 dB.
>
>You can't have a broad forward lobe (say, one which covers a full 1/10
>of the sphere), and achieve a high gain of 20 dB (100 times as much
>power per angle) without violating the law of conservation of energy.
>
>*THAT* is the fundamental limit I'm talking about, Art.
>
>
>>> As usual for your postings, Art, it's impossible to tell whether your
>>> claims for your antenna are plausible, because you refuse to disclose
>>> *anything* (either the invention, or the results you claim) in any
>>> halfway-tanglible form (e.g. models, specific numbers, etc.).
>>
>>
>>My antenna is somewhat related
>

>You DID IT AGAIN, Art. You said "is somewhat related", you didn't say
>related to *what*, you didn't give any details whatsoever.
>
>>The question however, is specifically related to Yagi's
>>and its narrowed lobes.
>> Do you know what it is that creats an elongated lobe
>>on a high gain yagi i.e not totally round.?
>>Nothing more, nothing less.
>
>You're acting as though the lobe were a physical object, and that
>something is "putting pressure" on it to squeeze it out of shape like
>a physical balloon.
>
>That is a FALSE ANALOGY, Art. It's meaningless.
>
>The "shape" of the lobe is simply a way of plotting numbers on a
>graph. It depends on the scaling of the graph, and it's a *relative*
>scale. A dipole's lobes may look perfectly round on one sort of
>graph, elliptical on another, and lumpy on a third, depending on
>whether the plot's axes are logarithmic, linear, or somewhere in
>between the two.
>
>Fundamentally, the reason that the shape of the lobe (on a
>conventional plot) changes from somewhat-circular to more-eliptical is
>due to the fact that the antenna is sending more of its power in a
>favored direction (to achieve gain), at the expense of sending less in
>other directions. Period.
>
>The *mechanism* by which this is done, in a Yagi (or an actively-
>driven set of phased radiators), is simply one of dividing up the
>power being radiated so that it's radiated (or re-radiated) from
>multiple points, in different spatial and phase relationships, so that
>the resulting waves cancel out in certain directions and reinforce in
>others.
>
>If you really want to know the details, I suggest that you dig up and
>read the original papers by Uda and Yagi.
>>> Until you do, I really think it would be to everyone's relief if you'd
>>> follow through with your recent statement that you were going to stop
>>> posting. You're achieving no good result for yourself by contining as
>>> you are.
>
>>I have not posted as you have inferred. The question is about Yagi design
>
>It all seems to come down to the same thing with you, Art.
>
>I suppose I should just killfile you and completely ignore your
>postings. I'm sorry, I've tried my best to steer you in directions
>that I think will actually help your efforts, but it seems quite futile.

4325. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 01:09:16 UTC
From: nm5k@wt.net
Message-ID: <1111972156.528078.174090@l41g2000cwc.googlegroups.com>
Source record: 80170

Asimov wrote:
We are in 2005 now and some geek in a broom closet is just about
> to unleash a comparable cataclysmic change to our world and one
better
> count on it!

I doubt it will have anything to do with antennas though..
And I doubt it will be a geek in a broom closet.
MK

4326. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 01:10:24 UTC
From: dplatt@radagast.org
Message-ID: <114emc0fs9v1m38@corp.supernews.com>
Source record: 80172

In article <P2G1e.110904$Ze3.11791@attbi_s51>,
aunwin@insightbb.com <aunwin@insightbb.com@insightbb.com> wrote:

>By all means put me on your kill file. I asked a simple question and you
> want to reply to a different question of your liking and place your
>question
>as one preferable to mine.

Art, in cases like this, you keep asking "simple questions" which imply, by their very wording, a whole bunch of assumptions about how things work which just ain't so.

The fact that you keep getting answer after answer, from a lot of knowledgeable people, which you either don't understand or "blow past" or that you feel evade the point of your question, ought to be saying something to you: that there's something wrong with the questions you ask.

>No one has been able to supply the answer to my question,
>Using your words ,what steers the pattern away from a circular
>form from a natural circular form.

That depends on what you mean by "a natural circular form."

If you're referring to the fact that the main lobe of a dipole tends to look circular on many of the commonly-used plots, then the pattern isn't "circular" in any cosmic sense of the word. It's just as correct to say that it's elliptical, or bumpy, or squashed, because that's exactly how it will look on plots which use different circular axes (linear, logarithmic, etc).

To try it again, though: you're asking why the pattern appears to be compressed, as the gain increases. Fundamentally, it's due to the fact that the antenna is sending more power out in the desired directions (more gain), at the expense of sending less in other directions. This is done by creating multiple radiators, which are offset in power and location and phase so that their individual radiation wavefronts reinforce in the desired directions, and cancel in the undesired directions.

When we plot the resulting RF strengths, the RF in the desired direction is stronger (we got the gain that we want). Let's assume that (as is common practice) we continue to plot the signal in the strongest direction on the outer circle of the graph.

Now, one of two things will have to be true:

[1] Every other direction in the main lobe had its power "scaled up"
by the same amount... the increase in gain worked the same for all
directions within the main lobe. In this case, the shape of the
main lobe will not change at all.

In this case, the additional power required to achieve the
increase in gain in the main lobe will have had to come for
somewhere. Since it didn't come from the main lobe, it will have
had to come either from the sidelobes, or from the rear half of
the antenna's pattern.

There's a limit to how far you can take approach [1]. It stops
working when your sidelobes and rear half of the pattern drop to
zero... and it becomes rather ineffective some time before that,
when the largest of the side/rear lobes is maybe 10-15 dB down.
Beyond that point, there just isn't enough power left in those
backlobes to be useful.

[2] The other possibility is that you didn't manage to boost the gain,
uniformly, in the entire main lobe.

In this case, if you're still plotting the strongest signal on the
outermost circle of the graph, you'll notice that the shape of the
main lobe has changed. Any direction in which the gain increase
was less than the maximum you achieved, will be closer to the
center of the circle than before. [Another way of looking at this
is that by increasing your maximum directional gain, you've
"enlarged the circle" on which you're plotting it, but that some
points didn't move outwards by the same ratio.]

In the common case of a Yagi, when you boost the gain (say, from 10 dB
to 15 dB) there just isn't enough power available in the side and rear
lobes to make up this gain... you can't 'rob' enough directivity from
the sidelobes and rear lobe. Instead, you 'rob' the power from the
outer edges of the main lobe, and shift it in towards the center.

You do this, most commonly, by adding additional parasitic elements,
whose location and phasing are such that their radiation reinforces
that moving in the "forward" direction, and interacts destructively
with (cancels) radiation moving outwards at an angle.

When you plot the resulting pattern, and scale it so that the
strongest signal is on the outer circle of the plot, you find that the
main lobe looks narrower. Part of this is due to the actual
redirection of power, and part of it is due to the fact that you've
re-scaled the graph.a

. I am not asking for the extraneious
>information
>that all feel they are compelled to supply to make their posting look
>informative.

[invokes several wrathful deities...]

Art, if you continue to ask "simple questions", and you continue to
get back complicated and detailed answers, it really ought to convey
to you the possibility that your "simple" question is oversimplified.
Or, perhaps, that you've been given the actual (simple) answer three
or four or five times already, have rejected it, and people are trying
to explain to you why it's actually correct.

Goodbye, Art. This is/was my last attempt, I think. I doubt I'll try
again.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4327. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 01:12:13 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <4dme41hho2puaggfm19mbuh3ipd5f3jcd2@4ax.com>
Source record: 80171

On Sun, 27 Mar 2005 14:48:41 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

[snip]

>I compensated by growing up to be six foot four.

I've met Cecil and can vouch for that.

4328. Re: antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 01:14:48 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d27lq8$om4$1@sparta.btinternet.com>
Source record: 80173

You'll need a balun whether or not you use a balanced tuner.

That is unless you have a balanced transmitter.

You can save yourself the cost of a pair of ganged inductors by
inserting a choke balun between the balanced feedline and an ordinary
unbalanced tuner.

Reg

4329. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 01:16:26 UTC
From: "aunwin@insightbb.com"
Message-ID: <KVl1e.159$Vx1.16@attbi_s01>
Source record: 80075

Hal
Amateur radio operators have been convinced to display radiation patterns
on logarithmic paper to make it look more directional than normal plotting
procedure.
Since I can now generate a complete circle for an non yagi antenna array
using logarithmic paper on my antenna program I thought it would be
interesting to see
what a circle would look like when using 'standard' graph paper.(a reverse
procedure)
Now, as I write this, I realise that my antenna computor program has the
ability to
make this transition.
This will be interesting as I have no pre-expectations as to what it will
show.
Best regards
Art

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:7fI1e.84287$5T6.34250@bignews4.bellsouth.net...
>> I've got to now draw a circle with a compass and observe how the shape
>> changes when
>> replotted with logrithmic and other types of graph paper
>>
>> Regards
>> Art
>
> Be sure to give us a report on creating the logarithmic graph paper.
> If I heard someone was looking to replot circles on log graph paper, I
> would
> say he must be a ham.
> Then I would think about writing a Java program to do it, as I slipped
> into
> sleep while listening to 'Coast-to-coast-AM' on the radio.
>
>

4330. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 01:17:35 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <3kme41hos86gjc6lnb05a1u7u2p5co9kia@4ax.com>
Source record: 80174

On Sun, 27 Mar 2005 12:23:07 -0800, "John Smith"
<assemblywizard@gmail.com> wrote:

>My post was simply a list of facts as they appear to me. The use of
>communications to assist in the delivery of medicine, food, clothing,
>building materials, etc. is of more importance than the use of airways for
>recreation.

So you're calling the babble that the truckers put out an "assist to
the delivery of products?"

You have to be trolling.

4331. Re: antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 01:19:45 UTC
From: dplatt@radagast.org
Message-ID: <114emth952mbs9f@corp.supernews.com>
Source record: 80076

In article <d27lq8$om4$1@sparta.btinternet.com>,
Reg Edwards <g4fgq,regp@ZZZbtinternet,com> wrote:

>You'll need a balun whether or not you use a balanced tuner.
>
>That is unless you have a balanced transmitter.

... or a link-coupled tuner, which works just fine without a balun
(or, looked at in another way, incorporates a balun as part of its
basic design).

>You can save yourself the cost of a pair of ganged inductors by
>inserting a choke balun between the balanced feedline and an ordinary
>unbalanced tuner.

... and being very careful to "float" the chassis of the tuner clear
of ground, and insulate it thoroughly.. If you don't do this, your
ground connection bypasses the choke balun, and/or you can be "bitten"
by the RF on the chassis which will often be at a substantial
potential above ground.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4332. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 01:33:30 UTC
From: pctech <mospam@yahoo.com>
Message-ID: <K9J1e.7056$z.5509@newsread2.news.atl.earthlink.net>
Source record: 80077

>
> With all the disobedience in this country, no wonder it is going to hell
> in a hand basket.
>

Man, You hit a nerve on that statement , Maybe you wanted to say " We need more disobedience in this country" didnt you ? The have's trying to run the lives of the have not's for one ...I guess it always was that way for the most part , Dont be suprised if that changes in the not to distant future. Common folk are gettin sick and tired of rising costs of goods in general, perverts raping and killing little kids ,Look now at people freakin out and doin goofy shit. Mankind (in general) is in for drastic changes in the next 10 to 20 years ..History will start to repeat itself just as soon as oil prices start to be unaffordable to us commen folk. So act now...buy a horse and wagon

4333. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 01:39:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7hne41lp4til3mn1qa098g0oufbp79r0cc@4ax.com>
Source record: 80078

On Sun, 27 Mar 2005 19:53:44 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>No one has come up with a explanation

Hi Art,

As usual, I see you simply enjoy posting without corresponding.
C'mon, it is more than obvious you have no interest in any explanation
other than your own.

>Roy and a couple of others qualify and have yet to respond
You've spit on them so much that is hardly surprising - is it?

73's
Richard Clark, KB7QHC

4334. Re: Walter Maxwell's Missing Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 01:40:59 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d27nbb$r9h$1@sparta.btinternet.com>
Source record: 80079

The Internet with its Service Providers is the most unreliable machine
ever invented.

4335. Re: antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 01:40:59 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d27nbb$r9h$2@sparta.btinternet.com>
Source record: 80080

The whole purpose of the choke balun is to allow the ordinary tuner to
be safely grounded.

The tuner is grounded automatically by virtue of its short connection
to the unbalanced transmitter.

Or have I misunderstood you?

Reg

4336. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 01:44:31 UTC
From: "Joe S." <nobody@nowhere.net>
Message-ID: <d27nhi0121e@news2.newsguy.com>
Source record: 80082

```
-----

"John Smith" <assemblywizard@gmail.com> wrote in message
news:d271ue$t09$1@domitilla.aioe.org...
> "Freebanding" is quite common these days.
> However, from my observations, you are much more likely to find a ham on
CB
> having fun and rabble-rousing with the truckers and "country folk" than a
> trucker on the 10 meter band.
> Be it as it is... truckers probably well outnumber hams in the US... and
> CERTAINLY provide a much more valuable service.

Great. Think I'll run out and buy myself a big-ass Volvo-White sleeper with
a 53-foot trailer and when the cops ask for my CDL license, I'll tell them
I'm a free-roader and I don't need any stinking CDL. Sounds fair to me.

--

Joe S.

>
> Regards
>
> "drwxr-xr-x" <bit-bucket@config.com> wrote in message
> news:slrnd4e0jc.66h.bit-bucket@shell.config.com...
> > On Sun, 27 Mar 2005 18:05:03 GMT, Clarence_A wrote:
> >>
> >> "H J" <ts440@webtv.net> wrote in message
> >> news:5557-4246894E-4@storefull-3277.bay.webtv.net...
> >>> the band we truckers,took over we dont need big hf radios like
> >> keenwood
> >>> etc.we use low cost radios with big power.also the high power
> >> black
> >>> radio people are makeing there way up 28hz.the new super bowl
> >> .we
> >>> black,white folks are meeting togeter.untiy day is here on 28mhz
> >>
> >> Can't spell, can not clearly communicate, and will spend serious
> >> time in prison for operation on 10Meters. The fine is $10,000 a
> >> Day, and the prison time is up to 10 years per infraction.
> >> NOT SMART!
> >
> > What is really *NOT SMART* is replying to a TROLL.
>
>
```

4337. Re: Compact 40m gain antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 01:57:44 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <42476498$0$3714$39cecf19@news.twtelecom.net>
Source record: 80081

Ralph Mowery wrote:

>
> Check out the scans of the antenna here:
>
> http://home.earthlink.net/~rmowery28146/data/
>
> It is from the 1981 Handbook. It is slightly larger than specified but may
> be usable. The Files are about 1 and 2 meg in size.
>
>

Interesting, and a bit too big isn't a killer. I do not have a copy of
that Handbook. Is it available in any of the ARRL antenna books?

Meanwhile I'll check to see if I can find a copy of that.

Thanks
tom
K0TAR

4338. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 02:02:55 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d27okfhlh2@hercules.btinternet.com>
Source record: 80083

>
> >I compensated by growing up to be six foot four.
>
> I've met Cecil and can vouch for that.

==========

The main difference, then, between Cecil and John Wayne, is that
rattle-snake shooting Cecil is not so slow witted.

4339. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 02:02:55 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d27okfhlh1@hercules.btinternet.com>
Source record: 80084

Albert Einstein was merely the first to realise what is obvious to
anybody who thinks about it.

What's all the fuss about for the last 100 years?

4340. Re: Compact 40m gain antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 02:06:54 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <424766bf$0$3707$39cecf19@news.twtelecom.net>
Source record: 80085

Tom Ring wrote:

> I have a coworker that would like to put up a 40m antenna on his tower

Thanks to everyone that responded so far. I have looked at most of the ones suggested, and they are all interesting. Many were familiar, but I looked again anyway.

The one I found most interesting in my personal search was from a link someone posted a while ago. Here is the one I found off that link -

http://www.cebik.com/wire/4.html
and the antenna is "The VK2ABQ Square"

Does anyone have any experience with this?

I kind of expected someone to point to a dual driven element design of some sort. Anyone have anything like that?

tom
K0TAR

4341. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 02:10:38 UTC
From: "aunwin@insightbb.com"
Message-ID: <ylJ1e.112262$Ze3.11096@attbi_s51>
Source record: 80086

"Dave Platt" <dplatt@radagast.org> wrote in message
news:114emc0fs9v1m38@corp.supernews.com...
> In article <P2G1e.110904$Ze3.11791@attbi_s51>,
> aunwin@insightbb.com <aunwin@insightbb.com@insightbb.com> wrote:
>
>>By all means put me on your kill file. I asked a simple question and you
>> want to reply to a different question of your liking and place your
>>question
>>as one preferable to mine.
>
> Art, in cases like this, you keep asking "simple questions" which
> imply, by their very wording, a whole bunch of assumptions about how
> things work which just ain't so.
>
> The fact that you keep getting answer after answer, from a lot of
> knowledgeable people, which you either don't understand or "blow past"
> or that you feel evade the point of your question, ought to be saying
> something to you: that there's something wrong with the questions you
> ask.
>
>>No one has been able to supply the answer to my question,
>>Using your words ,what steers the pattern away from a circular
>>form from a natural circular form.
>
> That depends on what you mean by "a natural circular form."
>
> If you're referring to the fact that the main lobe of a dipole tends
> to look circular on many of the commonly-used plots, then the pattern
> isn't "circular" in any cosmic sense of the word. It's just as
> correct to say that it's elliptical, or bumpy, or squashed, because
> that's exactly how it will look on plots which use different circular
> axes (linear, logarithmic, etc).
>
> To try it again, though:

I thank you for that

you're asking why the pattern appears to be
> compressed, as the gain increases. Fundamentally, it's due to the
> fact that the antenna is sending more power out in the desired
> directions (more gain), at the expense of sending less in other
> directions.

Fully agreed to

This is done by creating multiple radiators, which are
> offset in power and location and phase so that their individual
> radiation wavefronts reinforce in the desired directions, and cancel
> in the undesired directions.

Accepted as long as you can agree that a similar vector analysis with
multiple radiators can also create a non focussing pattern

>
> When we plot the resulting RF strengths, the RF in the desired
> direction is stronger (we got the gain that we want). Let's assume
> that (as is common practice) we continue to plot the signal in the
> strongest direction on the outer circle of the graph.
>
> Now, one of two things will have to be true:
>
> [1] Every other direction in the main lobe had its power "scaled up"
> by the same amount... the increase in gain worked the same for all
> directions within the main lobe. In this case, the shape of the
> main lobe will not change at all.

O.K. this would /could be the case I am thinking of
>
> In this case, the additional power required to achieve the
> increase in gain in the main lobe will have had to come for
> somewhere.

Agreed

Since it didn't come from the main lobe, it will have
> had to come either from the sidelobes, or from the rear half of
> the antenna's pattern.

Agreed for over all gain but not necessarilly for the lobe becomming
focussed
which is the crux of my question
>
> There's a limit to how far you can take approach [1]. It stops
> working when your sidelobes and rear half of the pattern drop to
> zero... and it becomes rather ineffective some time before that,
> when the largest of the side/rear lobes is maybe 10-15 dB down.
> Beyond that point, there just isn't enough power left in those
> backlobes to be useful.

Using a antenna computor program the main lobe at 10 degrees does not
deviate from a circle even if the F/R is more than 30 db (note F/R vs F/B)
and this is comprised of vector addition mode as with a yagi design.

>
> [2] The other possibility is that you didn't manage to boost the gain,
> uniformly, in the entire main lobe.

Hum!

> In this case, if you're still plotting the strongest signal on the
> outermost circle of the graph, you'll notice that the shape of the
> main lobe has changed.

No, not always, only with a yagi design in my opinion

Any direction in which the gain increase
> was less than the maximum you achieved, will be closer to the
> center of the circle than before. [Another way of looking at this
> is that by increasing your maximum directional gain, you've
> "enlarged the circle" on which you're plotting it, but that some
> points didn't move outwards by the same ratio.]

Agreed thus my question

>
> In the common case of a Yagi, when you boost the gain (say, from 10 dB
> to 15 dB) there just isn't enough power available in the side and rear
> lobes to make up this gain... you can't 'rob' enough directivity from
> the sidelobes and rear lobe. Instead, you 'rob' the power from the
> outer edges of the main lobe, and shift it in towards the center.

Now we are getting closer to my quest. How do we "rob" from the outer
edge of the main lobe is the underpinnings of my question.

>
> You do this, most commonly, by adding additional parasitic elements,
> whose location and phasing are such that their radiation reinforces
> that moving in the "forward" direction, and interacts destructively
> with (cancels) radiation moving outwards at an angle.

Agreed if we are adding or subtracting on a constant plane.
Could you by any chance referring to the closing vector of the vector
analysis
to consist of two vectors and where one of these vectors is the force at
right
angles to the main lobe and which deforms it. If so I am beginning to see
the light!

>
> When you plot the resulting pattern, and scale it so that the
> strongest signal is on the outer circle of the plot, you find that the
> main lobe looks narrower. Part of this is due to the actual
> redirection of power, and part of it is due to the fact that you've
> re-scaled the graph.a

I am lost here but if we agree on my interpretation of what you said then
I am at a point where I can generate vector diagrams of different arrays
and forecast the width of the resultant lobe .Does anybody else agree
that the main lobe width can be forecast via vector analysis.
Seems like from past posts that vector analysis is not now in vogue
for electrical engineers in the U,S and only creates blank stares
when mentioned/
.

kes several wrathful deities...]
>
> Art, if you continue to ask "simple questions", and you continue to
> get back complicated and detailed answers, it really ought to convey
> to you the possibility that your "simple" question is oversimplified.
> Or, perhaps, that you've been given the actual (simple) answer three
> or four or five times already, have rejected it, and people are trying
> to explain to you why it's actually correct.
>
> Goodbye, Art. This is/was my last attempt, I think. I doubt I'll try
> again.

But David, nobody pointed to vector analysis and the particular facet
that you referred to. You are to be congratulated in pointing to a trail
of logic that could well be the direction I was looking for.
Nobody but you presented in real terms an analysis that leads to
serious consideration and I thank you very much for that.

Best regards
Art KB9MZ.....xg

g the Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

4342. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 02:15:08 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <424768ad$0$3707$39cecf19@news.twtelecom.net>
Source record: 80087

aunwin@insightbb.com wrote:

> You are not alone as I thought it meant quieter contacts but it is said
> (ARRL publication) that it then becomes more difficult to aim, ala the
> rombic.
> That's why I see my antenna's flattening of the main lobe without loss in
> beam
> width an advantage.

Oh boy, is this going to be fun!

Next he'll be selling a box that does perpetual motion.

tom
K0TAR

4343. Re: antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 02:26:56 UTC
From: dplatt@radagast.org
Message-ID: <114eqrg426q5ba6@corp.supernews.com>
Source record: 80088

In article <d27nbb$r9h$2@sparta.btinternet.com>,
Reg Edwards <g4fgq,regp@ZZZbtinternet,com> wrote:

>The whole purpose of the choke balun is to allow the ordinary tuner to
>be safely grounded.
>
>The tuner is grounded automatically by virtue of its short connection
>to the unbalanced transmitter.
>
>Or have I misunderstood you?

It depends. There are two arrangements using choke baluns that I'm aware of - balun at the input, and balun at the output.

It's fairly common to put a choke balun at the output of an unbalanced tuner, to convert the unbalanced output to a balanced form. This seems to work pretty well when the tuner is looking into loads that aren't too high, low, or reactive in nature. For high-R or highly-reactive loads, it may be difficult to create a choke balun with a high enough choking reactivity to force adequate balance on the line. In this approach, the tuner can be connected to the transceiver via a direct cable, and its chassis can be connected to the station RF ground.

The other approach is to put a choke balun at the input of the tuner, "float" the tuner chassis clear of ground, and connect the balanced line directly to the "unbalanced" output of the tuner. This pseudo-balanced arrangment can provide good balance once the tuner is adjusted, because the balun "sees" 50 ohms on both sides... but it adds the complication of having to float and insulate the tuner. I've heard of some people taking a commercial tuner, and putting it on insulators inside a secondary outer chassis. The outer chassis can be connected to the station ground, and or to the transceiver coaxial feedline braid _before_ going through the choke balun.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4344. Re: Where Did My Web Page URL Go?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 02:37:04 UTC
From: John Doe <JohnDoe@0.0.0.0>
Message-ID: <42476d84$0$21677$afc38c87@news.optusnet.com.au>
Source record: 80089

Hi Walter,
You web page host may have restored
an earlier backup of your web page,
or your web page host may have been hacked.
Thank you for taking the time
to share your work with us.

"Walter Maxwell" <w2du@iag.net> wrote in message
news:umqd41dr5hbre65dgkd5uoqm638gs1kb29@4ax.com...
> On 3-14 or 3-15 I started a thread concerning a new url for my web page at
> walt@w2du.com. After the original post I added two more. Then a few days
ago I
> started to add another post, but the thread had disappeared.
>
> Can anyone tell me how a thread disappears? Can it be deleted? By just
anyone?
>
> Walt Maxwell, W2DU

4345. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 02:39:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d27qo9$j5h$1@domitilla.aioe.org>
Source record: 80090

Well, I guess the FCC could increase the cost of licences by about 10000% to cover the costs of enforcing this for a very small number who would benefit--but don't hold your breath...
Sure, most of those truckers are running 500+ watts and I have seen 1500 watt linears being built by a retired engineer in his garage (mobile linears!) for extra beer money...
But hey, those truckers are in most towns and cities for a matter of minutes, they don't get paid unless they are laying down miles on a road--they are only temporary inconveniences...
"Radio Police" running up and down the freeways pursuing truckers seems to come in low on a list including terrorists, illegal aliens, a failing SSI system, increasing drug and medical costs, etc, etc--the danger of being sued for illegal searches alone is scarry... not to even mention how ridiculous it all sounds to people outside ham radio!
Becomming totally involved in a hobby to the point of losing all sense of importance of reality is fine--I like to day dream--but get real!

Regards

"Joe S." <nobody@nowhere.net> wrote in message
news:d27nhi0121e@news2.newsguy.com...
> -----
>
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:d271ue$t09$1@domitilla.aioe.org...
>> "Freebanding" is quite common these days.
>> However, from my observations, you are much more likely to find a ham on
> CB
>> having fun and rabble-rousing with the truckers and "country folk" than a
>> trucker on the 10 meter band.
>> Be it as it is... truckers probably well outnumber hams in the US... and
>> CERTAINLY provide a much more valuable service.
>
>
>
> Great. Think I'll run out and buy myself a big-ass Volvo-White sleeper
> with
> a 53-foot trailer and when the cops ask for my CDL license, I'll tell them
> I'm a free-roader and I don't need any stinking CDL. Sounds fair to me.
>
> --
>
> Joe S.
>
>>

>> Regards
>>
>> "drwxr-xr-x" <bit-bucket@config.com> wrote in message
>> news:slrnd4e0jc.66h.bit-bucket@shell.config.com...
>> > On Sun, 27 Mar 2005 18:05:03 GMT, Clarence_A wrote:
>> >>
>> >> "H J" <ts440@webtv.net> wrote in message
>> >> news:5557-4246894E-4@storefull-3277.bay.webtv.net...
>> >>> the band we truckers,took over we dont need big hf radios like
>> >> keenwood
>> >>> etc.we use low cost radios with big power.also the high power
>> >> black
>> >>> radio people are makeing there way up 28hz.the new super bowl
>> >> .we
>> >>> black,white folks are meeting togeter.untiy day is here on 28mhz
>> >>
>> >> Can't spell, can not clearly communicate, and will spend serious
>> >> time in prison for operation on 10Meters. The fine is $10,000 a
>> >> Day, and the prison time is up to 10 years per infraction.
>> >> NOT SMART!
>> >
>> > What is really *NOT SMART* is replying to a TROLL.
>>
>>
>
>

4346. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 02:40:38 UTC
From: "aunwin@insightbb.com"
Message-ID: <G8K1e.109726$r55.62679@attbi_s52>
Source record: 80091

Not so. If I cannot accept an answer that I figure to be unreasonable then I do not accept them. In Roy's case I accept
the majority of his explanations, but not all. In your case you come up with many knoweledgable explanations
on various facets of science ,but in general, you concentrate more in attacking others opinions with out supplying corrections
I say this only where your posts are clear and not smattered with relatively unused words where a shorter one would suffice How ever those are in the minority.
If I do not concurr with any explanation offerred .in no way does this suggest that I am spitting on the individual and thus treating him with disrespect. In your case you treat me in disrespect which as far as I am concerned requires reciprical treatment. You ask for it and you will get it from me without retreat On the other hand respect demands respect, your choice as I am now americanised for retaliation without regard to common courtesy as per the Britts
Art

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:7hne41lp4til3mn1qa098g0oufbp79r0cc@4ax.com...
> On Sun, 27 Mar 2005 19:53:44 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>>No one has come up with a explanation
>
> Hi Art,
>
> As usual, I see you simply enjoy posting without corresponding.
> C'mon, it is more than obvious you have no interest in any explanation
> other than your own.
>
>>Roy and a couple of others qualify and have yet to respond
> You've spit on them so much that is hardly surprising - is it?
>
> 73's
> Richard Clark, KB7QHC

4347. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 02:48:30 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d27r9u$9dg$1@titan.btinternet.com>
Source record: 80092

> Using a antenna computor program the main lobe at 10 degrees does
not
> deviate from a circle even if the F/R is more than 30 db (note F/R
vs F/B)
> and this is comprised of vector addition mode as with a yagi design.
>
==========

Using a computer program automatically incorporates all the defects in
the programmer's reasoning and understanding of the problems
involved - plus other bugs.

Never use a computer program as the Bible.

4348. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 02:51:36 UTC
From: "aunwin@insightbb.com"
Message-ID: <YiK1e.109762$r55.101998@attbi_s52>
Source record: 80093

Tom, now you are being silly.
You obviously do not know all about antennas other wise
you would be anxious to display your knoweledge as to why this is
impossible.
But then you can't and thus want to assault the messenger.
I could present the facts to an individual for confirmation but this would
only mean
a deflection of comments from me to the adjudicator from people with the pre
disposition of yourself

Art

"Tom Ring" <news0002@taring.org> wrote in message
news:424768ad$0$3707$39cecf19@news.twtelecom.net...
> aunwin@insightbb.com wrote:
>
>> You are not alone as I thought it meant quieter contacts but it is said
>> (ARRL publication) that it then becomes more difficult to aim, ala the
>> rombic.
>> That's why I see my antenna's flattening of the main lobe without loss in
>> beam
>> width an advantage.
>
> Oh boy, is this going to be fun!
>
> Next he'll be selling a box that does perpetual motion.
>
> tom
> K0TAR

4349. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 03:07:36 UTC
From: "aunwin@insightbb.com"
Message-ID: <YxK1e.112441$Ze3.27114@attbi_s51>
Source record: 80094

I could not agree more This is why I requested comment on my computor
findings.
It is easy to generate a program to agree with what is known to all.
It is another thing to pre forecast results from an untried array.
It appears from comments given that the computor programs are not to be
fully
accepted, especially if a lobe pattern produced is circular in nature and of
various thickness
Tho I must admit I am unaware of what text books they are being guided from.
,
Regards
Art

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:d27r9u$9dg$1@titan.btinternet.com...
>> Using a antenna computor program the main lobe at 10 degrees does
> not
>> deviate from a circle even if the F/R is more than 30 db (note F/R
> vs F/B)
>> and this is comprised of vector addition mode as with a yagi design.
>>
> ================================
>
> Using a computer program automatically incorporates all the defects in
> the programmer's reasoning and understanding of the problems
> involved - plus other bugs.
>
> Never use a computer program as the Bible.
>
>
>

4350. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 03:16:08 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <424776f9$0$3709$39cecf19@news.twtelecom.net>
Source record: 80095

aunwin@insightbb.com wrote:

> Tom, now you are being silly.
> You obviously do not know all about antennas other wise
> you would be anxious to display your knoweledge as to why this is
> impossible.
> But then you can't and thus want to assault the messenger.
> I could present the facts to an individual for confirmation but this would
> only mean
> a deflection of comments from me to the adjudicator from people with the pre
> disposition of yourself
>
> Art

Nope, I don't know everything, but I do know the amount of energy
radiated can't be more than what the transmitter outputs, so the sum of
energy around the sphere has to equal that. If you think you can make
the main lobe broader, then you are implying that you can radiate more
powwr than than was originally there.

tom
K0TAR

4351. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 03:30:37 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <e8ue41dvsmb5pu6mroglbq3q49pu1c5a55@4ax.com>
Source record: 80096

On Sun, 27 Mar 2005 18:05:03 GMT, "Clarence_A" <no@No.com> wrote:

>
>"H J" <ts440@webtv.net> wrote in message
>news:5557-4246894E-4@storefull-3277.bay.webtv.net...
>> the band we truckers,took over we dont need big hf radios like
>keenwood
>> etc.we use low cost radios with big power.also the high power
>black
>> radio people are makeing there way up 28hz.the new super bowl
>.we
>> black,white folks are meeting togeter.untiy day is here on 28mhz
>
>
>Can't spell, can not clearly communicate, and will spend serious
>time in prison for operation on 10Meters. The fine is $10,000 a
>Day, and the prison time is up to 10 years per infraction. NOT
>SMART!
>

Freebanding is the least of my worries with truckers. Big trucks are 5 percent of the vehicles on the road. They are involved in 25 percent of the accidents. Naturally, they blame this on the cars. The corrupt federal, state and local governments are paid off by the motor freight (fright?) industry to look the other way on speeding and almost all other infractions. When was it last time you saw a truck pulled over? How often do they go by on the highway in excess of 75 MPH? Do the math.

Of course, as a ham, I also despise freebanders and hope they get caught and fined - big time.

Russ

4352. Re: 28mhz ham radio read this what i think .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 03:39:27 UTC
From: jcooper874@webtv.net
Message-ID: <18728-42477C6F-83@storefull-3271.bay.webtv.net>
Source record: 80098

so what is more inportant in life not your hobby most people put there
radio hobby before,god and there family that is sad .they will drive all
night to go to a hamfest but when it comes time for a family event o i
cant make it heard it to many times on the radio waves.
so i guess the ups or fedex truck did not bring you that new hf rig so
next time you pick it up stop picking on truckers.

4353. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 03:43:58 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_42478627@fidonet.org>
Source record: 80121

"nm5k@wt.net" bravely wrote to "All" (27 Mar 05 17:09:16)
--- on the heady topic of "Re: physical 1/4, electrical 1/2 wavelength"

nm> From: nm5k@wt.net
nm> Xref: aeinews rec.radio.amateur.antenna:27403

nm> Asimov wrote:
> some geek in a broom closet is just about
> to unleash a comparable cataclysmic change to our world and

nm> I doubt it will have anything to do with antennas though..
nm> And I doubt it will be a geek in a broom closet.

It's numbingly comforting to doubt but science isn't a religion.
Not to be a contrarian but it might have to do with antennas.
We can't tell the future, I can only influence it a bit by action.

A*s*i*m*o*v

... The World is run by those who show up.

4354. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 03:47:25 UTC
From: "aunwin@insightbb.com"
Message-ID: <h7L1e.388$Vx1.382@attbi_s01>
Source record: 80097

"Tom Ring" <news0002@taring.org> wrote in message
news:424776f9$0$3709$39cecf19@news.twtelecom.net...
> aunwin@insightbb.com wrote:
>
>> Tom, now you are being silly.
>> You obviously do not know all about antennas other wise
>> you would be anxious to display your knoweledge as to why this is
>> impossible.
>> But then you can't and thus want to assault the messenger.
>> I could present the facts to an individual for confirmation but this
>> would only mean
>> a deflection of comments from me to the adjudicator from people with the
>> pre disposition of yourself
>>
>> Art
>
> Nope, I don't know everything, but I do know the amount of energy radiated
> can't be more than what the transmitter outputs, so the sum of energy
> around the sphere has to equal that.

Goodness me, do you really think that is in quesdtion in this debate ?

If you think you can make
> the main lobe broader, then you are implying that you can radiate more
> powwr than than was originally there.

You really are jumping the Grand Canyon in TWO strides !.
I have no idea what you are saying or alluding to.
To make something broarder is describing one dimension only.. less if used
in ratio terms
To describe energy one must have more than one dimension or unit.
Surely one must know this to graduate from High school in the U.S. or am I
mistaken.?
If so it then accounts for some of the wierd responses that have come my
way.
Art

>
> tom
> K0TAR
>

4355. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 03:51:21 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <42477f39$0$3713$39cecf19@news.twtelecom.net>
Source record: 80099

aunwin@insightbb.com wrote:

> You really are jumping the Grand Canyon in TWO strides !.
> I have no idea what you are saying or alluding to.
> To make something broarder is describing one dimension only.. less if used
> in ratio terms
> To describe energy one must have more than one dimension or unit.
> Surely one must know this to graduate from High school in the U.S. or am I
> mistaken.?
> If so it then accounts for some of the wierd responses that have come my
> way.
> Art

I said "sphere".

Moron.

4356. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 03:54:30 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_42478628@fidonet.org>
Source record: 80120

"Wes Stewart" bravely wrote to "All" (27 Mar 05 18:12:13)
--- on the heady topic of "Re: Interesting Antennas"

WS> From: Wes Stewart <n7ws_@*yahoo.com>
WS> Xref: aeinews rec.radio.amateur.antenna:27405

WS> On Sun, 27 Mar 2005 14:48:41 -0600, Cecil Moore <w5dxp@hotmail.com>
WS> wrote:

WS> [snip]

>I compensated by growing up to be six foot four.

WS> I've met Cecil and can vouch for that.

Bah, the bigger they are the nicer they are!

A*s*i*m*o*v

... "Water? I never touch the stuff -- fish screw in it!" -- W.C. Fields

4357. Re: Walter Maxwell's Missing Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 03:56:05 UTC
From: Mike Coslo <mremovethiscoslo@adelphia.net>
Message-ID: <AaydnWxUpprJHdrfRVn-pw@adelphia.com>
Source record: 80100

Reg Edwards wrote:
> The Internet with its Service Providers is the most unreliable machine
> ever invented.

Then you must not have tried cell phones.

A true application of diminished expectations.......

- Mike KB3EIA -

4358. Re: 28mhz ham radio best keep secret.not any more .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 03:56:52 UTC
From: ts440@webtv.net
Message-ID: <18504-42478084-118@storefull-3275.bay.webtv.net>
Source record: 80103

by the way if you wanna be a free trucker go with the best volvo lol i
will by a kw.or pete. next time i see you radio police cops
trying to get my tag number i may have to go to jail but i will make dam
shure that wil be your last number you get. just think 80.000lbs runing
you off the road

4359. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 03:58:03 UTC
From: "aunwin@insightbb.com"
Message-ID: <fhL1e.112634$Ze3.2182@attbi_s51>
Source record: 80101

snip
"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:h7L1e.388$Vx1.382@attbi_s01...
>
> "Tom Ring" <news0002@taring.org> wrote in message
> news:424776f9$0$3709$39cecf19@news.twtelecom.net...
>> aunwin@insightbb.com wrote:
>>
snip
>>>
>>> Art
>>
Your statement
>> Nope, I don't know everything, but I do know the amount of energy
>> radiated can't be more than what the transmitter outputs, so the sum of
>> energy around the sphere has to equal that.

My response
> Goodness me, do you really think that is in quesdtion in this debate ?

Your statement
> If you think you can make
>> the main lobe broader, then you are implying that you can radiate more
>> powwr than than was originally there.

My response

> You really are jumping the Grand Canyon in TWO strides !.
> I have no idea what you are saying or alluding to.
> To make something broarder is describing one dimension only.. less if used
> in ratio terms
> To describe energy one must have more than one dimension or unit.
> Surely one must know this to graduate from High school in the U.S. or am I
> mistaken.?
> If so it then accounts for some of the wierd responses that have come my
> way.
> Art

QED
Art

>
>
>
>
>

>
>>
>> tom
>> K0TAR
>>
>
>

4360. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 04:05:08 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_42478626@fidonet.org>
Source record: 80119

"Cecil Moore" bravely wrote to "All" (27 Mar 05 14:48:41)
--- on the heady topic of "Re: Interesting Antennas"

CM> From: Cecil Moore <w5dxp@hotmail.com>
CM> Xref: aeinews rec.radio.amateur.antenna:27378

> I suppose you may have compensated by growing up to become a
> lumberjack or a marines sargent?

CM> I compensated by growing up to be six foot four. Judge Cecil
CM> Neeley was indeed a marine corps general before he retired.

I wasn't so far off then. BTW I'm plagued with an oddball real name
myself which is why I used the pen name Asimov. However, I plead
ignorance of General and Judge Neeley? A famous american no doubt?
TIA

A*s*i*m*o*v

... Bad Beer Rots Our Young Guts But Vodka Goes Well.

4361. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 04:05:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <DoL1e.108$us7.2014309@news.sisna.com>
Source record: 80102

As a matter of fact, I have been wondering when they are going to put those toilets back in the parks and hire an illegal alien to clean them (that can't be that expensive!), sure makes it hard when you take the grandkids to the park...

Regards

"Just?n K?se" <chupacabra@operamail.com> wrote in message news:42487e15.22413628@chupacabra...
> In Message-ID:<e8ue41dvsmb5pu6mroglbq3q49pu1c5a55@4ax.com> posted on
> Mon, 28 Mar 2005 03:30:37 GMT, Russ wrote:
>
>>Of course, as a ham, I also despise freebanders and hope they get
>>caught and fined - big time.
>
> You'd rather them bootlegging in the ham bands?
> Like a public toilet in the park, sure it's nasty, but better than
> shitting everywhere, and some folk are gonna communicate no matter where
> the end up doing it.
> --
>
> JK

4362. Re: 28mhz ham radio best keep secret.not any more .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 04:36:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d281kk$nf5$1@domitilla.aioe.org>
Source record: 80104

Fella... I can't even begin to tell you what is wrong with that post... if you have any friends who would stand beside you as you make bodily threats to human beings--I can't even begin to describe where I would like to see you all removed to...

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw aboot speel-checkin it fer me?
"H J" <ts440@webtv.net> wrote in message news:18504-42478084-118@storefull-3275.bay.webtv.net...
> by the way if you wanna be a free trucker go with the best volvo lol i
> will by a kw.or pete. next time i see you radio police cops
> trying to get my tag number i may have to go to jail but i will make dam
> shure that wil be your last number you get. just think 80.000lbs runing
> you off the road
>

4363. Re: Flagpole verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 05:46:38 UTC
From: pfriedmanNoSpam <p.paulfriedmanNoSpam@comcast.net>
Message-ID: <4d-dndQ_cluSB9rfRVn-pQ@comcast.com>
Source record: 80105

"Dan, danl, danny boy, Redbeard, actually Greybeard now"
<danl4x@charter.net> wrote in message
news:dkke41tobuccnocp4ufculap9b8d602ddm@4ax.com...
> Anyone had any luck with a commercial or home built one?
>
> A friend of mine is moving to a restricted location and was wondering.
> danl4x@charter.net
> Remove the x for e-mail reply
> www.outdoorfrontiers.com
> www.SecretWeaponLures.com
> A proud charter member of "PETAF", People for Eating Tasty Animals and
> Fish!!!

A friend of mine, in a restricted Southern Ca. location installed a flagpole (he needed special permission from the Association's Architectural Committee for this). Then late at night we added buried radials and a feedline. It works reasonably well 40->6 meters with the help of a tuner. It would work better with a remote coupler, of course.

This is the Force 12 version, but I don't think it makes a whole lot of difference.

Paul AB0SI

4364. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 06:01:11 UTC
From: nm5k@wt.net
Message-ID: <1111989671.314719.271550@g14g2000cwa.googlegroups.com>
Source record: 80106

My post was simply a list of facts as they appear to me. The use of
communications to assist in the delivery of medicine, food, clothing,
building materials, etc. is of more importance than the use of airways
for
recreation.

That might mean something if they actually needed it, or didn't
have a legal choice. But they do. Regardless of feelings on the
matter, what they do is illegal, and could cause them considerable
negative cashflow if caught. Could also effect the ability to
legally obtain a license after such a conviction, the way things
have been going lately.

Since most would accept that the law of "...the greatest good for the
greatest number..." would apply, if push came to shove--the truckers
would
probably end up with the frequencies in question...

They have legal frequencies they can use. This is *exactly* what
the CB band was created for. They also have business band options,
the the family radio frequencies to chose from. Myself, I have a
simple solution that I impliment when I hear illegal truckers on
the CW portion of 10m. I fire up my henry console, and started
calling CQ right smack dab on top of them. Tends to ruin
their day...1+ kw of CW on 10m cuts holes like a plasma
cutter...:) I have no real problems with them using the
"freeband" under 28 mhz, as it's basically unused, although
legally, it is allocated to aircraft I believe... I'll
leave it up to the FCC to decide how they want to treat it.
As far as I know, they will prosecute, if they hear you
there. The "freebanders" have been there for so many years,
they have sorta of taken it over...
But if I catch them in *my* allocated frequency range,
I'm gonna put them on hold. They can try to talk,
but I'm going to make it as unpleasant for them,
as possible. It's called self policing. And that's
the way ham radio has basically been run for years.
If the truckers want to use 10m, more power to them,
but they better get a license first. And being it's
so easy these days, with CW being snails pace, even
for extra, there is *no* excuse not to have one.
They can use 2m, if they are too slow to learn CW.
So even CW is no excuse to break the law. MK

4365. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 06:07:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0n7f41530oa9ku96u16ek6b3am6chi7f8k@4ax.com>
Source record: 80107

On Sun, 27 Mar 2005 15:29:59 -0600, "Richard Fry" <rfry@adams.net>
wrote:

>This will be news to the FCC and AM broadcast stations

Hi OM,

Send them a singing telegram.

73's
Richard Clark, KB7QHC

4366. Re: Walter Maxwell's Missing Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 06:13:56 UTC
From: nm5k@wt.net
Message-ID: <1111990436.511094.137170@o13g2000cwo.googlegroups.com>
Source record: 80108

There has been a lot of web hacking lately...Many
"forum" type websites in particular have been
hacked..It's possible you were hacked,
unless you find out the ISP lost the files...
MK

4367. Re: Where Did My Web Page URL Go?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 06:23:24 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <o48f41h9rvn6l15qk7gnr9dr5ha5bh2eg1@4ax.com>
Source record: 80109

On Sun, 27 Mar 2005 21:33:59 GMT, Walter Maxwell <w2du@iag.net> wrote:

>God knows I didn't delete my own--I
>don't know how to do it.

Hi Walt,

This is simple to confirm from your end of the posting. Go to
"Window" on the menu bar, click "Open Outbox."

This will open a window of all the postings you have made. Scroll
down to the date you made these posts that did not appear and note if
the icon to the left of them is in red showing you had some problem
connecting to the server for outgoing posts.

>Cecil said posts can be deleted by the poster,

This is a fantasy. May as well blame it on photons.

>but can they be deleted by someone else?

Such manipulation requires rather exotic software that only crackers
deal with. We had an episode of that some months back, but by recent
reports he was wrestled to the ground by three cops. Feces happens.

>Incidentally, Richard, which paper did you re-read that you called 'sourze C'?

Examine the carefully crafted term.

73's
Richard Clark, KB7QHC

4368. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 06:29:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <kq8f41522c1l78i9npfqfgp2ahs7r5bocu@4ax.com>
Source record: 80110

On Mon, 28 Mar 2005 02:02:55 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>Albert Einstein was merely the first to realise what is obvious to
>anybody who thinks about it.
>
>What's all the fuss about for the last 100 years?
>

Hi Reg,

No one else wrote it down. Sure you can "think about it," but if you keep dialing the same number to talk to Mum and you get chinese take-out, then "thinking about it" is not all that it is cracked up to be.

73's
Richard Clark, KB7QHC

4369. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 06:50:51 UTC
From: nm5k@wt.net
Message-ID: <1111992651.363855.56740@z14g2000cwz.googlegroups.com>
Source record: 80111

....Anyone ever done a helical wound "Slim Jim?"
yes.
Since this is a 1/2 wave
antenna with a 1/4 matching section (3/4 overall),

Why the 1/4 matching section? Seems that takes it
nearly to the full half wave length...or close
enough not to matter much...
Myself, I would probably prefer a "gamma loop"
type matching scheme, which adds no height.
To me, 16 ft tall is no more trouble than 12 ft tall
in the real world.
I've had a lightweight 32 ft self supporting radiator
up, which was no hassle at all...And the base of that
was at 36 ft on a mast. "68 ft tall total".
That was a dual band 40m GP/ 17m 5/8 GP....Full size
on both bands, relay switched.

helical winding of this form into a 3/8 overall height
(approx. 12 ft. @ 28Mhz) might be possible.
The extremely low angle of radiation (approx. 8 degrees)
would make this vertical antenna desirable... .....

The angle of maximum radiation will vary fairly
drastically depending on height above ground.
For a "like" sized vertical, the height above
ground will have more of an effect, than any
extra electrical length. To my way of thinking,
the advantage of the extended winding should be
the largest, the closer to ground it is.
The higher above ground, approaching 1/2 wave up,
the lesser the advantage.
Note that at high heights above ground in WL,
the 1/4 wave ground plane, and the 1/2 wave
vertical have nearly the same gain for practical
purposes. "maybe .3 -.8 db difference..."
You should consider decoupling of the antenna
from the feedline also. Radiation from the line
will skew the pattern upwards off the horizon.
This will ruin even higher gain collinears.

I like my antennas full size if at all possible.
I'm a radio bully. :/ MK

4370. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 07:23:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <569f41t80mq5klm2ka6chvcpsqkbd6hl3v@4ax.com>
Source record: 80112

On Mon, 28 Mar 2005 02:40:38 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:
>If I cannot accept an answer that I figure to be unreasonable then I
>do not accept them.

Hi Art,

This is your standard line of bullshit. Don't blame Shakespeare for
this standard offering of anglo-saxon clarity.

The simple answer to your question was already revealed in your
question which offered in part:
>is formed using Yagi principles.
>Nothing more, nothing less.
Exactly.

I know this may come as a shock to you, but the obvious problem is
that you have absolutely no understanding of just what
>Yagi principles.
means and you refuse to go there. If you want to make this a 12 step
Shakespearian comedy, keep ignoring the elephant in your living room.

73's
Richard Clark, KB7QHC

4371. The Greatest News Ever!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 07:27:10 UTC
From: Ron_Grossi_038@yahoo.com
Message-ID: <1111994830.076785.221250@l41g2000cwc.googlegroups.com>
Source record: 80113

http://www.jcil.blogspot.com << The Greatest News Ever!

4372. !PI4EMN

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 07:56:44 UTC
From: PD0CIF <harm.siepel@home.nl>
Message-ID: <d28da9jfm1@news1.zwoll1.ov.home.nl>
Source record: 80114

www.pi4emn.tk

www.pd0cif.tk

www.jo32kt.tk

4373. Re: Flagpole verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 08:41:08 UTC
From: George Kinzer <horseflygk@worldnet.att.net>
Message-ID: <EqP1e.471767$w62.104719@bgtnsc05-news.ops.worldnet.att.net>
Source record: 80115

speak English...rewrite ..
flagpole. O.K......above ground height, examples are (30 ft?) diameter
bottom (5''), top (3")..thickness. (.156) will be written as 30' X 5" X
.156 w/ 3" top
sectional? There aint much about a flagpole I DON'T know...

4374. Re: antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 12:08:58 UTC
From: KC1DI <elbc2@pivot.net>
Message-ID: <4247F3DA.3000206@pivot.net>
Source record: 80116

Dave Platt wrote:
> In article <d27nbb$r9h$2@sparta.btinternet.com>,
> Reg Edwards <g4fgq,regp@ZZZbtinternet,com> wrote:
>
>
>>The whole purpose of the choke balun is to allow the ordinary tuner to
>>be safely grounded.
>>
>>The tuner is grounded automatically by virtue of its short connection
>>to the unbalanced transmitter.
>>
>>Or have I misunderstood you?
>
>
> It depends. There are two arrangements using choke baluns that I'm
> aware of - balun at the input, and balun at the output.
>
> It's fairly common to put a choke balun at the output of an unbalanced
> tuner, to convert the unbalanced output to a balanced form. This
> seems to work pretty well when the tuner is looking into loads that
> aren't too high, low, or reactive in nature. For high-R or
> highly-reactive loads, it may be difficult to create a choke balun
> with a high enough choking reactivity to force adequate balance on the
> line. In this approach, the tuner can be connected to the transceiver
> via a direct cable, and its chassis can be connected to the station RF
> ground.
>
> The other approach is to put a choke balun at the input of the tuner,
> "float" the tuner chassis clear of ground, and connect the balanced
> line directly to the "unbalanced" output of the tuner. This
> pseudo-balanced arrangment can provide good balance once the tuner is
> adjusted, because the balun "sees" 50 ohms on both sides... but it
> adds the complication of having to float and insulate the tuner. I've
> heard of some people taking a commercial tuner, and putting it on
> insulators inside a secondary outer chassis. The outer chassis can be
> connected to the station ground, and or to the transceiver coaxial
> feedline braid _before_ going through the choke balun.
>
Hi Dave and all,

For Reg. I've used the method that Dave speaks of above over the years
with very good Sucess but as he says the tuner must be isolated from
ground in order to produce the needed balance at the out put. The
advatage as stated is that the Balun (once the turner is tuned to the

frequency being used will see pretty much 50 ohms on both sides. It has work very well here .

73 Dave Kc1di

4375. Re: antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 12:19:03 UTC
From: KC1DI <elbc2@pivot.net>
Message-ID: <114fthomlt0chec@corp.supernews.com>
Source record: 80117

Angela & Gary wrote:
> I'm looking for plans to build a balanced tuner for ladderline without a
> balun. In the past, I've seen schematics for tuners with ganged
> inductors. Can't seem to stumble back upon these on a web search. Any
> ideas and thanks in advance.
>
> Gary
Hi Gary,

you may find the following web sites of interest in designing your own
balanced tuner.
hope they help in your quest.
73 Dave KC1DI

http://www.cebik.com/link/link.html

http://www.cebik.com/edu/edu6.html

http://www.cebik.com/link/l-bal.html

another approach is the Z-Match tuner

http://www.qsl.net/wb3gck/zmatch.htm

http://www4.tpgi.com.au/users/ldbutler/SingleCoilZMatch.htm

(Note it is very desirable on the Z-Match to have Vernier dials as the
Adjustments can be very sharp and easy to miss without them.)

http://www.seboldt.net/k0jd/z-match.html#schematic

4376. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 12:22:05 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4247f743_2@newsfeed.slurp.net>
Source record: 80118

"Richard Clark" wrote >
>>This will be news to the FCC and AM broadcast stations
> Hi OM, Send them a singing telegram.

I'll leave that to you, as the author of the news.

4377. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 14:49:15 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42481a16$1_1@127.0.0.1>
Source record: 80122

Wes Stewart wrote:

> Cecil Moore <w5dxp@hotmail.com> wrote:
>>I compensated by growing up to be six foot four.
>
> I've met Cecil and can vouch for that.

Hey Wes, I just heard a sportscaster say that
one of the reasons that Oklahoma State lost to
Arizona is that they don't have any really big
players. Their biggest is only 6' 10". :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4378. Re: antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 14:59:40 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42481c83$1_2@127.0.0.1>
Source record: 80123

Dave Platt wrote:
> ... or a link-coupled tuner, which works just fine without a balun

How efficient is link-coupling? I have an old
Sunair PN-099400 auto-tuner that uses motor-
driven variable-link coupling. Too bad it runs
on 28 vdc.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4379. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 15:32:41 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42482440$1_1@127.0.0.1>
Source record: 80124

Reg Edwards wrote:
> Albert Einstein was merely the first to realise what is obvious to
> anybody who thinks about it.

Some things that Albert Einstein said sound a lot like Art.

"Imagination is more important than knowledge."

"Education is what remains after one has forgotten everything he
learned in school."

"All our science, measured against reality, is primitive and
childlike ..."

"As far as the laws of mathematics refer to reality, they are not
certain, as far as they are certain, they do not refer to reality."

"Whoever undertakes to set himself up as a judge of Truth and
Knowledge is shipwrecked by the laughter of the gods."

"Great spirits have always found violent opposition from mediocrities."

"He who joyfully marches to music rank and file, has already earned my
contempt. He has been given a large brain by mistake, since for him the
spinal cord would surely suffice."
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
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4380. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 15:36:35 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4248252a$1_2@127.0.0.1>
Source record: 80025

Reg Edwards wrote:
> The main difference, then, between Cecil and John Wayne, is that
> rattle-snake shooting Cecil is not so slow witted.

Actually, I've always thought the main difference between
me and John Wayne was the size of our feet. His were
something like 8 1/2. Mine are 13. My uncle said I would
have been a tall guy if I didn't have so much turned down
for feet.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4381. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 15:48:50 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <BHV1e.3$m51.1068060@news.sisna.com>
Source record: 80026

It is interesting that so many intend that you "design the world" then cause the people to fit the design; this is 180 degrees of what really happens--people bend the world to fit themselves.

For whatever reasons, some have seemed to have decided certain "rf space" fits them and, they are no small number, the truckers!

While it might benefit some, if there were "radio police" to hunt down every trucker with a 500+ watt linear, who would pay for this? Would hams accept a 10000%+ increase in the cost of licenses to help fund such a force, equipment and activities?

And, it is one thing to find a station running at a stationary location--quite another when that station is mobile. However, those enjoying such things would find one large and unending fox hunt--reminiscent of the old "cops and robbers game" one played as a child!

Imprisoning citizens for simple infractions of rules which are causing no one physical, monetary or real personal damage (i.e. amateurs are only being deprived of sole benefit of bandwidth for their hobby use) is insane--you have to wonder "what are these people thinking?"
One very good example of this, and could be viewed as a model of what would happen if this were to occur might be "the war on drugs." We have waged this war for 30+ years--there are more drugs on the streets than before we began--and people are REALLY being harmed NOW as these criminals attempt to gain the money to obtain the drugs we have made so expensive and, to escape the penalties we have made so severe--INSANE! There is about the same amount of cocaine in a coca plant as sugar in a sugar cane. I can walk into a supermarket and buy 5 lbs of sugar for next to nothing! If that were cocaine, it would probably get everyone in a major city high, maybe for days! Since it is forced to the black market it most likely costs millions!!! And, there seems an unlimited amount of addicts which will maim, harm or even kill citizens to gain this drug--INSANE!

There was a time when one special group of a few individuals could be allowed to think themselves "special" and allowed to run a unique "old boys club." Times have changed. However, you are living in the past if you don't see the handwriting on the wall and, think you will be able to oppose change and evolution of the use of radio communications.

Some will personally attack me for pointing this all out-kill the messenger bearing the bad news-WAKE UP! Look around, you are either part of the problem or you are part of the solution...

When you are done acting like a child and throwing your temper tantrums-perhaps you will see the problem is still there to deal with.

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw
aboot speel-checkin it fer me?

<nm5k@wt.net> wrote in message
news:1111989671.314719.271550@g14g2000cwa.googlegroups.com...
> My post was simply a list of facts as they appear to me. The use of
> communications to assist in the delivery of medicine, food, clothing,
> building materials, etc. is of more importance than the use of airways
> for
> recreation.
>
> That might mean something if they actually needed it, or didn't
> have a legal choice. But they do. Regardless of feelings on the
> matter, what they do is illegal, and could cause them considerable
> negative cashflow if caught. Could also effect the ability to
> legally obtain a license after such a conviction, the way things
> have been going lately.
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> Since most would accept that the law of "...the greatest good for the
> greatest number..." would apply, if push came to shove--the truckers
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> probably end up with the frequencies in question...
>
> They have legal frequencies they can use. This is *exactly* what
> the CB band was created for. They also have business band options,
> the the family radio frequencies to chose from. Myself, I have a
> simple solution that I impliment when I hear illegal truckers on
> the CW portion of 10m. I fire up my henry console, and started
> calling CQ right smack dab on top of them. Tends to ruin
> their day...1+ kw of CW on 10m cuts holes like a plasma
> cutter...:) I have no real problems with them using the
> "freeband" under 28 mhz, as it's basically unused, although
> legally, it is allocated to aircraft I believe... I'll
> leave it up to the FCC to decide how they want to treat it.
> As far as I know, they will prosecute, if they hear you
> there. The "freebanders" have been there for so many years,
> they have sorta of taken it over...
> But if I catch them in *my* allocated frequency range,
> I'm gonna put them on hold. They can try to talk,
> but I'm going to make it as unpleasant for them,
> as possible. It's called self policing. And that's
> the way ham radio has basically been run for years.
> If the truckers want to use 10m, more power to them,
> but they better get a license first. And being it's
> so easy these days, with CW being snails pace, even
> for extra, there is *no* excuse not to have one.
> They can use 2m, if they are too slow to learn CW.
> So even CW is no excuse to break the law. MK
>

4382. Re: antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 15:52:04 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <424828cc$1_1@127.0.0.1>
Source record: 80027

Dave Platt wrote:
> The other approach is to put a choke balun at the input of the tuner,
> "float" the tuner chassis clear of ground, and connect the balanced
> line directly to the "unbalanced" output of the tuner. This
> pseudo-balanced arrangment can provide good balance once the tuner is
> adjusted, because the balun "sees" 50 ohms on both sides... but it
> adds the complication of having to float and insulate the tuner.

There's considerable debate on that configuration. If we assume
the common-mode current doesn't change when we move the choke
from output to input, i.e. it is a systematic problem, then the
choke is exposed to exactly the same common-mode current on output
and input. Common mode current travels on the tuner chassis and the
coax shield input and coax shield output may be one inch from each
other with a dead short between them.

And here's something that no one, to the best of my knowledge,
has mentioned. If one succeeds in balancing the currents at
the input of an unbalanced antenna tuner, the currents at the
output will automatically be unbalanced because the current on
the coax center wire will suffer a greater phase delay than
the current on the coax inner braid thus forcing some current
to the outside of the coax. This effect should be easy to measure.

Link coupling solves the common-mode problem. Unfortunately, the
MFJ balanced tuners do not relieve the stress on the choke. Take
a look at the schematic to see why.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4383. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 15:59:30 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42482a89$1_1@127.0.0.1>
Source record: 80028

Asimov wrote:
> However, I plead
> ignorance of General and Judge Neeley? A famous american no doubt?

A famous American in Madison County, TX.

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4384. Re: Where Did My Web Page URL Go?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 16:04:54 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42482bce$1_2@127.0.0.1>
Source record: 80029

Richard Clark wrote:

> Walter Maxwell <w2du@iag.net> wrote:
>>Cecil said posts can be deleted by the poster,
>
> This is a fantasy.

Not at all. My usenet service provider allows me
to delete my own posts. That's useful if I typo
"1/2WL" instead of "1/4WL" or some such.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4385. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 16:07:13 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42482c58$1_2@127.0.0.1>
Source record: 80030

nm5k@wt.net wrote:

> Since this is a 1/2 wave
> antenna with a 1/4 matching section (3/4 overall),
>
> Why the 1/4 matching section?

An 1/2WL end-fed with 1/4WL matching section is a Zepp.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
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4386. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 16:57:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <vHW1e.6$NA3.1776733@news.sisna.com>
Source record: 80031

To put everyone "on the same page", here is a good description of what I
intend when I mention "slim jim."
http://www.hamuniverse.com/slimjim.html

Regards
--
Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw
aboot speel-checkin it fer me?

<nm5k@wt.net> wrote in message
news:1111992651.363855.56740@z14g2000cwz.googlegroups.com...
> ....Anyone ever done a helical wound "Slim Jim?"
> yes.
> Since this is a 1/2 wave
> antenna with a 1/4 matching section (3/4 overall),
>
> Why the 1/4 matching section? Seems that takes it
> nearly to the full half wave length...or close
> enough not to matter much...
> Myself, I would probably prefer a "gamma loop"
> type matching scheme, which adds no height.
> To me, 16 ft tall is no more trouble than 12 ft tall
> in the real world.
> I've had a lightweight 32 ft self supporting radiator
> up, which was no hassle at all...And the base of that
> was at 36 ft on a mast. "68 ft tall total".
> That was a dual band 40m GP/ 17m 5/8 GP....Full size
> on both bands, relay switched.
>
> helical winding of this form into a 3/8 overall height
> (approx. 12 ft. @ 28Mhz) might be possible.
> The extremely low angle of radiation (approx. 8 degrees)
> would make this vertical antenna desirable... ....
>
> The angle of maximum radiation will vary fairly
> drastically depending on height above ground.
> For a "like" sized vertical, the height above
> ground will have more of an effect, than any
> extra electrical length. To my way of thinking,
> the advantage of the extended winding should be
> the largest, the closer to ground it is.
> The higher above ground, approaching 1/2 wave up,
> the lesser the advantage.
> Note that at high heights above ground in WL,
> the 1/4 wave ground plane, and the 1/2 wave

> vertical have nearly the same gain for practical
> purposes. "maybe .3 -.8 db difference..."
> You should consider decoupling of the antenna
> from the feedline also. Radiation from the line
> will skew the pattern upwards off the horizon.
> This will ruin even higher gain collinears.
>
> I like my antennas full size if at all possible.
> I'm a radio bully. :/ MK
>

4387. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 17:30:01 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <gsdg415co1tlgpjegl9e9mg87sfnd54gf6@4ax.com>
Source record: 80032

On Mon, 28 Mar 2005 08:49:15 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Wes Stewart wrote:
>
>> Cecil Moore <w5dxp@hotmail.com> wrote:
>>>I compensated by growing up to be six foot four.
>>
>> I've met Cecil and can vouch for that.
>
>Hey Wes, I just heard a sportscaster say that
>one of the reasons that Oklahoma State lost to
>Arizona is that they don't have any really big
>players. Their biggest is only 6' 10". :-)

The reason OK lost is because, despite AZ's off-night loss to IL and
their friends the officials and the crowd, they were up against the
best team in college basketball.

Our biggest guy, Channing Frye, is listed variously as 6' 10" or 6'
11".

4388. Re: 28mhz ham radio best keep secret.not any more .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 17:41:18 UTC
From: Clarence_A <no@No.com>
Message-ID: <2lX1e.2481$FN4.1287@newssvr21.news.prodigy.com>
Source record: 80034

"H J" <ts440@webtv.net> wrote in message
news:18504-42478084-118@storefull-3275.bay.webtv.net...
> by the way if you wanna be a free trucker go with the best volvo
lol i
> will by a kw.or pete. next time i see you radio police
cops
> trying to get my tag number i may have to go to jail but i will
make dam
> shure that wil be your last number you get. just think 80.000lbs
runing
> you off the road
>

Forwarded to the department of Home Land Security.

Path:
newssvr21.news.prodigy.com!newsdbm01.news.prodigy.com!newscon07.ne
ws.prodigy.com!newsmst01a.news.prodigy.com!prodigy.com!newscon02.n
ews.prodigy.com!prodigy.net!news.moat.net!newsfeed-3001.bay.webtv.
net!newssorter-3001.bay.webtv.net!not-for-mail
From: ts440@webtv.net (H J)
Newsgroups: rec.radio.amateur.antenna
Subject: Re: 28mhz ham radio best keep secret.not any more .
Date: Sun, 27 Mar 2005 21:56:52 -0600
Organization: WebTV Subscriber
Lines: 6
Message-ID: <18504-42478084-118@storefull-3275.bay.webtv.net>
References: <d27nhi0121e@news2.newsguy.com>
NNTP-Posting-Host: localhost.webtv.net
Mime-Version: 1.0 (WebTV)
Content-Type: Text/Plain; Charset=US-ASCII
Content-Transfer-Encoding: 7Bit
X-WebTV-Signature: 1

ETAuAhUAmxBufFtDPFvOPPsmP5/x9BiCGbECFQCjFf558G0fLCHxRWmr7NNklmjScg
==
Content-Disposition: Inline
Xref: newsmst01a.news.prodigy.com rec.radio.amateur.antenna:245134

4389. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 17:41:19 UTC
From: Clarence_A <no@No.com>
Message-ID: <3lX1e.2482$FN4.1815@newssvr21.news.prodigy.com>
Source record: 80033

"Russ" <carlzomer@hotmail.com> wrote in message
news:e8ue41dvsmb5pu6mroglbq3q49pu1c5a55@4ax.com...
> On Sun, 27 Mar 2005 18:05:03 GMT, "Clarence_A" <no@No.com>
wrote:
> >"H J" <ts440@webtv.net> wrote in message
> >news:5557-4246894E-4@storefull-3277.bay.webtv.net...
> >> the band we truckers,took over we dont need big hf radios
like
> >keenwood
> >> etc.we use low cost radios with big power.also the high power
> >black
> >> radio people are makeing there way up 28hz.the new super bowl
> >.we
> >> black,white folks are meeting togeter.untiy day is here on
28mhz
> >
> >
> >Can't spell, can not clearly communicate, and will spend
serious
> >time in prison for operation on 10Meters. The fine is $10,000
a
> >Day, and the prison time is up to 10 years per infraction.
NOT
> >SMART!
> >
>
> Freebanding is the least of my worries with truckers. Big
trucks are
> 5 percent of the vehicles on the road. They are involved in 25
> percent of the accidents. Naturally, they blame this on the
cars.
> The corrupt federal, state and local governments are paid off by
the
> motor freight (fright?) industry to look the other way on
speeding and
> almost all other infractions. When was it last time you saw a
truck
> pulled over? How often do they go by on the highway in excess
of 75 MPH? Do the math.
>
> Of course, as a ham, I also despise freebanders and hope they
get
> caught and fined - big time.
>

> Russ

Eight stopped just in the last two days. But they missed another
five!

4390. Re: Compact 40m gain antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 17:47:26 UTC
From: Buck <iam@this.site>
Message-ID: <1igg41t3b7s1853m913jbjlqj31fnv0nqq@4ax.com>
Source record: 80035

On Wed, 23 Mar 2005 10:40:48 -0600, Tom Ring <news0002@taring.org>
wrote:

>I have a coworker that would like to put up a 40m antenna on his tower
>that has some gain and directivity. I have modeled a few things, and
>while they are fairly satisfactory, I wanted to see what ideas the group
>had.
>
>The approximate limitations are as follows -
>
>o Boomlength 30 feet
>o Element length 30 feet
>o Any vertical components are max -10 feet from the plane of the boom
>and elements. The reason here is that it's a crankup, and his roof
>clearance would be about 10 feet when lowered.
>
>It would be desirable to have both CW and phone covered, but phone only
>is ok.
>It will need to be coax fed.
>
>Thanks.
>
>tom
>K0TAR

Have you looked into the Moxon or X Beam designs? There is also a
drooping yagi where the elements of the yagi are fixed length, but a
wire is hung on the ends of the elements to keep the lengths of the
driven and reflector elements properly resonant. Additionally, you
can try linear loaded elements for the beam.

If it is small and directional, you better choose a portion of the
band and focus on that. I don't think you will find too many wide
band shortened beams.

--
73 for now
Buck
N4PGW

4391. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 17:57:42 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <s9hg419c75r7vtlh17g75ib5kb7dvmq6u2@4ax.com>
Source record: 80036

On Mon, 28 Mar 2005 06:22:05 -0600, "Richard Fry" <rfry@adams.net>
wrote:

>"Richard Clark" wrote >
>>>This will be news to the FCC and AM broadcast stations
>> Hi OM, Send them a singing telegram.
>_____________
>
>I'll leave that to you, as the author of the news.

Not as important as you first thought I see - which was my point.

73's
Richard Clark, KB7QHC

4392. Re: Where Did My Web Page URL Go?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 18:04:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <sihg41djnreubb5vg49eq75tninqfopiec@4ax.com>
Source record: 80037

On Mon, 28 Mar 2005 10:04:54 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:
>> This is a fantasy.
>Not at all.
The void of experiance. Galileo should have had such access to
retractions.

4393. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 18:17:59 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <42484ab1_2@newsfeed.slurp.net>
Source record: 80038

"Richard Clark" wrote> wrote:
>>"Richard Clark" wrote >
>>>>This will be news to the FCC and AM broadcast stations
>>> Hi OM, Send them a singing telegram.
>>I'll leave that to you, as the author of the news.
> Not as important as you first thought I see - which was my point.

Readers will judge for themselves as to the importance and validity of our respective statements on this topic. You chose to avoid commenting about the accuracy of what I posted, replying instead with a flip comment. I suspect you know that what I posted was valid -- even though counter to your point of view.

RF

4394. Re: Using 2 antennas as a repeater

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 18:34:39 UTC
From: Buck <iam@this.site>
Message-ID: <3gjg411g2evs7jojq0qov985e0jan7j9hs@4ax.com>
Source record: 80039

>Hi Jim,
> Yes, I've heard of knife-edge refraction, but the instance I was referring
>to in the article had a real positive benefit. As I recall, the operator
>went from <zero contact> to <satifactory contact> by hooking up 2 beams
>back-to-back at the summit, with one beam pointing back at him - and the
>other beam pointed to the otherwise unreachable distant repeater.
> I wouldn't have thought something like that would work without some
>signal amplification. But it does.
>

How critical would the matching on those beams have to be? I am
wondering if maybe a 300 ohm wire could run from DE to DE on the two
beams.

--
73 for now
Buck
N4PGW

4395. Re: 28mhz ham radio best keep secret.not any more .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 18:42:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <2eY1e.9$IO6.2608169@news.sisna.com>
Source record: 80047

While I don't support people who threaten harm to others, neither do I respect the "I am going to tell the teacher" types.

If you wish your ISP to be anonymous go to this web page, find an anonymous host of your choosing:

http://www.atomintersoft.com/products/alive%2Dproxy/proxy%2Dlist/

|-------
address -------|- port-|

the ISP address will be give in the form XXX.XXX.XXX.XXX:XXXX

using the address and port, open IE Explorer.

- go to "Tools"

- then "Internet Options"

- then "Connections" tab

- then "LAN Settings"

- check the "Use proxy server for you LAN" and enter the above address and proxy into the appropriate boxes.

- Pick "OK", then "OK" again

Now your browser should be set to proxy through the ISP proxy you have entered into IE Explorer. I leave it to you to make sure it is set correctly, there are many pages on the web which will test for you and show you the ISP that being displayed as being "yours."

If your settings in outlook express are to use the settings from IE Explorer, this will make your postings and email appear to come from another ISP which is NOT your real one-effectively making you anonymous..

No one should be able to say this is "illegal." It can simply be looked at as sending a letter to someone and NOT including a return address on the envelope-or, using an invalid address to protect the innocent.

Posting, and voicing ones thoughts should not be open to retaliation by vengeful people who would harm you.

--
Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw aboot speel-checkin it fer me?

"H J" <ts440@webtv.net> wrote in message
news:18504-42478084-118@storefull-3275.bay.webtv.net...
> by the way if you wanna be a free trucker go with the best volvo lol i
> will by a kw.or pete. next time i see you radio police cops
> trying to get my tag number i may have to go to jail but i will make dam
> shure that wil be your last number you get. just think 80.000lbs runing
> you off the road
>

4396. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 18:43:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6pig41tghj16p5e62it84lmjud6n58878p@4ax.com>
Source record: 80040

On Mon, 28 Mar 2005 12:17:59 -0600, "Richard Fry" <rfry@adams.net>
wrote:
> I suspect you know that what I posted was valid -- even though counter to your
>point of view.
Knowing Pi out to seventeen places neither validates nor refutes the
shape of a pie. The evidence of correspondence proves my point: it
doesn't really matter given the greater bulk of your responses lie
outside of technical offerings - such data rich marginalia still fails
to elevate its pretenses above a trivial concern.

73's
Richard Clark, KB7QHC

4397. Re: vlf antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 18:48:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <d6kg419rgd3skoq6cunk73f9nvfdfpoiet@4ax.com>
Source record: 80042

On Mon, 28 Mar 2005 13:27:45 -0500, Albert <> wrote:

>I'd like to increase the range without spending much money-so I want
>something quick and dirty:>:

Hi Albert,

Hmm, more range? You should be able to fry that puppy within a
country mile if you do that.

Perhaps you should describe your goal instead of your intended method.

73's
Richard Clark, KB7QHC

4398. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 18:49:05 UTC
From: Buck <iam@this.site>
Message-ID: <aakg415egsmjas6u0mnmd38ic4u42oqg1i@4ax.com>
Source record: 80041

Many truckers are smart enough to become hams and have done so. So
why can't other truckers do the same?

Truck drivers may do a good service, but they do a dis-service when
they freeband.

On Sun, 27 Mar 2005 11:35:43 -0800, "John Smith"
<assemblywizard@gmail.com> wrote:

>"Freebanding" is quite common these days.
>However, from my observations, you are much more likely to find a ham on CB
>having fun and rabble-rousing with the truckers and "country folk" than a
>trucker on the 10 meter band.
>Be it as it is... truckers probably well outnumber hams in the US... and
>CERTAINLY provide a much more valuable service.
>
>Regards

--
73 for now
Buck
N4PGW

4399. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 18:50:40 UTC
From: Buck <iam@this.site>
Message-ID: <6ekg41hn3ic0n2s87ge2n5s143eokqs6p0@4ax.com>
Source record: 80043

On Sun, 27 Mar 2005 12:23:07 -0800, "John Smith"
<assemblywizard@gmail.com> wrote:

>My post was simply a list of facts as they appear to me. The use of
>communications to assist in the delivery of medicine, food, clothing,
>building materials, etc. is of more importance than the use of airways for
>recreation.
>Since most would accept that the law of "...the greatest good for the
>greatest number..." would apply, if push came to shove--the truckers would
>probably end up with the frequencies in question...
>
>Regards

There are frequencies assigned for those kinds of purposes, not
amateur frequencies. Try using a cell phone etc. Besides, they don't
need the ham bands to deliver medicine etc.
--
73 for now
Buck
N4PGW

4400. Re: Where Did My Web Page URL Go?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 18:54:16 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <d7kg4194sf5km80rl99doeostd69tertm9@4ax.com>
Source record: 80044

On Sun, 27 Mar 2005 23:09:05 GMT, Jon <john_athengarbage@hotmail.com> wrote:

>On Sun, 27 Mar 2005 17:22:23 GMT, Walter Maxwell <w2du@iag.net> wrote:
>
>>On 3-14 or 3-15 I started a thread concerning a new url for my web page at
>>walt@w2du.com. After the original post I added two more. Then a few days ago I
>>started to add another post, but the thread had disappeared.
>>
>>Can anyone tell me how a thread disappears? Can it be deleted? By just anyone?
>>
>>Walt Maxwell, W2DU
>
>I have the thread beginning on 3/3 with the follow ups on 3/7 & 3/14. Do you need to look
>further back in time on your browser.?
>
>I see that you are using the same server as I use. I checked and your messages are still
>on the East Earthlink news server. It is possible that your news reader is confused (for
>want of a better word). On my Agent, Version (1.9) I retrieved the old headers and
>messages for this group by selecting the group and then clicking on "Online" and then
>clicking on "Get All Headers in Selected Group". I don't know how this would be done on
>agent 2.0, but perhaps it is similar.
>
>Posts on the server go back to late September, around 10,000 of them, so it may take a
>while.
>
>Jon
>
>73 de KJ4OP
Thanks to you, Jon, and all others who came to my rescue.

Turns out that my Alzheimers intervened again. I was certain that my earlier of
the problem posts were posted on either 3-14 or 3-15, so I didn't look at the
earlier postings. Actually, as Jon pointed out above, I initiated my thread on
3-3--fooled the H out of me.

Seems impossible not to larn' something when participating in this group--I sure
larned something today. Thanks to you all.

Walt, W2DU

4401. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 18:56:29 UTC
From: Buck <iam@this.site>
Message-ID: <2qkg41pgbhi4ulu45j7i6v1kruovsabtun@4ax.com>
Source record: 80045

So what is wrong with operating in their assigned frequencies?

On Mon, 28 Mar 2005 07:48:50 -0800, "John Smith"
<assemblywizard@gmail.com> wrote:

>It is interesting that so many intend that you "design the world" then cause
>the people to fit the design; this is 180 degrees of what really
>happens--people bend the world to fit themselves.
>
>For whatever reasons, some have seemed to have decided certain "rf space"
>fits them and, they are no small number, the truckers!
>
>While it might benefit some, if there were "radio police" to hunt down every
>trucker with a 500+ watt linear, who would pay for this? Would hams accept
>a 10000%+ increase in the cost of licenses to help fund such a force,
>equipment and activities?
>
>And, it is one thing to find a station running at a stationary
>location--quite another when that station is mobile. However, those
>enjoying such things would find one large and unending fox hunt--reminiscent
>of the old "cops and robbers game" one played as a child!
>
>Imprisoning citizens for simple infractions of rules which are causing no
>one physical, monetary or real personal damage (i.e. amateurs are only being
>deprived of sole benefit of bandwidth for their hobby use) is insane--you
>have to wonder "what are these people thinking?"
>One very good example of this, and could be viewed as a model of what would
>happen if this were to occur might be "the war on drugs." We have waged
>this war for 30+ years--there are more drugs on the streets than before we
>began--and people are REALLY being harmed NOW as these criminals attempt to
>gain the money to obtain the drugs we have made so expensive and, to escape
>the penalties we have made so severe--INSANE! There is about the same
>amount of cocaine in a coca plant as sugar in a sugar cane. I can walk into
>a supermarket and buy 5 lbs of sugar for next to nothing! If that were
>cocaine, it would probably get everyone in a major city high, maybe for
>days! Since it is forced to the black market it most likely costs
>millions!!! And, there seems an unlimited amount of addicts which will maim,
>harm or even kill citizens to gain this drug--INSANE!
>
>There was a time when one special group of a few individuals could be
>allowed to think themselves "special" and allowed to run a unique "old boys
>club." Times have changed. However, you are living in the past if you don't
>see the handwriting on the wall and, think you will be able to oppose change
>and evolution of the use of radio communications.
>

>Some will personally attack me for pointing this all out-kill the messenger
>bearing the bad news-WAKE UP! Look around, you are either part of the
>problem or you are part of the solution...
>
>When you are done acting like a child and throwing your temper
>tantrums-perhaps you will see the problem is still there to deal with.
>
>
>
>Regards

--
73 for now
Buck
N4PGW

4402. Re: Walter Maxwell's Missing Posts

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 18:58:49 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <0skg41l067bkkv1mh2k4kjkiavobtt3rh4@4ax.com>
Source record: 80046

>Walter, your posts still show on my PC, but that may be the result of
>caching. Here they are again, anyway (below). /RF

Thanks Richard, I found them thanks to you and Jon. Please see my post in the above thread.

Walt

4403. Re: 28mhz ham radio best keep secret.not any more .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 19:07:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d29knlmmk1@domitilla.aioe.org>
Source record: 80048

Oh yeah, I forgot... if this proxy you entered ever becomes unavailable, you will NOT be able to connect to the web. SO... remember to either go back in IE and turn off the "Use proxy..." box using the above will guide you there... then you can simply go back to the proxy web page, get a new address of a new proxy and plug it into IE Explorer... you should change the proxy you are using, frequently, anyway...

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw aboot speel-checkin it fer me?

"John Smith" <assemblywizard@gmail.com> wrote in message news:2eY1e.9$lO6.2608169@news.sisna.com...
> While I don't support people who threaten harm to others, neither do I
> respect the "I am going to tell the teacher" types.
>
> If you wish your ISP to be anonymous go to this web page, find an
> anonymous host of your choosing:
>
> http://www.atomintersoft.com/products/alive%2Dproxy/proxy%2Dlist/
>
>
>
> |-------
> address -------|- port-|
>
> the ISP address will be give in the form XXX.XXX.XXX.XXX:XXXX
>
>
>
> using the address and port, open IE Explorer.
>
> - go to "Tools"
>
> - then "Internet Options"
>
> - then "Connections" tab
>
> - then "LAN Settings"
>
> - check the "Use proxy server for you LAN" and enter the above
> address and proxy into the appropriate boxes.
>

> - Pick "OK", then "OK" again
>
>
>
> Now your browser should be set to proxy through the ISP proxy you have
> entered into IE Explorer. I leave it to you to make sure it is set
> correctly, there are many pages on the web which will test for you and
> show you the ISP that being displayed as being "yours."
>
> If your settings in outlook express are to use the settings from IE
> Explorer, this will make your postings and email appear to come from
> another ISP which is NOT your real one-effectively making you anonymous..
>
> No one should be able to say this is "illegal." It can simply be looked
> at as sending a letter to someone and NOT including a return address on
> the envelope-or, using an invalid address to protect the innocent.
>
> Posting, and voicing ones thoughts should not be open to retaliation by
> vengeful people who would harm you.
>
>
> --
> Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw
> aboot speel-checkin it fer me?
>
>
> "H J" <ts440@webtv.net> wrote in message
> news:18504-42478084-118@storefull-3275.bay.webtv.net...
>> by the way if you wanna be a free trucker go with the best volvo lol i
>> will by a kw.or pete. next time i see you radio police cops
>> trying to get my tag number i may have to go to jail but i will make dam
>> shure that wil be your last number you get. just think 80.000lbs runing
>> you off the road
>>
>
>

4404. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 19:16:21 UTC
From: Buck <iam@this.site>
Message-ID: <holg4192ahgikfb63ki2p5firq452iaugm@4ax.com>
Source record: 80049

>....Anyone ever done a helical wound "Slim Jim?"
>yes.
>Since this is a 1/2 wave
>antenna with a 1/4 matching section (3/4 overall),
>
>Why the 1/4 matching section? Seems that takes it
>nearly to the full half wave length...or close
>enough not to matter much...
>Myself, I would probably prefer a "gamma loop"
>type matching scheme, which adds no height.
>To me, 16 ft tall is no more trouble than 12 ft tall
>in the real world.

<SNIP>

The SlimJim resembles the J-Pole. The 1/4 wave section is a matching
network and it is probably not critical that it be vertical so the
height may be reduced by about 1/3. I am not sure what the folded
section does for it. but without the 1/2 wave section coming back
down from the top, the antenna is just a J-Pole.

>
>helical winding of this form into a 3/8 overall height
>(approx. 12 ft. @ 28Mhz) might be possible.
>The extremely low angle of radiation (approx. 8 degrees)
>would make this vertical antenna desirable... .....

>I like my antennas full size if at all possible.
>I'm a radio bully. :/ MK

I am with you here, when it is possible and practical.

--
73 for now
Buck
N4PGW

4405. Re: 28mhz ham radio best keep secret.not any more .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 19:29:33 UTC
From: Clarence_A <no@No.com>
Message-ID: <xWY1e.2518$FN4.1249@newssvr21.news.prodigy.com>
Source record: 80050

"John Smith" <assemblywizard@gmail.com> wrote in message
news:2eY1e.9$lO6.2608169@news.sisna.com...
> While I don't support people who threaten harm to others,
neither do I
> respect the "I am going to tell the teacher" types.

It is the duty of every citizen to report crime when it is
witnessed!
There is no teacher here, just the American Justice system!

4406. Re: vlf antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 19:44:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vfmg419jjscugbnhiqv85hu1gi72la3dgm@4ax.com>
Source record: 80051

On Mon, 28 Mar 2005 14:04:03 -0500, Albert <> wrote:

>Can you offer any suggestions that don't cost alot or require alot of
>time to implement?

Hi Albert,

I presume by this "range" that the beagle moves unhindered WITHIN the range of the antenna, and outside of this range she gets a shock (or some form of behavior modification).

If that is accurate, then boosting range would accomplish your goal. The problem I had was presuming that the antenna was at the perimeter, and if your dog penetrated towards it, entering its field, that this would "modify" her behavior. I am more familiar with antenna perimeter fences were a collared pooch approaching such a fence would be -um- stimulated.

Anyway, as you have already noted the design of the transmitter and the antenna both, then you have options with both. Using the same antenna, you could feed your transmitter into an unused stereo (or monaural) amplifier and use that to drive the antenna with more power (say 1 to 5 Watts). Then you could adjust the range with the volume control. If this worked, you could then go out an buy a dedicated audio amp kit ($10-$20) that fits this power range.

Another method is to replace the antenna with conductive stakes driven into the ground. At this frequency, ground conduction has a fair range. It was one method of communication that was used with trench warfare during WWI. The further apart the stakes are, the better. I would add that this comes with some shock hazard and is certainly not within the warrantee of the product (but nothing suggested here will be). As this a strictly an experimental long shot, try the simpler suggestions above.

73's
Richard Clark, KB7QHC

4407. Insulated Wire Velocity Factor: How to . . ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 19:52:23 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <1112039543.240538.184890@f14g2000cwb.googlegroups.com>
Source record: 80052

I'm in the habit of using insulated stranded all-copper conductors for HF wire antennas. Usually U.S. standard #14 Type THHN "house wire" because of it's easy availability everywhere at low cost. However insulated wires pose an annoying problem, their specific velocity factors are not published and vary all over creation depending on a whole collection of variables.

I've tried to nail down the Vf of my usual #14 THHN by cutting the lengths of 20M dipoles to one or another of the usual equations. I put together the antennas, hoist them to various operatng heights and nip the coax feedline to it's minimum possible length so that I can find the resonant point with an antenna analyzer while I'm on the ground directly under the feedpoint. A process which I believe should lead me to a "correction factor" from which the Vf can be determined.

Modeling a 20M dipole at 35 feet indicates a fairly sharp null at the resonant point. But that's not what I get when I build the antenna and try to measure the frequency of it's resonant point with an antenna analyzer. I get a much flatter SWR curve from the analyzer than I do from modeling probably because of feedline losses and because of the low analyzer frequency resolution (MFJ-259B). To the point where the antenna appears to be resonant over a range of maybe 200Khz. Which in reality it can't be.

>From a practical standpoint this scenario isn't any problem in the case of a simple dipole. I "cut long", put the antenna up, sweep it with the analyzer, find what seems to be the center of resonace, do the quickie numbers, trim it and take it to the airwaves.

The problem comes when trying to accurately model complex, fussy wire antennas like hex beams when the Vf of the wire is unknown. A one percent error in conductor length at 14 Mhz is 140 Khz which makes decent modeling just about useless.

So two questions in this regard: Is there a way to measure the Vf of a wire without having to resort to using 2" Heliax to feed a dipole and without a lab full of HP and GR test equipment? Second, assuming the Vf becomes known how does one handle it during the modeling process? Model the antenna wire lengths at an upward-shifted frequency based on the Vf?

Thanks,

w3rv

4408. Re: antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 20:26:09 UTC
From: dplatt@radagast.org
Message-ID: <114gq31uan7p49@corp.supernews.com>
Source record: 80053

>> ... or a link-coupled tuner, which works just fine without a balun
>
>How efficient is link-coupling? I have an old
>Sunair PN-099400 auto-tuner that uses motor-
>driven variable-link coupling. Too bad it runs
>on 28 vdc.

I'm not sure that there's any single answer to that question.

Comments on eHam.net from owners of the old Johnson (or Nye) Matchbox link-coupled tuner seem to suggest that it's capable of operating with low losses - significantly lower than are achieved by some of the unbalanced T-configuration tuners mentioned.

I suspect that the efficiency depends very much on the design and implementation of the tuner (e.g. air-core coils vs. a toroidal design, size of core, degree of coupling between the tank and the link, wire gauge) and on the specific impedance being matched.

Based on what I've read about Z-match tuner design, it seems that close coupling across the inductive link helps boost the efficiency. However, the close inductive coupling tends to come with an increased amount of capacitive coupling, and this can apparently affect the output balance for the worse in some cases.

I suspect (but don't know for sure) that link-coupled designs which use a fixed-position, tightly-coupled link (e.g. an air-wound or toroid-core Z-match) may be more efficient than those which use a "swinging" link with variable coupling.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4409. Re: Insulated Wire Velocity Factor: How to . . ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 20:35:16 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <q5qg41tulkh90ug3ko20ukjm7jf5n8eft7@4ax.com>
Source record: 80054

On 28 Mar 2005 11:52:23 -0800, "Brian Kelly" <kelly@dvol.com> wrote:

>So two questions in this regard: Is there a way to measure the Vf of a
>wire without having to resort to using 2" Heliax to feed a dipole and
>without a lab full of HP and GR test equipment? Second, assuming the
>Vf becomes known how does one handle it during the modeling process?
>Model the antenna wire lengths at an upward-shifted frequency based on
>the Vf?

Hi Brian,

1. Drive the design with power instead of low level excitation;

2. Remove half the transmission line muffling of results by using a
field strength meter to find resonance (another reason for power);

3. Find the Vf (as you put it) by derivation against a wire model
(through the difference in lengths of bare wire model resonance to
real wire resonance);

4. Use the new EZNEC which allows you to employ insulation over wire
and adjusting the thickness to conform with results found
experimentally with real wire at actual length;

5. Assign these insulation properties to all future designs in the
modeler.

73's
Richard Clark, KB7QHC

4410. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 20:39:45 UTC
From: dplatt@radagast.org
Message-ID: <114gqshbo8d6848@corp.supernews.com>
Source record: 80055

In article <holg4192ahgikfb63ki2p5firq452iaugm@4ax.com>,
Buck <iam@this.site> wrote:

>The SlimJim resembles the J-Pole. The 1/4 wave section is a matching
>network and it is probably not critical that it be vertical so the
>height may be reduced by about 1/3. I am not sure what the folded
>section does for it. but without the 1/2 wave section coming back
>down from the top, the antenna is just a J-Pole.

The Slim Jim appears to be identical to the "top wire double radiator"
J-pole which is described in Cebik's multi-part discussion of J-pole
designs: see http://www.cebik.com/vhf/jp2.html

His analysis suggests that the performance and behavior of this type
of J-pole are essentially identical to those of a single-radiator
J-pole. There are some slight changes needed in the antenna
dimensions to get it resonated properly (the coax attachment point is
a fraction of an inch higher up and the total length is a bit
different) but once those are taken into account there doesn't seem to
be any real difference in performance between this variant, a
version with two wires which are left unconnected at the top, and a
version with one wire.

At their best, they appear to be simple 1/2-wave radiators. The hype
on the HamUniverse page about this antenna outperforming "1/2wave over
1/2wave over 1/2wave colinear!" seems a bit overdone - if it's ever
true, it would be in comparison to a rather badly-done colinear!

My expectation is that one could create a helically-wound version of
any of these J-pole versions. The matching arrangement would no doubt
need some adjustment. I'd expect the gain to drop off, with more
high-angle radiation appearing, in the usual fashion as the total
length of the radiating section is shortened.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4411. Re: 28mhz ham radio best keep secret.not any more .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 20:42:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d29q7vqmk1@domitilla.aioe.org>
Source record: 80056

I answer to a much higher power first, then to my fellow citizens who ARE the gov't--I answer to no one else... I am your best friend when you are in trouble and seek someone to help you assure your unalienable rights--I attempt to become your worst enemy if you are on the side of evil..

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw aboot speel-checkin it fer me?

"Clarence_A" <no@No.com> wrote in message
news:xWY1e.2518$FN4.1249@newssvr21.news.prodigy.com...
>
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:2eY1e.9$lO6.2608169@news.sisna.com...
>> While I don't support people who threaten harm to others,
> neither do I
>> respect the "I am going to tell the teacher" types.
>
> It is the duty of every citizen to report crime when it is
> witnessed!
> There is no teacher here, just the American Justice system!
>
>
>

4412. Re: vlf antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 21:00:53 UTC
From: AB2RC <AB2RC@localhost.localdomain>
Message-ID: <slrnd4gs73.ppr.AB2RC@localhost.localdomain>
Source record: 80057

On 2005-03-28, Albert <> wrote:
> Hi Richard,
>
> We live in the country, and have all kinds of room for the dog to run.
> Despite the fact that we are 700 feet from the road, the dog insists
> on going to the road and chasing cars. We are worried for the dogs
> safety, hence we purchased the 'wireless fence'.
>
> The design has quite a few safeguards in it and it is very well
> thought out.
>
> BUT, it has a 90 foot maximum range. I'd like to extend the range out
> to 300 or 400 feet without spending alot of time and money. The
> solution offered by the manufacturer is to purchase an additional
> transmitter and run them both at the same time. This is a very
> expensive remedy and it only gives a modest increase in the range.
>
> My 'goal' is to have an increased range so the beagle can have a
> little more area to run in while keeping her away from the road.
>

I might be missing something here, but wouldnt increasing the range of the transmitter/antenna combination reduce the amount of room that the dog has to run in? Increasing the range, would trigger the collar when the pup was farther away from the perimeter - confining the pooch to a smaller area.

What is the design of the reciever on the dogs collar? You don't have to increase the range of the transmitter, you could just increase the sensitivity of the receiver. If the xmitter is really running at about 17khz, then a 1/4 wave whip (about 2.75 miles) attached to the dogs collar might work. If that does not work, you could at least reel the dog in when she gets a bit too close to the road.

--
Alex / AB2RC
Linux is user friendly, however it is not idiot friendly

4413. Re: Using 2 antennas as a repeater

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-28 22:15:12 UTC
From: richardharrison@webtv.net
Message-ID: <25177-424881F0-277@storefull-3255.bay.webtv.net>
Source record: 80058

Buck wrote:
"How critical would the matching of those beams have to be?"

Very.

Recall that a perfectl;y matched antenna delivers only 50% of its received energy to its load. The other 50% is re-radiated. In the case of back-to-back antennas, the load of one antenna is the other antenna. The source resistance of one antenna is the antenna resistancce of the other antenna.

If one antenna is shorted or open, 100% of the energy it receives is re-radiated.

So if all antennas are in far-fields, and if all antenna connections are lossless, and if all antennas are properly aligned, and if the match of all antennas is perfect, overall system gain is the sum of the antenna gains minus the path losses (both paths with a pair of antennas back-to-back). Recall that the radiated signal loses 22 dB in the first wavelength and 6 more dB exery time the distance doubles after that.

Best regards, Richard Harrison, KB5WZI

4414. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 00:55:23 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <si9h41p1cn76gu657r9652iq1jab37iaqk@4ax.com>
Source record: 80059

On Sun, 27 Mar 2005 19:48:52 -0800, Justï¿½n Kï¿½se
<chupacabra@operamail.com> wrote:

>In Message-ID:<e8ue41dvsmb5pu6mroglbq3q49pu1c5a55@4ax.com> posted on
>Mon, 28 Mar 2005 03:30:37 GMT, Russ wrote:
>
>>Of course, as a ham, I also despise freebanders and hope they get
>>caught and fined - big time.
>
>You'd rather them bootlegging in the ham bands?
>Like a public toilet in the park, sure it's nasty, but better than
>shitting everywhere, and some folk are gonna communicate no matter where
>the end up doing it.

I've seen some non-sequitors in my time but this one is in the top
ten.

I'd rather they kept to the CB and 4 watts. I'd rather they didn't
use amps. I hope they get caught and fined out of business. I pray
that we as a nation can throw off the chains of corruption that have
us enslaved and I hope that the motor freight industry finally faces
traffic enforcement like all of the rest of us. The motor freight
industry is a waste of fuel and a hazard to other users of the public
roads.

Does that clarify my position?

Russ

4415. Re: 28mhz ham radio read this what i think .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 01:02:02 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <ot9h41dj2cst7msuqgc75smm2vt71fcmqo@4ax.com>
Source record: 80060

Man, what a low level the education system in this country has
achieved. This shining example of public instruction has a webtv
account and possibly a CDL. No wonder my life is in danger every time
I drive on the highways. Amateur radio is a hobby, nothing more. I
don't know many hams who put it before the rest of their commitments.
There are the few, of course but most of us know better. Naturally,
the garbage heard on the CB is so uplifting, it's almost like church.

Russ

On Sun, 27 Mar 2005 21:39:27 -0600, jcooper874@webtv.net wrote:

>so what is more inportant in life not your hobby most people put there
>radio hobby before,god and there family that is sad .they will drive all
>night to go to a hamfest but when it comes time for a family event o i
>cant make it heard it to many times on the radio waves.
>so i guess the ups or fedex truck did not bring you that new hf rig so
>next time you pick it up stop picking on truckers.

4416. Re: 28mhz ham radio best keep secret.not any more .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 01:05:00 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <m9ah41hp5png3lsmankipdl47nppv788u0@4ax.com>
Source record: 80061

Excellent, uttering a terroristic threat in a public place. In some
states you may already have committed a crime.

You'll never know if I'm getting your tag number. All I need is your
line name and that big number on the box.

Russ

On Sun, 27 Mar 2005 21:56:52 -0600, ts440@webtv.net (H J) wrote:

>by the way if you wanna be a free trucker go with the best volvo lol i
>will by a kw.or pete. next time i see you radio police cops
>trying to get my tag number i may have to go to jail but i will make dam
>shure that wil be your last number you get. just think 80.000lbs runing
>you off the road

4417. Re: Insulated Wire Velocity Factor: How to . . ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 01:21:52 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <8%12e.67538$6g7.23546@bignews1.bellsouth.net>
Source record: 80062

If you have a MFJ-259, you can get the VF of the wire easily
or
1. put up a 10-meter dipole using bare wire - note the resonant freq
2. duplicate exactly using 14 THHN Str - note the NEW resonant freq.

divide the resonant freq from step 1 by the resonant freq from step 2. (or is it the other way around)

Anyway, I don't think you have to add your social security number.

4418. Re: Insulated Wire Velocity Factor: How to . . ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 01:23:34 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <K022e.67550$6g7.41514@bignews1.bellsouth.net>
Source record: 80063

or just use .95 as the VF and adjust as needed

4419. Re: vlf antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 01:29:11 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <%522e.67585$6g7.10705@bignews1.bellsouth.net>
Source record: 80065

Putting a ferrite core in the windings of the antenna would extend its
range, wouldn't it ?
- or are you working on a way to shock the neighbor's puppy ?
:-)

4420. Re: 28mhz ham radio best keep secret.not any more .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 01:29:49 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4248b035$1_1@127.0.0.1>
Source record: 80064

Clarence_A wrote:
> It is the duty of every citizen to report crime when it is
> witnessed!
> There is no teacher here, just the American Justice system!

What level of crime does freebanding fall into?
Misdemeanor 1,2,3,4? Felony 1,2,3,4? I witness
speeding crimes every day. When I report them,
absolutely nothing happens.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4421. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 01:43:46 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <Gj22e.67682$6g7.13747@bignews1.bellsouth.net>
Source record: 80066

AHA - now we have the answer to the problem of narrow yagi lobes.
We are simply using the wrong graph paper to depict the pattern.
I'm sure that with enough planning and dedication, a committee of a few
dozen could come up with a special graph paper, custom-made to your yagi
such that no lobes would seem narrow at all.
In fact, your yagi could become the perfect isotropic radiator.
THAT's the ticket.
For a 'more fun' way to plot yagi lobes, you must use a field strength meter
and a motorcycle and a blonde.

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:KVI1e.159$Vx1.16@attbi_s01...
> Hal
> Amateur radio operators have been convinced to display radiation patterns
> on logarithmic paper to make it look more directional than normal plotting
> procedure.
> Since I can now generate a complete circle for an non yagi antenna array
> using logarithmic paper on my antenna program I thought it would be
> interesting to see
> what a circle would look like when using 'standard' graph paper.(a
reverse
> procedure)
> Now, as I write this, I realise that my antenna computor program has the
> ability to
> make this transition.
> This will be interesting as I have no pre-expectations as to what it will
> show.
> Best regards
> Art
>
>
> "Hal Rosser" <hmrosser@bellsouth.net> wrote in message
> news:7fI1e.84287$5T6.34250@bignews4.bellsouth.net...
> >> I've got to now draw a circle with a compass and observe how the shape
> >> changes when
> >> replotted with logrithmic and other types of graph paper
> >>
> >> Regards
> >> Art
> >
> > Be sure to give us a report on creating the logarithmic graph paper.
> > If I heard someone was looking to replot circles on log graph paper, I
> > would
> > say he must be a ham.

> > Then I would think about writing a Java program to do it, as I slipped
> > into
> > sleep while listening to 'Coast-to-coast-AM' on the radio.
> >
> >
>
>

4422. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 01:55:26 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4248b637$1_1@127.0.0.1>
Source record: 80067

Buck wrote:
> The SlimJim resembles the J-Pole.

And the Zepp.

> I am not sure what the folded section does for it.

Folding a 1/4WL vertical raises the feedpoint impedance.
Folding a 1/2WL vertical lowers the feedpoint impedance.

A folded 1/2WL monopole has about half the end-fed feed-
point impedance of an end-fed single-wire 1/2WL monopole.
About 1250 ohms Vs 2500 ohms for 20m with mininec ground.

EZNEC sez the folded 1/2WL monopole has a slightly lower
resonant frequency and slightly higher gain. (+0.07 dB)
--
73, Cecil http://www.qsl.net/w5dxp

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4423. Re: 28mhz ham radio best keep secret.not any more .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 01:55:53 UTC
From: Clarence_A <no@No.com>
Message-ID: <JA22e.4081$zl.652@newssvr13.news.prodigy.com>
Source record: 80068

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:4248b035$1_1@127.0.0.1...
> Clarence_A wrote:
> > It is the duty of every citizen to report crime when it is
> > witnessed!
> > There is no teacher here, just the American Justice system!
>
> What level of crime does freebanding fall into?
> Misdemeanor 1,2,3,4? Felony 1,2,3,4? I witness
> speeding crimes every day. When I report them,
> absolutely nothing happens.
> --
> 73, Cecil http://www.qsl.net/w5dxp

Fcc, and they do take their time prosecuting. But the fines are
going up so they may get more involved.

4424. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 01:57:56 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2acn1$4u2$1@domitilla.aioe.org>
Source record: 80069

May the truck which is carrying you toilet paper fail to arrive!!!! <grin>

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw
aboot speel-checkin it fer me?

"Russ" <carlzomer@hotmail.com> wrote in message
news:si9h41p1cn76gu657r9652iq1jab37iaqk@4ax.com...
> On Sun, 27 Mar 2005 19:48:52 -0800, Just&#65533;n K&#65533;se
> <chupacabra@operamail.com> wrote:
>
>>In Message-ID:<e8ue41dvsmb5pu6mroglbq3q49pu1c5a55@4ax.com> posted on
>>Mon, 28 Mar 2005 03:30:37 GMT, Russ wrote:
>>
>>>Of course, as a ham, I also despise freebanders and hope they get
>>>caught and fined - big time.
>>
>>You'd rather them bootlegging in the ham bands?
>>Like a public toilet in the park, sure it's nasty, but better than
>>shitting everywhere, and some folk are gonna communicate no matter where
>>the end up doing it.
>
> I've seen some non-sequitors in my time but this one is in the top
> ten.
>
> I'd rather they kept to the CB and 4 watts. I'd rather they didn't
> use amps. I hope they get caught and fined out of business. I pray
> that we as a nation can throw off the chains of corruption that have
> us enslaved and I hope that the motor freight industry finally faces
> traffic enforcement like all of the rest of us. The motor freight
> industry is a waste of fuel and a hazard to other users of the public
> roads.
>
> Does that clarify my position?
>
> Russ

4425. Re: Insulated Wire Velocity Factor: How to . . ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 02:06:55 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <btdh41pgdsgfs3s0fcnlk919tia740e86n@4ax.com>
Source record: 80070

On Mon, 28 Mar 2005 20:23:34 -0500, "Hal Rosser"
<hmrosser@bellsouth.net> wrote:

>or just use .95 as the VF and adjust as needed

Or buy a copy of Eznec v4
>

4426. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 02:21:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2ae3u$5p3$1@domitilla.aioe.org>
Source record: 80071

Interesting... so electrical length is affecting gain and EZNEC supports
it--that will probably silence those who claim the physical length is all
important... ya suppose?

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw
aboot speel-checkin it fer me?

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:4248b637$1_1@127.0.0.1...
> Buck wrote:
>> The SlimJim resembles the J-Pole.
>
> And the Zepp.
>
>> I am not sure what the folded section does for it.
>
> Folding a 1/4WL vertical raises the feedpoint impedance.
> Folding a 1/2WL vertical lowers the feedpoint impedance.
>
> A folded 1/2WL monopole has about half the end-fed feed-
> point impedance of an end-fed single-wire 1/2WL monopole.
> About 1250 ohms Vs 2500 ohms for 20m with mininec ground.
>
> EZNEC sez the folded 1/2WL monopole has a slightly lower
> resonant frequency and slightly higher gain. (+0.07 dB)
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
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4427. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 02:52:11 UTC
From: cl <clfurentN@Syahoo.com>
Message-ID: <Yp32e.58025$NC6.43573@newsread1.mlpsca01.us.to.verio.net>
Source record: 80072

"John Smith" <assemblywizard@gmail.com> wrote in message
news:d2acn1$4u2$1@domitilla.aioe.org...
> May the truck which is carrying you toilet paper fail to arrive!!!! <grin>
>
> Regards
>
> --

Well, I hate to say it, but with the price of oil, some day that may happen.
IF SO, we'll have to resort back to what our Pioneer forefathers did when we
didn't have "toilet" paper. SO, there IS an answer to most any thing your
truck can do. OR fails to do.

cl

4428. Re: 28mhz ham radio read this what i think .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 03:27:04 UTC
From: Mike Coslo <mremovethiscoslo@adelphia.net>
Message-ID: <g_ydnTND07CaVtXfRVn-pA@adelphia.com>
Source record: 80073

jcooper874@webtv.net wrote:
> so what is more inportant in life not your hobby most people put there
> radio hobby before,god and there family that is sad .they will drive all
> night to go to a hamfest but when it comes time for a family event o i
> cant make it heard it to many times on the radio waves.
> so i guess the ups or fedex truck did not bring you that new hf rig so
> next time you pick it up stop picking on truckers.
>

Truckers should be allowed to do anything they darn well please.

4429. Re: 28mhz ham radio read this what i think .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 04:00:30 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <4248d2df$0$3706$39cecf19@news.twtelecom.net>
Source record: 80074

Mike Coslo wrote:

> jcooper874@webtv.net wrote:
>
>> so what is more inportant in life not your hobby most people put there
>> radio hobby before,god and there family that is sad .they will drive all
>> night to go to a hamfest but when it comes time for a family event o i
>> cant make it heard it to many times on the radio waves.
>> so i guess the ups or fedex truck did not bring you that new hf rig so
>> next time you pick it up stop picking on truckers.
>
>
> Truckers should be allowed to do anything they darn well please.

Well, let's hope that the idiots they are continue to drive above the
speed limit, ignore safety laws, cook the books, and kill lots of
innocent citizens. They seem to like that life, and we, as normal
humans should not deny them it.

tom
K0TAR

4430. Re: The Greatest News Ever!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 04:21:08 UTC
From: John <ac5tx@sbcglobal.net>
Message-ID: <UI42e.4366$yq2.4230@newssvr12.news.prodigy.com>
Source record: 79975

For as many of you as were baptized into Christ did put on Christ, Galatians
3:27
<Ron_Grossi_038@yahoo.com> wrote in message
news:1111994830.076785.221250@l41g2000cwc.googlegroups.com...
> http://www.jcil.blogspot.com << The Greatest News Ever!
>

4431. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 04:25:05 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4248d949$1_1@127.0.0.1>
Source record: 79976

cl wrote:
> "John Smith" <assemblywizard@gmail.com> wrote:
>>May the truck which is carrying you toilet paper fail to arrive!!!! <grin>

> Well, I hate to say it, but with the price of oil, some day that may happen.
> IF SO, we'll have to resort back to what our Pioneer forefathers did when we
> didn't have "toilet" paper.

When I was a kid, we used corn cobs in the outhouse.
--
73, Cecil http://www.qsl.net/w5dxp

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----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4432. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 04:31:14 UTC
From: nm5k@wt.net
Message-ID: <1112070674.400728.86850@g14g2000cwa.googlegroups.com>
Source record: 79977

John Smith wrote:
> It is interesting that so many intend that you "design the world"
then cause
> the people to fit the design; this is 180 degrees of what really
> happens--people bend the world to fit themselves.

This does not compute.
>
> For whatever reasons, some have seemed to have decided certain "rf
space"
> fits them and, they are no small number, the truckers!

This barely computes.
>
> While it might benefit some, if there were "radio police" to hunt
down every
> trucker with a 500+ watt linear, who would pay for this? Would hams
accept
> a 10000%+ increase in the cost of licenses to help fund such a force,

> equipment and activities?

Wouldn't be needed. Hell, I'll do my part to hunt 10 of those
rf spectrum grabbing scumbags for *free*!

>
> And, it is one thing to find a station running at a stationary
> location--quite another when that station is mobile. However, those
> enjoying such things would find one large and unending fox
hunt--reminiscent
> of the old "cops and robbers game" one played as a child!

For the FCC, finding them, even in motion *is* childs play.

>
> Imprisoning citizens for simple infractions of rules which are
causing no
> one physical, monetary or real personal damage (i.e. amateurs are
only being
> deprived of sole benefit of bandwidth for their hobby use) is
insane--you
> have to wonder "what are these people thinking?"

I have to wonder...What in the hell are *you* thinking....

> One very good example of this, and could be viewed as a model of what
would

> happen if this were to occur might be "the war on drugs." We have
waged
> this war for 30+ years--there are more drugs on the streets than
before we
> began--and people are REALLY being harmed NOW as these criminals
attempt to
> gain the money to obtain the drugs we have made so expensive and, to
escape
> the penalties we have made so severe--INSANE! There is about the
same
> amount of cocaine in a coca plant as sugar in a sugar cane. I can
walk into
> a supermarket and buy 5 lbs of sugar for next to nothing! If that
were
> cocaine, it would probably get everyone in a major city high, maybe
for
> days! Since it is forced to the black market it most likely costs
> millions!!! And, there seems an unlimited amount of addicts which
will maim,
> harm or even kill citizens to gain this drug--INSANE!

Insane is relative...
>
> There was a time when one special group of a few individuals could be

> allowed to think themselves "special" and allowed to run a unique
"old boys
> club." Times have changed. However, you are living in the past if
you don't
> see the handwriting on the wall and, think you will be able to oppose
change
> and evolution of the use of radio communications.

I can oppose anything I want to. And my henry will back me up
on this.
>
> Some will personally attack me for pointing this all out-kill the
messenger
> bearing the bad news-WAKE UP! Look around, you are either part of the

> problem or you are part of the solution...

Oh yea, I could hunt you down and kick your whiny little ass,
but what the hell good would it do....You would just whine more
and say I didn't do a good enough job.

>
> When you are done acting like a child and throwing your temper
> tantrums-perhaps you will see the problem is still there to deal
with.

Temper tantrums? At least I don't advocate illegal use of
radio spectrum.
I think I'm totally through talking to you about anything,
because my mama told me not to talk to people that have total
shit for brains... MK

4433. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 04:36:19 UTC
From: nm5k@wt.net
Message-ID: <1112070979.824983.312450@o13g2000cwo.googlegroups.com>
Source record: 79978

An 1/2WL end-fed with 1/4WL matching section is a Zepp.

Well yea, I realize that...But I think it's a silly
way to do things, if height is an issue...Unless maybe,
it's some kind of parallel stub as in a J pole...But
I would think that would be sort of silly too...
MK

4434. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 04:40:18 UTC
From: nm5k@wt.net
Message-ID: <1112071218.698631.313410@f14g2000cwb.googlegroups.com>
Source record: 79979

The SlimJim resembles the J-Pole. The 1/4 wave section is a matching network and it is probably not critical that it be vertical so the height may be reduced by about 1/3. I am not sure what the folded section does for it. but without the 1/2 wave section coming back down from the top, the antenna is just a J-Pole.

Yea, I finally realized that, after Cecils reply.
I would still prefer a gamma loop feed I think...MK

4435. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 07:06:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <n8vh41tp5masfqt0hofvk5egnf00n45cc1@4ax.com>
Source record: 79980

On Mon, 28 Mar 2005 18:21:52 -0800, "John Smith"
<assemblywizard@gmail.com> wrote:

>Interesting... so electrical length is affecting gain and EZNEC supports
>it--that will probably silence those who claim the physical length is all
>important... ya suppose?

Hi "Fred,"

It will take more than supposition and superstition.

So back to rote:
The physical size in relation to wavelength dominates launch
characteristics, NOT electrical length.

73's
Richard Clark, KB7QHC

4436. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 08:07:15 UTC
From: astron345@webtv.net
Message-ID: <22434-42490CB3-342@storefull-3278.bay.webtv.net>
Source record: 79981

you think the feds will take ts 440 serious.

4437. Re: vlf antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 12:09:27 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <RZ-dnZKzgfoU2NTfRVn-vg@bright.net>
Source record: 79982

I auume these thing work in reverse of conventional thinking. I assume that as long as the receiver is receiving a signal, the dog does not get shocked. If it strays too far and the receiver loses the signal...ZAP! However, modifying the transmitter would violate its Part 15 certification and the owner might be the one to get the ZAP (from the FCC)...

Scott

AB2RC wrote:

> On 2005-03-28, Albert <> wrote:
>
>>Hi Richard,
>>
>>We live in the country, and have all kinds of room for the dog to run.
>>Despite the fact that we are 700 feet from the road, the dog insists
>>on going to the road and chasing cars. We are worried for the dogs
>>safety, hence we purchased the 'wireless fence'.
>>
>>The design has quite a few safeguards in it and it is very well
>>thought out.
>>
>>BUT, it has a 90 foot maximum range. I'd like to extend the range out
>>to 300 or 400 feet without spending alot of time and money. The
>>solution offered by the manufacturer is to purchase an additional
>>transmitter and run them both at the same time. This is a very
>>expensive remedy and it only gives a modest increase in the range.
>>
>>My 'goal' is to have an increased range so the beagle can have a
>>little more area to run in while keeping her away from the road.
>>
>
>
> I might be missing something here, but wouldnt increasing the range of the
> transmitter/antenna combination reduce the amount of room that the dog has
> to run in? Increasing the range, would trigger the collar when the pup was
> farther away from the perimeter - confining the pooch to a smaller area.
>
> What is the design of the reciever on the dogs collar? You don't have to
> increase the range of the transmitter, you could just increase the
> sensitivity of the receiver. If the xmitter is really running at about
> 17khz, then a 1/4 wave whip (about 2.75 miles) attached to the dogs collar
> might work. If that does not work, you could at least reel the dog in when
> she gets a bit too close to the road.

>
>
>

4438. Re: vlf antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 13:02:28 UTC
From: AB2RC <AB2RC@localhost.localdomain>
Message-ID: <slrnd4iki8.nj2.AB2RC@localhost.localdomain>
Source record: 79983

On 2005-03-28, Albert <> wrote:
> On Mon, 28 Mar 2005 11:44:33 -0800, Richard Clark <kb7qhc@comcast.net>
> wrote:
> l.
>
> Hi Richard and Alex,
>
> Both of you thought the wireless fence involved a buried loop, which
> is NOT the case.
>
> The transmitter is NOT connected to a buried loop, the antenna is in
> fact contained within the plastic case of the housing. The antennas
> are 8 or 9 inch air would coils with MANY MANY turns of small gauge
> wire.

OK, then this is very different from other "invisible" fences that I have seen. It would appear that this device is designed to keep the dog close to the transmitter, and then shock her when she strayed too far - when the receiver on the collar lost the input signal.

I think that device would not give you all that much control as to what kind of coverage area you can have. Also what would happen if the collar lost the xmitter signal due to other reasons (dog goes behind a trash can/metal shed/other large metal object)? Personally, I would return it, and get the type that used a buried wire -- or just train the dog not to stray too close to the road by other means.

That being said, it might still be easier to increase the sensitivity of the receiver. What type of antenna is on the dogs collar? Also - what is the brand and model of this unit? It might make tracking down the soultion a bit easier.

--
Alex / AB2RC
Linux is user friendly, however it is not idiot friendly

4439. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 14:14:16 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <42496311_5@newsfeed.slurp.net>
Source record: 79984

"Richard Clark"
>So back to rote:
> The physical size in relation to wavelength dominates launch
> characteristics, NOT electrical length.

I don't know who wrote your rote, but here is part of what Terman says on this topic in his Radio Engineer's Handbook, p 795, referring to vertical radiators driven against ground:

"Top loading has the same effect on the field distribution in a vertical plane as a greater height. Thus an antenna for which H = 0.45 lambda can by suitable top loading be made to have a field distribution in the vertical plane that is substantially the same as for a vertical wire of H = 0.6 lambda."

Or is that what you meant?

RF

4440. yagi boom question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 14:56:43 UTC
From: francesco.messineo@gmail.com
Message-ID: <d9f2bc2.0503290656.2e0b3837@posting.google.com>
Source record: 79985

Hello,

I've built several yagis until now (most of them based on the famous DL6 design).
Almost all of them are of the not-insulated elements variant, the last one
is instead of the insulated through the boom type. It's a 9 element for 144 MHz
and it gave me good results. No part of the boom is in electrical contact
with anything else but the support pole, the radiator is a folded dipole with
4:1 coaxial balun. Now I'd like to understand if it would be better to connect
the boom to the coaxial screen or to the center of the folded dipole or leave
it completely insulated (and also why it is so...).
Another question: has anyone calculated elements' corrections for
not circular booms (square section or rectangular section)?

Thanks and best 73

Francesco IS0FKQ (ex IZ5DWF)

4441. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 15:39:52 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d2bss8$6cc$1@titan.btinternet.com>
Source record: 79986

"Richard Fry" wrote > >So back to rote:
> > The physical size in relation to wavelength dominates launch
> > characteristics, NOT electrical length.
> _________________
>
> I don't know who wrote your rote, but here is part of what Terman
says on
> this topic in his Radio Engineer's Handbook, p 795, referring to
vertical
> radiators driven against ground:
>
> "Top loading has the same effect on the field distribution in a
vertical
> plane as a greater height. Thus an antenna for which H = 0.45
lambda can by
> suitable top loading be made to have a field distribution in the
vertical
> plane that is substantially the same as for a vertical wire of H =
0.6
> lambda."

============================

No, it doesn't !

But you could stretch "substantial" (a non-engineering term) a bit
more.

You have been warned once before about quoting Terman as the Bible.
(smiley)

Reg.

4442. Re: The Greatest News Ever!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 15:42:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2bt1t$2p9$2@domitilla.aioe.org>
Source record: 79987

I have raised new antenna designs to new heights and, although improvements
are made--MY SIGNAL STILL FALLS SHORT OF S9 IN HEAVEN!!!!

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw
aboot speel-checkin it fer me?

"John" <ac5tx@sbcglobal.net> wrote in message
news:UI42e.4366$yq2.4230@newssvr12.news.prodigy.com...
> For as many of you as were baptized into Christ did put on Christ,
> Galatians 3:27
> <Ron_Grossi_038@yahoo.com> wrote in message
> news:1111994830.076785.221250@l41g2000cwc.googlegroups.com...
>> http://www.jcil.blogspot.com << The Greatest News Ever!
>>
>
>

4443. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 15:47:39 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42497945$1_1@127.0.0.1>
Source record: 79988

John Smith wrote:
> Interesting... so electrical length is affecting gain and EZNEC supports
> it--that will probably silence those who claim the physical length is all
> important... ya suppose?

The important point is that the web page claim of bettering
three end-to-end 1/2WL dipoles misses by about 3 dB and a few
degrees on TOA.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4444. Re: The Greatest News Ever!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 15:51:29 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <42497a2b$1_1@127.0.0.1>
Source record: 79989

John Smith wrote:
> I have raised new antenna designs to new heights and, although improvements
> are made--MY SIGNAL STILL FALLS SHORT OF S9 IN HEAVEN!!!!

Isn't communications with God instantaneous? If so,
He must be using entangled photons. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4445. Re: vlf antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 16:32:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <d90j41hlpe3l5dfq2hdi3lp9o7jaj8l924@4ax.com>
Source record: 79990

On Tue, 29 Mar 2005 13:02:28 GMT, AB2RC <AB2RC@localhost.localdomain>
wrote:

>Also what would happen if the collar lost
>the xmitter signal due to other reasons (dog goes behind a trash can/metal
>shed/other large metal object)?

Hi Alex,

At 17KHz this is virtually impossible. It would be like trying to
hide behind a house in Aceh when the wave came in.

73's
Richard Clark, KB7QHC

4446. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 16:37:21 UTC
From: richardharrison@webtv.net
Message-ID: <22079-42498441-358@storefull-3256.bay.webtv.net>
Source record: 79993

Art Unwin wrote:
"---what actually creates the narrowing of the forward lobes?"

Destructive interference of energy outside the main lobe lobe which concurrently causes constructive interference within the forward lobe as energy is neither created nor destroyed but redirected.

Highly conductive parasitic antenna elements can approach 100% efficiency. They re-radiate, having no load other than a complete highly conductive short sircuit, nearly all of the energy they intercept.

The re-radiated energy is carefully phased to create the desired directional pattern. This can be "cut and try" or it can be calculate and try.

Best regards, Richard Harrison, KB5WZI

4447. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 16:38:49 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <424984f0$1_4@newsfeed.slurp.net>
Source record: 79992

"Reg Edwards" wrote about the elevation pattern of a loaded vertical against ground as being ~ the same as that of a longer, unloaded vertical, per Terman:

> No, it doesn't ! You have been warned once before
> about quoting Terman as the Bible.

I wonder, then, what your basis is for saying so.
At least I give a source.

Terman also publishes a formula to calculate the elevation pattern of a shortened vertical with a top-mounted capacity ring, driven against ground -- but it's too much to post here without mathematical notation. The formula was credited by Terman to George H. Brown from his "A Critical Study of Broadcast Antennas as Affected by Antenna Current Distribution" published in the Proceedings of the I.R.E.

Terman also says that inserting a coil a bit down from the top of a shortened vertical gives results equivalent to using a top mounted capacity ring.

RF

4448. Re: vlf antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 16:41:03 UTC
From: AB2RC <AB2RC@localhost.localdomain>
Message-ID: <slrnd4j190.qs6.AB2RC@localhost.localdomain>
Source record: 79991

On 2005-03-29, Richard Clark <kb7qhc@comcast.net> wrote:
> On Tue, 29 Mar 2005 13:02:28 GMT, AB2RC <AB2RC@localhost.localdomain>
> wrote:
>
>>Also what would happen if the collar lost
>>the xmitter signal due to other reasons (dog goes behind a trash can/metal
>>shed/other large metal object)?
>
> Hi Alex,
>
> At 17KHz this is virtually impossible. It would be like trying to
> hide behind a house in Aceh when the wave came in.

Forgot about the frequency there for a minute ... 17khz is a very long wave

Either way, the whole concept of this specific device seems sort of
backwards for it's intended purpose.

--
Alex / AB2RC
Linux is user friendly, however it is not idiot friendly

4449. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 17:15:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gf2j41tn5s1562b85i0ne33rmjo0seh0on@4ax.com>
Source record: 79994

On Tue, 29 Mar 2005 10:38:49 -0600, "Richard Fry" <rfry@adams.net>
wrote:

>Terman also says
nothing about a Helical wound slim jim. Of course, this begs the
question "Why would he?"

The results are predictable, boringly so, and several have already
been down that road to no net gain. However, common sense in these
matters can be discarded if only someone offers validation, however
slim that may be from any jim. Such inventors stand on the shoulders
of dwarfs. Sorry for the allusion, as it again reprises the obvious
that physical height in relation to a standard (wavelength) dominates
the principle. However as principles and seeking validation go, no
doubt the topic will drift towards top loading dwarfs....

73's
Richard Clark, KB7QHC

4450. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 17:25:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nd3j4197ocmdugd4modq0ns67pg2kuqg4t@4ax.com>
Source record: 79995

On Sun, 27 Mar 2005 20:53:27 +0100, Brian Howie
<brian@nospam.demon.co.uk> wrote:

>One way to reduce the effect is to use a number of vertically stacked
>low gain yagis. The lobe becomes narrow in the vertical plane , but
>remains broad in the horizontal plane.

Hi Brian,

A simple, but cogent point.

73's
Richard Clark, KB7QHC

4451. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 17:51:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <BAg2e.63$7j1.14083201@news.sisna.com>
Source record: 80003

Apparently, I am not like you, I don't have all the answers and am just sitting here ready to educate all the poor ignorant masses who have questions.
I am amazed my motives can even be brought into question, to the intelligent, I have suspected would be obvious.
I am interested in what others know, or think they know--I am interested in things I do NOT yet know..
While if I am able to help someone with information in my possession--I will quite willingly do so, however, I first need to gain this information.
Somehow, from all your posts, I am left with the impression you were probably born knowing all the answers and, if not, you are now in the possession of such and, all others serve only as an anoyance to you--so I can see how you would puzzle over some ignorant A$$ such as myself.

Regards
--
Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw aboot speel-checkin it fer me?

"Richard Clark" <kb7qhc@comcast.net> wrote in message news:3cnc4196alsc2jin06ije0p8445bn576it@4ax.com...
> On Sat, 26 Mar 2005 18:00:30 -0800, "John Smith"
> <assemblywizard@gmail.com> wrote:
>>Rather, back to my original question (your ADD--attention defecit disorder
>>is showing), "Anyone ever done a helical wound "Slim Jim?""
>
> Hi "Jack,"
>
> I suppose it has to be said if this is going anywhere: Yes.
>
> Is this 20 questions, or do you have any answers for yourself?
>
> 73's
> Richard Clark, KB7QHC

4452. Re: Narrow lobe of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 18:07:40 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <114j6ble2s3nq17@corp.supernews.com>
Source record: 79996

One of the old Firestone HF circuits to EL used stacked rhombics to kill the
second lobe. The high angle lobe was hurting RTTY reception because of the
delay associated with receiving via two propagation modes.
Today's modulation methods and computation power would not be hurt by
such multipath propagation.
I have thought of using such a scheme with LPDAs on receiving so as not
to receive US stations so strongly. Most of the hurtful QRM when trying to
work DX comes from first-hop stations. (I am speaking of on-frequency QRM.)
The benefit on transmitting is unimportant.

Lots of fun to use a pair of the 5 element yagis included with EZNEC to
see the effect of vertical (or horizontal) stacking (broadside array).
73, Mac N8TT
--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net

4453. Re: Using 2 antennas as a repeater

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 18:26:29 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <114j803ioue5kbc@corp.supernews.com>
Source record: 79998

Many years ago, when costs were quite different:

The British police used a hybrid system to extend the range of their low power 400 MHz transceivers. They found some large almost flat roofs located near the edge of coverage. At the edge of the roof most near to the base station they erected a high gain antenna pointed at the base station. Coax was run to a BPF + mixer + narrow BPF + mixer + amplifier where the LO for both mixers is the same. (This scheme cleans the signal and adds some amplification.) From the active device, coax was run to the distal edge of the roof to a second gain antenna pointing to the sector of interest. Both antennas had grid reflectors/shields so as to reduce to a minimum their "behind" coupling, which had to be less than the gain added by the active device.
The scheme worked.

I have used passive schemes where a high gain antenna on a roof captures signals that are distributed in basements and tunnels through a TL made deliberately leaky. Have coverage where none was available before.

The sub-theme of Richard is that one needs to calculate the numbers to see if such systems will work.

73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:25177-424881F0-277@storefull-3255.bay.webtv.net...
> Buck wrote:
> "How critical would the matching of those beams have to be?"
>
> Very.
>
> Recall that a perfectl;y matched antenna delivers only 50% of its
> received energy to its load. The other 50% is re-radiated. In the case
> of back-to-back antennas, the load of one antenna is the other antenna.
> The source resistance of one antenna is the antenna resistancce of the
> other antenna.
>
> If one antenna is shorted or open, 100% of the energy it receives is
> re-radiated.
>
> So if all antennas are in far-fields, and if all antenna connections are
> lossless, and if all antennas are properly aligned, and if the match of
> all antennas is perfect, overall system gain is the sum of the antenna

> gains minus the path losses (both paths with a pair of antennas
> back-to-back). Recall that the radiated signal loses 22 dB in the first
> wavelength and 6 more dB exery time the distance doubles after that.
>
> Best regards, Richard Harrison, KB5WZI
>

4454. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 18:34:08 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <42499ff7_4@newsfeed.slurp.net>
Source record: 79997

"Richard Clark" wrote:
>Sorry for the allusion, as it again reprises the obvious
> that physical height in relation to a standard (wavelength) dominates
> the principle. However as principles and seeking validation go, no
> doubt the topic will drift towards top loading dwarfs...

So far you have not provided support for your statements on this subject from any recognized antenna authority. Do you really believe that your understanding of this, and your statements about it are better/more accurate than those of Frederick Terman and George Brown?

RF

4455. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 18:42:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2c7in$b6m$1@domitilla.aioe.org>
Source record: 79999

I must point out that although my exchange with you has been short and seemingly pointless; you feel a necessity to place yourself in prominence, of both your "knowledge", opinions and your person.

I hardly wish you to keep up with such tiring and pointless expenditure of energy on your part--I have found you to only be self-serving in your devotion to your ego, yourself and your personal endeavors to make a fool of yourself and destroy any sense of dignity one might have been able to afford you.

I can only speak for myself of course, but you have completely destroyed any credibility I could have granted you and, would only accept any offerings from you after having checked them through other sources--since this is the case, little is to be had from giving you any further considerations at all.

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw aboot speel-checkin it fer me?

"Richard Clark" <kb7qhc@comcast.net> wrote in message news:gf2j41tn5s1562b85i0ne33rmjo0seh0on@4ax.com...
> On Tue, 29 Mar 2005 10:38:49 -0600, "Richard Fry" <rfry@adams.net>
> wrote:
>
>>Terman also says
> nothing about a Helical wound slim jim. Of course, this begs the
> question "Why would he?"
>
> The results are predictable, boringly so, and several have already
> been down that road to no net gain. However, common sense in these
> matters can be discarded if only someone offers validation, however
> slim that may be from any jim. Such inventors stand on the shoulders
> of dwarfs. Sorry for the allusion, as it again reprises the obvious
> that physical height in relation to a standard (wavelength) dominates
> the principle. However as principles and seeking validation go, no
> doubt the topic will drift towards top loading dwarfs....
>
> 73's
> Richard Clark, KB7QHC

4456. Re: Ping W7EL - Re: Was: Feeding Ladderline thru window

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 18:43:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <114j8f5la8fiv29@corp.supernews.com>
Source record: 80000

Ted Bruce wrote:
> Roy,
> What wiould be the property of a polymer like acrilic or polycarbonate
> to determine its effectiveness as an insulator or a dielectric?
> Volume resistivity?
>
> Tnx,
> Ted KX4OM

Volume resistivity is a useful measure only at DC.

To determine a dielectric's lossiness at RF, look at the loss tangent, dissipation factor, or power factor. Loss tangent and dissipation factor are the same thing, and when loss is low, power factor is also the same for practical purposes. You'll find these in tables and descriptions of the electrical properties of insulators. Some searching will usually turn them up on the web if you don't have access to the appropriate reference books. Note that the loss properties are usually a function of frequency, so use the value at approximately the frequency of interest.

In some situations, the capacitance of the dielectric can be important, such as when you're using it as a coil form or antenna covering. For that, look at the dielectric constant or relative permittivity (which are the same thing). This also changes somewhat with frequency.

Roy Lewallen, W7EL

4457. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 18:44:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <r58j419c18bh0pt9p20lnjitqdrvorkve9@4ax.com>
Source record: 80001

On Tue, 29 Mar 2005 12:34:08 -0600, "Richard Fry" <rfry@adams.net>
wrote:

>So far you have not provided support for your statements on this subject
>from any recognized antenna authority. Do you really believe that your
>understanding of this, and your statements about it are better/more accurate
>than those of Frederick Terman and George Brown?

Hi OM,

What you demand is simply a lazy form of leaning on authority without
presuming to investigate the principles involved. I am not interested
in top loading dwarfs or in replacing simple insights with name
dropping and personalities.

73's
Richard Clark, KB7QHC

4458. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 18:44:56 UTC
From: Jim Kelley <jwkelley@nospam.edu>
Message-ID: <d2c7vm$pm2$1@news.service.uci.edu>
Source record: 80002

Cecil Moore wrote:

> Anyone want to
> predict the effect of non-locality on Maxwell's equations?

How better to explain interference phenomena at, "Alpha Centauri" for example? :-)

ac6xg

4459. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 18:56:27 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <4249a538_1@newsfeed.slurp.net>
Source record: 80004

"Richard Clark" wrote
>>So far you have not provided support for your statements on this subject
>>from any recognized antenna authority. Do you really believe that your
>>understanding of this, and your statements about it are better/more
>>accurate
>>than those of Frederick Terman and George Brown?

> What you demand is simply a lazy form of leaning on authority without
> presuming to investigate the principles involved. I am not interested
> in top loading dwarfs or in replacing simple insights with name
> dropping and personalities.

From your post above we must take it that you have investigated what Brown/Terman have to say on this subject, and can prove them wrong. If you wish your statements to be believed above theirs, you will need to show your work. Immortality awaits.

RF

4460. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 19:09:27 UTC
From: "aunwin@insightbb.com"
Message-ID: <HJh2e.117024$Ze3.78656@attbi_s51>
Source record: 80005

John
Cut off the conversation, it is not worth it.
Richard just loves to fight and show how smart he is and
if this doesn't work, which is generally, the case he goes
on a personal attack.
Generally he is not worth the attention.
And the more agitated he gets the more he reverts to use of
the long words instead of short words and scrambles his answers
so all are confused as to what he is saying, why he is saying it as
well as what benefit he thinks he is supplying by typing it.
The bottom line is that his intention is to destroy the integrity
of his opponent rather than to assist with courtesy.
And rest assured, he views all as an oponnent
Just making a point
No reply required
Regards
Art

"John Smith" <assemblywizard@gmail.com> wrote in message
news:BAg2e.63$7j1.14083201@news.sisna.com...
> Apparently, I am not like you, I don't have all the answers and am just
> sitting here ready to educate all the poor ignorant masses who have
> questions.
> I am amazed my motives can even be brought into question, to the
> intelligent, I have suspected would be obvious.
> I am interested in what others know, or think they know--I am interested
> in things I do NOT yet know..
> While if I am able to help someone with information in my possession--I
> will quite willingly do so, however, I first need to gain this
> information.
> Somehow, from all your posts, I am left with the impression you were
> probably born knowing all the answers and, if not, you are now in the
> possession of such and, all others serve only as an anoyance to you--so I
> can see how you would puzzle over some ignorant A$$ such as myself.
>
> Regards
> --
> Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw
> aboot speel-checkin it fer me?
>
>
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:3cnc4196alsc2jin06ije0p8445bn576it@4ax.com...
>> On Sat, 26 Mar 2005 18:00:30 -0800, "John Smith"

>> <assemblywizard@gmail.com> wrote:
>>>Rather, back to my original question (your ADD--attention defecit
>>>disorder
>>>is showing), "Anyone ever done a helical wound "Slim Jim?""
>>
>> Hi "Jack,"
>>
>> I suppose it has to be said if this is going anywhere: Yes.
>>
>> Is this 20 questions, or do you have any answers for yourself?
>>
>> 73's
>> Richard Clark, KB7QHC
>
>

4461. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 19:12:04 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d2c9a4$c26$1@hercules.btinternet.com>
Source record: 80006

Wasn't George Brown one of the ancient trio of experimenters who laid
out 118.5 radials but all three forgot to measure the most important
characteristics - ground conductivity and permittivity!

4462. Re: Using 2 antennas as a repeater

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 19:18:13 UTC
From: Buck <iam@this.site>
Message-ID: <rbaj41tnviek5og7qmge1r5d70cb9lvvao@4ax.com>
Source record: 80007

In this Rigless Repeater, would an antenna made up of Dir5, Dir4, Dir3, Dir2, Dir1, Driven, Dir1, Dir2, Dir3, Dir4 Dir5 make up a similar antenna to two 7 element beams phased together pointing back to back?

THanks.

Buck

On Mon, 28 Mar 2005 16:15:12 -0600, richardharrison@webtv.net (Richard Harrison) wrote:

>Buck wrote:
>"How critical would the matching of those beams have to be?"
>
>Very.
>
>Recall that a perfectl;y matched antenna delivers only 50% of its
>received energy to its load. The other 50% is re-radiated. In the case
>of back-to-back antennas, the load of one antenna is the other antenna.
>The source resistance of one antenna is the antenna resistancce of the
>other antenna.
>
>If one antenna is shorted or open, 100% of the energy it receives is
>re-radiated.
>
>So if all antennas are in far-fields, and if all antenna connections are
>lossless, and if all antennas are properly aligned, and if the match of
>all antennas is perfect, overall system gain is the sum of the antenna
>gains minus the path losses (both paths with a pair of antennas
>back-to-back). Recall that the radiated signal loses 22 dB in the first
>wavelength and 6 more dB exery time the distance doubles after that.
>
>Best regards, Richard Harrison, KB5WZI

--
73 for now
Buck
N4PGW

4463. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 19:21:04 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d2c9r0cjp1@hercules.btinternet.com>
Source record: 80008

John, I just love your logical assembly and choice of words. It flows.
Too good for amateur radio.

I wish I had your vocabulary.

Reg.

4464. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 19:22:43 UTC
From: Buck <iam@this.site>
Message-ID: <2kaj41tv0jeqssm0nn1op5imjkl04m9q00@4ax.com>
Source record: 80009

On Mon, 28 Mar 2005 18:21:52 -0800, "John Smith"
<assemblywizard@gmail.com> wrote:

>Interesting... so electrical length is affecting gain and EZNEC supports
>it--that will probably silence those who claim the physical length is all
>important... ya suppose?
>
>Regards

.07 DB might be gain, but I somehow get the feeling that I would never
notice it on my HF rig. What would that gain represent on a 1000
watts? I don't know the formula, just the generalization that 3 db =
double power.

--
73 for now
Buck
N4PGW

4465. How to killfile Richard Clark (or even me if you choose <grin>)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 19:29:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <p0i2e.67$kc4.14201893@news.sisna.com>
Source record: 80010

Complete instructions here:
http://members.impulse.net/~thebob/seanette/bitbucket.html

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw
aboot speel-checkin it fer me?

4466. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 19:59:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2cc3mest1@domitilla.aioe.org>
Source record: 80011

True, it is only "proof of concept." However, the longest journey begins
but with the first step...
Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw
aboot speel-checkin it fer me?

"Buck" <iam@this.site> wrote in message
news:2kaj41tv0jeqssm0nn1op5imjkl04m9q00@4ax.com...
> On Mon, 28 Mar 2005 18:21:52 -0800, "John Smith"
> <assemblywizard@gmail.com> wrote:
>
>>Interesting... so electrical length is affecting gain and EZNEC supports
>>it--that will probably silence those who claim the physical length is all
>>important... ya suppose?
>>
>>Regards
>
> .07 DB might be gain, but I somehow get the feeling that I would never
> notice it on my HF rig. What would that gain represent on a 1000
> watts? I don't know the formula, just the generalization that 3 db =
> double power.
>
>
> --
> 73 for now
> Buck
> N4PGW

4467. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 20:09:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2ccln$ff6$1@domitilla.aioe.org>
Source record: 80013

Thank you for your kindness reg. However, I quite well realize I stand in
the presence of those who have knowledge, ideas, opinions and guidence I
would be wise to heed, at best, there are times when I stand with my peers.

73's!

--
Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw
aboot speel-checkin it fer me?

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:d2c9r0cjp1@hercules.btinternet.com...
> John, I just love your logical assembly and choice of words. It flows.
> Too good for amateur radio.
>
> I wish I had your vocabulary.
> ----
> Reg.
>
>

4468. Top Hat on J-Pole ... was Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 20:09:25 UTC
From: Buck <iam@this.site>
Message-ID: <j7dj415q704btopv5tu4r597rlaceqvibl@4ax.com>
Source record: 80012

In some situations it is better to have a 'shortened' antenna than the absolute last tiniest fraction of a db. I realize a cap hat can reduce the size of a vertical with reasonably low loss, I am wondering if it would do as well with the J-Pole?

For example, a quarter wave matching network for the J-Pole would be whatever works best, be it original design or some form of balun, but the 1/2 wave vertical might be reduced in size by forming a capacity hat above it.

How well would that work for shortening a J-Pole? would it be better to use a shortened 1/2 wave dipole or would the J-Pole design be better?

Buck

--
73 for now
Buck
N4PGW

4469. Re: Ping W7EL - Re: Was: Feeding Ladderline thru window

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 20:26:01 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <114jeeuog05707a@corp.supernews.com>
Source record: 80014

I should also mention that the requirements for an insulator depend heavily on the application. An insulator which results in a lot of loss when a large electric field is present might produce negligible loss when the field is weak. For example, an insulator at the base of a very short or half wavelength high vertical, or at the end of a dipole, has to be pretty good in order to minimize loss, because the electric field is high at those points. On the other hand, a poor quality insulator is just fine at the base of a quarter wave high vertical or the center of a half wave dipole, since the electric field is low at those points.

Roy Lewallen, W7EL

4470. Re: How to killfile Richard Clark (or even me if you choose <grin>)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 20:37:43 UTC
From: cl <clfurentN@Syahoo.com>
Message-ID: <P0j2e.58284$NC6.401@newsread1.mlpsca01.us.to.verio.net>
Source record: 80015

"John Smith" <assemblywizard@gmail.com> wrote in message
news:p0i2e.67$kc4.14201893@news.sisna.com...
> Complete instructions here:
> http://members.impulse.net/~thebob/seanette/bitbucket.html
>
> Regards
>
> --
> Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw
> aboot speel-checkin it fer me?
>
>
>

You give yourself way too much credit. Most of us already know how to kill file... Speaking of which, consider yourself as such!

cl

4471. Re: The Greatest News Ever!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 20:50:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <%bj2e.73$IQ6.14316654@news.sisna.com>
Source record: 80016

Yanno?
I took the dimensions of the "Ark of the Covenant", as detailed in the bible, and extrapolated them to dimensions I could use in the construction of an "EH Antenna!" (it is held together by prayer and I don't know if this is affecting the directivity or not), I constructed the antenna, attached it to a hard hat (again, it is held to the hat by prayer and that could be affecting performance) and placed it on my head...
I now think I am on the verge of a break-through in communications with Heaven (cutting out the middle man, i.e. priest, the savings in tithes alone could be a miracle!--possibly leading to a 1db+ gain in money in my bank account, Praise the LORD!)
At this point, I AM HEARING VOICES! My exuberance is nothing short of spiritual!
Conditions are a bit down right now, when they improve, I will request a QSL card and post it here as confirmation...

Regards
--
Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion, haw aboot speel-checkin it fer me?

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:42497a2b$1_1@127.0.0.1...
> John Smith wrote:
>> I have raised new antenna designs to new heights and, although
>> improvements are made--MY SIGNAL STILL FALLS SHORT OF S9 IN HEAVEN!!!!
>
> Isn't communications with God instantaneous? If so,
> He must be using entangled photons. :-)
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> -----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
> News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000
> Newsgroups
> ---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4472. Re: How to killfile Richard Clark (or even me if you choose <grin>)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 21:09:32 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <guj2e.25559$Fy.8207@okepread04>
Source record: 80017

```
"cl" <clfurentN@Syahoo.com> wrote in message
news:P0j2e.58284$NC6.401@newsread1.mlpsca01.us.to.verio.net...
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:p0i2e.67$kc4.14201893@news.sisna.com...
>> Complete instructions here:
>> http://members.impulse.net/~thebob/seanette/bitbucket.html
>>
>> Regards
>>
>> --
>> Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw
>> aboot speel-checkin it fer me?
>>
>>
>>
>
> You give yourself way too much credit. Most of us already know how to kill
> file... Speaking of which, consider yourself as such!
>
> cl

And you, for killfiling someone who was just trying to help......

<<<PLONK>>>

KG0WX
```

4473. Re: vlf antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 21:16:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2cgja$j83$1@domitilla.aioe.org>
Source record: 80018

Is there a webpage of the manufacturer which contains any details of the
device in question? A picture can be worth a 1000 words....

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion, haw
aboot speel-checkin it fer me?

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:d6kg419rgd3skoq6cunk73f9nvfdfpoiet@4ax.com...
> On Mon, 28 Mar 2005 13:27:45 -0500, Albert <> wrote:
>
>>I'd like to increase the range without spending much money-so I want
>>something quick and dirty:>:
>
> Hi Albert,
>
> Hmm, more range? You should be able to fry that puppy within a
> country mile if you do that.
>
> Perhaps you should describe your goal instead of your intended method.
>
> 73's
> Richard Clark, KB7QHC

4474. Re: How to killfile Richard Clark (or even me if you choose <grin>)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 21:32:40 UTC
From: cl <clfurentN@Syahoo.com>
Message-ID: <kQj2e.58291$NC6.2890@newsread1.mlpsca01.us.to.verio.net>
Source record: 80019

```
"Ken Bessler" <kg0wx@NOSPAMyahoo.com> wrote in message
news:guj2e.25559$Fy.8207@okepread04...
> "cl" <clfurentN@Syahoo.com> wrote in message
> news:P0j2e.58284$NC6.401@newsread1.mlpsca01.us.to.verio.net...
>> "John Smith" <assemblywizard@gmail.com> wrote in message
>> news:p0i2e.67$kc4.14201893@news.sisna.com...
>>> Complete instructions here:
>>> http://members.impulse.net/~thebob/seanette/bitbucket.html
>>>
>>> Regards
>>>
>>> --
>>> Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw
>>> aboot speel-checkin it fer me?
>>>
>>>
>>>
>>
>> You give yourself way too much credit. Most of us already know how to
>> kill file... Speaking of which, consider yourself as such!
>>
>> cl
>
> And you, for killfiling someone who was just trying to help......
>
> <<<PLONK>>>
>
> KG0WX
>
>
>

Help? WHO? Guess you're plonked too. No great loss...
```

4475. Re: Top Hat on J-Pole ... was Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 21:41:50 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2ci32kfp1@domitilla.aioe.org>
Source record: 80020

Becareful Buck!!! It is catching, you are starting to think like me!

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion, haw
aboot speel-checkin it fer me?

"Buck" <iam@this.site> wrote in message
news:j7dj415q704btopv5tu4r597rlaceqvibl@4ax.com...
> In some situations it is better to have a 'shortened' antenna than the
> absolute last tiniest fraction of a db. I realize a cap hat can
> reduce the size of a vertical with reasonably low loss, I am wondering
> if it would do as well with the J-Pole?
>
> For example, a quarter wave matching network for the J-Pole would be
> whatever works best, be it original design or some form of balun, but
> the 1/2 wave vertical might be reduced in size by forming a capacity
> hat above it.
>
> How well would that work for shortening a J-Pole? would it be better
> to use a shortened 1/2 wave dipole or would the J-Pole design be
> better?
>
> Buck
>
> --
> 73 for now
> Buck
> N4PGW

4476. Re: How to killfile Richard Clark (or even me if you choose <grin>)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 21:58:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <hck2e.74$zA1.14642273@news.sisna.com>
Source record: 80021

Well, the subject of this post should have been, "Richard Clark I am killfile'ing you!. Don't just sit there suffering my posts you fool! You are well within your rights if you killfile me in return. Just in case you have forgotten how, a webpage detailing how is in this post"
However, I thought that subject line a bit long... so I went with the one which it now has...
Now I severly regret I posted it--if I knew you were going to killfile me do you even think I would have risked that post? <grin>

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion, haw aboot speel-checkin it fer me?

"cl" <clfurentN@Syahoo.com> wrote in message news:P0j2e.58284$NC6.401@newsread1.mlpsca01.us.to.verio.net...
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:p0i2e.67$kc4.14201893@news.sisna.com...
>> Complete instructions here:
>> http://members.impulse.net/~thebob/seanette/bitbucket.html
>>
>> Regards
>>
>> --
>> Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw
>> aboot speel-checkin it fer me?
>>
>>
>>
>
> You give yourself way too much credit. Most of us already know how to kill
> file... Speaking of which, consider yourself as such!
>
> cl
>

4477. Re: Top Hat on J-Pole ... was Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 22:10:49 UTC
From: Buck <iam@this.site>
Message-ID: <mgkj41h0rkf25rmohv78mgq9qk3q46vf3p@4ax.com>
Source record: 80022

On Tue, 29 Mar 2005 13:41:50 -0800, "John Smith"
<assemblywizard@gmail.com> wrote:

>Becareful Buck!!! It is catching, you are starting to think like me!
>
>Regards

hmmm, maybe I should killfile you for being contagious? ;)

(sorry, couldn't resist.)

As for the topic, I am interested to know. I am eznic challenged.

--
73 for now
Buck
N4PGW

4478. Re: vlf antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 22:26:59 UTC
From: Toni <post_to_usenet@hotmail.com>
Message-ID: <3au31nF6d0u98U1@individual.net>
Source record: 80023

I Hope I misunderstood or you have thought about it:

If the collar shocks the dogs when it stops receiving the transmitter's signal... What is going to happen to the dog when the transmitter eventually stops working (exhausted batteries, mains cut or simple malfunction)?

Toni

4479. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 22:59:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <68nj41l4ou93tbih3ejedoa6jfvoerrklh@4ax.com>
Source record: 80024

On Tue, 29 Mar 2005 19:09:27 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>Just making a point

Hi Art,

You could use a blunt.

73's
Richard Clark, KB7QHC

4480. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 23:02:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hfnj41tfmdo8ddujfnq89crgiatmstkmev@4ax.com>
Source record: 79875

On Tue, 29 Mar 2005 12:56:27 -0600, "Richard Fry" <rfry@adams.net>
wrote:
>Immortality awaits.

How kind, I am usually accused of that, short a T.

No, no, OM, I simply observed how you dredge up authorities to impeach
them. It's a tough act to follow. :-)

73's
Richard Clark, KB7QHC

4481. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 23:25:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mmnj41p8prqq4ssoia8rbia57ma982v43p@4ax.com>
Source record: 79876

On Tue, 29 Mar 2005 10:42:31 -0800, "John Smith"
<assemblywizard@gmail.com> wrote:

>but you have completely destroyed any credibility I could have granted you

I being Brett, or Jim Jones?

To return to rote (yes, annoyingly on topic):
The physical size in relation to wavelength dominates launch
characteristics, NOT electrical length.

73's,
Richard Clark, KB7QHC

4482. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 23:38:13 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4249e78f$1_2@127.0.0.1>
Source record: 79877

Jim Kelley wrote:
>
> Cecil Moore wrote:
>> Anyone want to
>> predict the effect of non-locality on Maxwell's equations?
>
> How better to explain interference phenomena at, "Alpha Centauri" for
> example? :-)

How better indeed? As I remember, it was Dr. Best's assertion
that the source always provided the extra energy during construc-
tive interference (no matter how far away the source might be).
I, OTOH, tend to believe "Optics", by Hecht where he asserts
that there must always be an energy balance between constructive
interference and destructive interference (as demonstrated by
the radiation pattern of an antenna).
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4483. Off topic but read, software warning

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 23:40:02 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <114jpqjrctr1i07@corp.supernews.com>
Source record: 79878
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap,rec.radio.amateur.equipment

If you go shopping for a 10 min ID timer for your pc and you run accross one called hamRtime just leave it alone. It will screw with your pc and it can not be removed.

Magee KF5DE

4484. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 23:49:24 UTC
From: Jim Kelley <jwkelley@nospam.edu>
Message-ID: <d2cq32$4m1$1@news.service.uci.edu>
Source record: 79880

Cecil Moore wrote:

> Jim Kelley wrote:
>
>>
>> Cecil Moore wrote:
>>
>>> Anyone want to
>>> predict the effect of non-locality on Maxwell's equations?
>>
>>
>> How better to explain interference phenomena at, "Alpha Centauri" for
>> example? :-)
>
>
> How better indeed? As I remember, it was Dr. Best's assertion
> that the source always provided the extra energy during construc-
> tive interference (no matter how far away the source might be).
> I, OTOH, tend to believe "Optics", by Hecht where he asserts
> that there must always be an energy balance between constructive
> interference and destructive interference (as demonstrated by
> the radiation pattern of an antenna).

It's certainly correct in almost any instance to say that the source of energy provides the energy. Not necessarily so of other points in space. And only rarely do we find any "extra" energy in physical systems. ;-)

ac6xg

4485. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-29 23:52:02 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4249eacd$1_2@127.0.0.1>
Source record: 79879

aunwin@insightbb.com wrote:
> And the more agitated he gets the more he reverts to use of
> the long words instead of short words and scrambles his answers
> so all are confused as to what he is saying, why he is saying it as
> well as what benefit he thinks he is supplying by typing it.

Art, I once has a fuzz-phrase card with ten words in each
of three columns. One picked three numbers at random and
looked up the words for inclusion in a memo or paper. One
possibility might be "integrated quantitized phenomenon".
I suspect Richard C. has some rather sophisticated fuzz-
phrase software at his disposal. :-)
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4486. Re: The Greatest News Ever!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 00:02:37 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4249ed4a$1_1@127.0.0.1>
Source record: 79881

John Smith wrote:
> At this point, I AM HEARING VOICES! My exuberance is nothing short of
> spiritual!

You certainly sound like you are under the influence
of spirits. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
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4487. Re: The Greatest News Ever!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 00:23:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2crh6$se1$1@domitilla.aioe.org>
Source record: 79882

Now I had that part right here but, can't find it at the moment... it is in the bible I know... you know, the scripture which says something like, "... take a little wine for the spirit..." You think I overdone it?

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion, haw aboot speel-checkin it fer me?

"Cecil Moore" <w5dxp@hotmail.com> wrote in message news:4249ed4a$1_1@127.0.0.1...
> John Smith wrote:
>> At this point, I AM HEARING VOICES! My exuberance is nothing short of
>> spiritual!
>
> You certainly sound like you are under the influence
> of spirits. :-)
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> ----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
> News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000
> Newsgroups
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4488. Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 00:48:17 UTC
From: Jaggy Taggy <outhouse@midcoast.com>
Message-ID: <BE6F61BF.7319%outhouse@midcoast.com>
Source record: 79883

I recently got myself a noise bridge to do some quantitative measurements on my antennas.
Lets say I am a bit disappointed. The small dials of the unit make all my antennas to appear very similar indeed and I am wondering if the unit is broken (not according to the test I did with a known load) or if I am expecting way too much.

What do real people use to do impedance measurements on their antennas (and please do not suggest anything from MFJ).

73

Uwe

4489. Re: vlf antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 00:50:44 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <VoedneD_8YtqatTfRVn-2w@bright.net>
Source record: 79884

Ahhh! Then there must also be a transmitter in the collar to "answer back" to the stationary transmitter? If so, maybe the thing works on the amount of time calculated for the signal to travel round trip. A radar mile (2 miles round trip) is about 12 microseconds, if I recall. Rountrip at 90 feet would be something like 183 nanoseconds. If THIS is how the unit works, running a kilowatt wouldn't make a difference. It would require changing the interval time that the transmitter waits for check-back. Maybe I'm making this too complicated ;) It must be simpler and then I would think they would use something other than 17 KHz....interesteing!!

Scott

Albert wrote:

> Scott,
>
> Your question brings much complication to a matter that should be easy
> to answer. I'll do my best to avoid getting bogged down in the
> explanation.
>
> The transmitter has a very long range, much longer than 90 feet. I
> believe the dogs collar hears the signal for a very long distance.
> But, that the collar does not issue a correction if the dog wanders
> past the range of the transmitter. If the collar acted in this manner,
> it would preclude the dog from RE-ENTERING the protected area from the
> outside of the 90 foot range.
>
> In order for the collar to initialize, it must hear the transmitter
> (initially). If the transmitter is turned off, and the collar is
> turned on, no corrections are issued.
>
> Also, if the collar is properly initialized and operating, abruptly
> turning off the transmitter DOES NOT result in a correction being
> issued. Corrections are only issued IF the dog is in the intermediate
> zone, which appears to be a 3 foot wide area.
>
> This type of operation is necessary to safeguard the dog, even though
> it complicates the hardware some.
>
> At 16 kilohertz with horrendously inefficient transmitting antennas, I
> doubt there would be an FCC problem, especially with a modest boost in
> ERP. The Earth and the solar system generates much noise on those
> frequencies as well, we could probably increase the transmit power
> quite a bit without creating problems.

>
> Hope this helps.
>
> A
>
>
>
> On Tue, 29 Mar 2005 12:09:27 +0000, Scott <acepilot@bloomer.net>
> wrote:
>
>
>>I auume these thing work in reverse of conventional thinking. I assume
>>that as long as the receiver is receiving a signal, the dog does not get
>>shocked. If it strays too far and the receiver loses the signal...ZAP!
>> However, modifying the transmitter would violate its Part 15
>>certification and the owner might be the one to get the ZAP (from the
>>FCC)...
>>
>>Scott
>>
>
>

4490. Re: Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 00:58:07 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <zQm2e.28367$b_6.23020@trnddc01>
Source record: 79885

Uwe

I'd like to hear more about MFJ, and why you dont want to hear more about them. I was thinking that they were a pretty good way of measuring impedance.

Jerry

"Jaggy Taggy" <outhouse@midcoast.com> wrote in message news:BE6F61BF.7319%outhouse@midcoast.com...
>I recently got myself a noise bridge to do some quantitative measurements
>on
> my antennas.
> Lets say I am a bit disappointed. The small dials of the unit make all my
> antennas to appear very similar indeed and I am wondering if the unit is
> broken (not according to the test I did with a known load) or if I am
> expecting way too much.
>
> What do real people use to do impedance measurements on their antennas (
> and please do not suggest anything from MFJ).
>
>
> 73
>
> Uwe
>

4491. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 01:14:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <46vj41dns96tfveuahlcktd3kec8aesmbc@4ax.com>
Source record: 79886

On Tue, 29 Mar 2005 17:52:02 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:
>I suspect Richard C. has some rather sophisticated fuzz-
>phrase software at his disposal. :-)
Called an education. Many have had the same opportunity, but mileage
varies as the saying goes.

Some simply prefer to push the car.

4492. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 01:32:43 UTC
From: "aunwin@insightbb.com"
Message-ID: <%kn2e.1441$kT5.1127@attbi_s21>
Source record: 79887

Cecil,
What ever happened turned out O.K.
Looks like he left and took a holiday
When he comes back, if he ever does,. maybe he
will be a bit more mellow to his fellow man.
. His degree is in the Arts but I think he saw to much
of Shakespeare and not enough of Gilbert and Sullivan,
which is probably why he has one hand on his knife at all times
I suspect he does have a 'Fuzz" card but it is in Elizabethan
which, being dated, fits in quite well for someone used to
appearing from 'stage left' in antenna discussions
Art

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:4249eacd$1_2@127.0.0.1...
> aunwin@insightbb.com wrote:
>> And the more agitated he gets the more he reverts to use of
>> the long words instead of short words and scrambles his answers
>> so all are confused as to what he is saying, why he is saying it as
>> well as what benefit he thinks he is supplying by typing it.
>
> Art, I once has a fuzz-phrase card with ten words in each
> of three columns. One picked three numbers at random and
> looked up the words for inclusion in a memo or paper. One
> possibility might be "integrated quantitized phenomenon".
> I suspect Richard C. has some rather sophisticated fuzz-
> phrase software at his disposal. :-)
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> ----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet
> News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000
> Newsgroups
> ---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4493. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 01:34:17 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d2cvmp$96c$1@hercules.btinternet.com>
Source record: 79888

> I wonder, then, what your basis is for saying so.
> At least I give a source.
>
==========

Sorry Richard. I never refer to sources. Except perhaps Ohm.
There's no way of guaranteeing reliability. I work things out for
myself so you'll just have to take my word for it.

I have a remarkably small book library. Although I did buy a
second-hand copy of Terman in 1947 which I still occasionally browse
through when I'm running short of ideas. He's most comprehensive.
Which accounts for his continued popularity. But he's not God. Anyone
who has actually tried to use him will know that.

I do have volumes from A to S of notes accumulated over the last 45
years. But some papers are about telescope making which was a hobby of
mine before our night skies became polluted with vapour trails and
other fumes. And some wicked kids stole my camera.

Reg.

4494. New group

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 02:06:27 UTC
From: Voice of freedom <VoiceFreedom@freedom.naa>
Message-ID: <Xns9628C25E5393BVoiceFreedomfreedomn@216.196.97.142>
Source record: 79889
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.shortwave

No spam, no nonsense:
http://groups.yahoo.com/group/Short_Wave-and-Amateur_Radio

--
A Voice Of Freedom in the
United States of America

4495. Re: Top Hat on J-Pole ... was Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 02:12:04 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2d1tlgl1@domitilla.aioe.org>
Source record: 79890

I am a software engineer but, I am glad you commented on eznec--I am finding
it a bit of challenge to utilize it meaningfully--it has brought me to my
knees and humbled me.
You know the old saying, "Garbage in, Garbage out", eznec just won't arrange
my garbage in a meaninful way.

Warmest regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion, haw
aboot speel-checkin it fer me?

"Buck" <iam@this.site> wrote in message
news:mgkj41h0rkf25rmohv78mgq9qk3q46vf3p@4ax.com...
> On Tue, 29 Mar 2005 13:41:50 -0800, "John Smith"
> <assemblywizard@gmail.com> wrote:
>
>>Becareful Buck!!! It is catching, you are starting to think like me!
>>
>>Regards
>
>
> hmmm, maybe I should killfile you for being contagious? ;)
>
> (sorry, couldn't resist.)
>
> As for the topic, I am interested to know. I am eznic challenged.
>
>
> --
> 73 for now
> Buck
> N4PGW

4496. Re: Putting up a small mast, need the basics

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 02:38:51 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <kr3k415crb73evk0psagm9fse8fdagoiqu@4ax.com>
Source record: 79891

On Tue, 29 Mar 2005 19:49:44 -0600, Leonard Martin
<lmarti49NOSPAM@bellsouth.net> wrote:

>Hello,
>
>I'm returning to ham radio after 10 years' inactivity, and my health and
>pocket book require me to start small. I bought one of those cool 33'
>telescoping fiberglass masts, and I intend to erect one of those in my
>small downtown lot.
>
>But how do I create a base for the thing? I can't mount it to the side
>of my house. It's covered with fragile siding. I don't know how to
>create a buried concrete base for a conventional mast. I'm not in shape
>for that job.

Well, if it's okay for the mast to be next to your house -- why not
just set the mast on the ground in a shallow hole, and support it with
your roof overhang, about 10 or 12 feet up?

You might also check the Radio Shack web site -- they have all kinds
of inexpensive brackets, guys and paraphernalia for tv-type masts,
which may work with your fiberglas mast.

bob
k5qwg

>
>I thought I'd just get an 8 foot length of pipe a little smaller than
>the fiberglass mast, drive it into the ground, and either mount the mast
>to the pipe with standoffs or, even simpler, just slide the mast down
>around the pipe and let the pipe support the mast from within (and be
>the safety ground for the assembly at the same time).
>
>However, I don't know how to be sure I'm driving the pipe into the
>ground straight, and I'd sure hate to end up with my mast leaning.
>Also, how do you get up high enough to drive an 8' length of pipe in the
>ground in the first place?
>
>Any advice would be appreciated.
>
>Leonard
>WD5DNQ

4497. Re: The Greatest News Ever!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 02:46:08 UTC
From: Asimov <Asimov@-removethis-bbs.juxtaposition.dynip.com>
Message-ID: <MSGID_1=3a167=2f133.0_424a190b@fidonet.org>
Source record: 79902

"Cecil Moore" bravely wrote to "All" (29 Mar 05 09:51:29)
--- on the heady topic of "Re: The Greatest News Ever!"

CM> From: Cecil Moore <w5dxp@hotmail.com>
CM> Xref: aeinews rec.radio.amateur.antenna:27530

CM> John Smith wrote:
> I have raised new antenna designs to new heights and, although improvements
> are made--MY SIGNAL STILL FALLS SHORT OF S9 IN HEAVEN!!!!

CM> Isn't communications with God instantaneous? If so,
CM> He must be using entangled photons. :-)

Or consciously ignores mangled metaphors...
BTW an aluminium hat might work as well as anything else to help
lower the TOA of the prayer. ;-)

A*s*i*m*o*v

... Just when my ship comes in, it's the Kobyashi Maru.

4498. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 03:31:13 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <424a1d81$0$3710$39cecf19@news.twtelecom.net>
Source record: 79892

Richard Clark wrote:
> On Tue, 29 Mar 2005 19:09:27 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
>
>>Just making a point
>
>
> Hi Art,
>
> You could use a blunt.
>
> 73's
> Richard Clark, KB7QHC

Richard, I'm guessing that you have no idea what you said in
semi-current slang.

tom
K0TAR

4499. Re: Putting up a small mast, need the basics

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 05:11:24 UTC
From: George Kinzer <horseflygk@worldnet.att.net>
Message-ID: <0yq2e.23077$cg1.15971@bgtnsc04-news.ops.worldnet.att.net>
Source record: 79893

Just call me, I do installations.
Toney, Alabama

4500. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 05:25:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2dd7jamf1@domitilla.aioe.org>
Source record: 79894

Tom, I am just guessing, but are you referring to medicinal marijuanna?
<grin>

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion, haw
aboot speel-checkin it fer me?

"Tom Ring" <news0002@taring.org> wrote in message
news:424a1d81$0$3710$39cecf19@news.twtelecom.net...
> Richard Clark wrote:
>> On Tue, 29 Mar 2005 19:09:27 GMT, "aunwin@insightbb.com"
>> <aunwin@insightbb.com@insightbb.com> wrote:
>>
>>
>>>Just making a point
>>
>>
>> Hi Art,
>>
>> You could use a blunt. 73's
>> Richard Clark, KB7QHC
>
> Richard, I'm guessing that you have no idea what you said in semi-current
> slang.
>
> tom
> K0TAR

4501. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 06:28:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8cgk41p7f2lmd72ioko0athf7g4ae3gin6@4ax.com>
Source record: 79895

On Tue, 29 Mar 2005 21:31:13 -0600, Tom Ring <news0002@taring.org>
wrote:

>Richard Clark wrote:
>> On Tue, 29 Mar 2005 19:09:27 GMT, "aunwin@insightbb.com"
>> <aunwin@insightbb.com@insightbb.com> wrote:
>>
>>
>>>>Just making a point
>>
>>
>> Hi Art,
>>
>> You could use a blunt.
>>
>> 73's
>> Richard Clark, KB7QHC
>
>Richard, I'm guessing that you have no idea what you said in
>semi-current slang.

Hi Tom,

Guessing and supposing seem to be de Rigueur. Let's look at it
through deconstruction (the convolutions of language used here are to
thin out the shallow end of the grammatical pool) and let me ask:
"Considering your reaction, Art's stimulus by which I made my
suggestion, and the comment itself: does all this maintain a
consistent, internal logic?"

If I were to deconstruct further, I would offer the query:
"How current is semi?"

If we reach back beyond the currency of semi (say 3 or more decades);
then I would have offered Art:
"Keep a tight ass hole."
and it would have still come from the same culture.

Now, at the risk of having to "explain" to a generation that demands
facts and references, and then shows so little inclination to actually
apply them (this does not mean you by the way as you have been
adventurous enough to probably have made connections anyway); then my
short answer would be:
"You've guessed wrong." (which is a far more commonplace outcome
by virtue of this preponderance of guessing, presuming, and supposing
instead of testing, analyzing, and examining).

5 points to the one who can name the source to the ancient (nearly 40 year old) quote offered. 5 extra points if you can provide the context (fictional character) who employs it. And 10 points bonus if you can name (fictional character) who it is applied to.

73's
Richard Clark, KB7QHC

4502. Re: Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 07:11:00 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <114kk8727cno2c8@corp.supernews.com>
Source record: 79896

I agree with Jerry. Why not use an MFJ. I have two of their oldest units one for HF and one VHF, the models 207 & 208. Bought mine a long time before he put the to measuring devices together. They measure the resonant freq. and that is what you want to know right? Mine have worked fine for years and still do. His newer instruments are just great. Wish I could justify buying the new MFJ-259B. I had the chance to play with one and it is terrific. If you can't determin everything about your antenna with that, well, you are just a lost soul in a techie world. Friends still will borrow one or the other of my ancient units to check their new construction or to find how far off their antennas have become from the original design. MFJ makes affordable, accurate, devices for Hams and as long as Martin F. Jue is running the place they allways will.

Butch Magee KF5DE
Diamondhead, MS

Jerry Martes wrote:
> Uwe
>
> I'd like to hear more about MFJ, and why you dont want to hear more about
> them. I was thinking that they were a pretty good way of measuring
> impedance.
>
> Jerry
>
>
>
> "Jaggy Taggy" <outhouse@midcoast.com> wrote in message
> news:BE6F61BF.7319%outhouse@midcoast.com...
>
>>I recently got myself a noise bridge to do some quantitative measurements
>>on
>>my antennas.
>>Lets say I am a bit disappointed. The small dials of the unit make all my
>>antennas to appear very similar indeed and I am wondering if the unit is
>>broken (not according to the test I did with a known load) or if I am
>>expecting way too much.
>>
>>What do real people use to do impedance measurements on their antennas (
>>and please do not suggest anything from MFJ).
>>
>>
>>73
>>

>>Uwe
>>
>
>
>

4503. Re: vlf antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 07:14:39 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <114kkf1rj7ib30b@corp.supernews.com>
Source record: 79897

Nothing but a little receiver and a buzzer in the belt. The wire
radiates and the lil bitty receiver detects it and the little dog
regrets his closeness to his boundaries.

Butch

Scott wrote:

> Ahhh! Then there must also be a transmitter in the collar to "answer
> back" to the stationary transmitter? If so, maybe the thing works on
> the amount of time calculated for the signal to travel round trip. A
> radar mile (2 miles round trip) is about 12 microseconds, if I recall.
> Rountrip at 90 feet would be something like 183 nanoseconds. If THIS is
> how the unit works, running a kilowatt wouldn't make a difference. It
> would require changing the interval time that the transmitter waits for
> check-back. Maybe I'm making this too complicated ;) It must be
> simpler and then I would think they would use something other than 17
> KHz....interesteing!!
>
> Scott
>
>
> Albert wrote:
>
>> Scott,
>>
>> Your question brings much complication to a matter that should be easy
>> to answer. I'll do my best to avoid getting bogged down in the
>> explanation.
>>
>> The transmitter has a very long range, much longer than 90 feet. I
>> believe the dogs collar hears the signal for a very long distance.
>> But, that the collar does not issue a correction if the dog wanders
>> past the range of the transmitter. If the collar acted in this manner,
>> it would preclude the dog from RE-ENTERING the protected area from the
>> outside of the 90 foot range.
>>
>> In order for the collar to initialize, it must hear the transmitter
>> (initially). If the transmitter is turned off, and the collar is
>> turned on, no corrections are issued.
>> Also, if the collar is properly initialized and operating, abruptly
>> turning off the transmitter DOES NOT result in a correction being
>> issued. Corrections are only issued IF the dog is in the intermediate
>> zone, which appears to be a 3 foot wide area.
>>

>> This type of operation is necessary to safeguard the dog, even though
>> it complicates the hardware some.
>>
>> At 16 kilohertz with horrendously inefficient transmitting antennas, I
>> doubt there would be an FCC problem, especially with a modest boost in
>> ERP. The Earth and the solar system generates much noise on those
>> frequencies as well, we could probably increase the transmit power
>> quite a bit without creating problems.
>>
>> Hope this helps.
>>
>> A
>>
>>
>>
>> On Tue, 29 Mar 2005 12:09:27 +0000, Scott <acepilot@bloomer.net>
>> wrote:
>>
>>
>>> I auume these thing work in reverse of conventional thinking. I
>>> assume that as long as the receiver is receiving a signal, the dog
>>> does not get shocked. If it strays too far and the receiver loses
>>> the signal...ZAP! However, modifying the transmitter would violate
>>> its Part 15 certification and the owner might be the one to get the
>>> ZAP (from the FCC)...
>>>
>>> Scott
>>>
>>
>>

4504. Re: Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 07:52:15 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <eelk4150v9ej6npoi17uvqsu971b3fef5c@4ax.com>
Source record: 79899

On Wed, 30 Mar 2005 00:48:17 GMT, Jaggy Taggy <outhouse@midcoast.com>
wrote:

>I recently got myself a noise bridge to do some quantitative measurements on
>my antennas.
>Lets say I am a bit disappointed. The small dials of the unit make all my
>antennas to appear very similar indeed and I am wondering if the unit is
>broken (not according to the test I did with a known load) or if I am
>expecting way too much.

Hi Uwe,

The Cadillac of Bridges is the General Radio 1606-A. However, it
requires you to have a source and detector. It is only a Bridge, but
it is a precision Bridge. The circuit is quite simple, but its triple
shielding and isolation are old-world craftsmanship. These things
sold at a price equivalent to 6 months wage for a bench tech. 6
months wages currently will buy you equipment that could do what was
only possible in a standards lab back then - but this is still in the
region of 5 figures.

You will need a stable source capable of 1 to 10mW power. You will
need a well shielded communications receiver to act as a detector.
You will also need a steady hand to balance the bridge (which may be
part of your problem with the noise bridge). Nulls are often more
than 100 dB deep. If you lack sufficient shielding for the detector,
this will degrade the nulls considerably. If you lack stability, you
will never find the null.

The MFJs of the world are quick and dirty, but when they reach their
limits you can only guess because they will as easily feed you a bogus
reading when they are out to lunch. The GR 1606 has limits too, but
they are obvious by dial indication and a top end of 60MHz usage (a
more practical top end, however, is 30MHz).

73's
Richard Clark, KB7QHC

4505. Re: The Greatest News Ever!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 07:53:20 UTC
From: Randy <theplanters95@aol.com>
Message-ID: <1112169200.595261.282360@l41g2000cwc.googlegroups.com>
Source record: 79898

Do not be drunk with wine, but be filled with the Holy Spirit.
Paraphrase of Ephesians 5:18.

The size of the Ark of the Covenenant is Exodus 37:1 (NLT) Next
Bezalel made the Ark out of acacia wood. It was 3 3/4 feet long, 2 1/4
feet wide, and 2 1/4 feet high.

Just goes to show how big your head is! :-)

4506. Re: Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 08:16:42 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <Kft2e.34242$mq2.18733@trnddc08>
Source record: 79900

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:eelk4150v9ej6npoi17uvqsu971b3fef5c@4ax.com...
> On Wed, 30 Mar 2005 00:48:17 GMT, Jaggy Taggy <outhouse@midcoast.com>
> wrote:
>
>>I recently got myself a noise bridge to do some quantitative measurements
>>on
>>my antennas.
>>Lets say I am a bit disappointed. The small dials of the unit make all my
>>antennas to appear very similar indeed and I am wondering if the unit is
>>broken (not according to the test I did with a known load) or if I am
>>expecting way too much.
>
> Hi Uwe,
>
> The Cadillac of Bridges is the General Radio 1606-A. However, it
> requires you to have a source and detector. It is only a Bridge, but
> it is a precision Bridge. The circuit is quite simple, but its triple
> shielding and isolation are old-world craftsmanship. These things
> sold at a price equivalent to 6 months wage for a bench tech. 6
> months wages currently will buy you equipment that could do what was
> only possible in a standards lab back then - but this is still in the
> region of 5 figures.
>
> You will need a stable source capable of 1 to 10mW power. You will
> need a well shielded communications receiver to act as a detector.
> You will also need a steady hand to balance the bridge (which may be
> part of your problem with the noise bridge). Nulls are often more
> than 100 dB deep. If you lack sufficient shielding for the detector,
> this will degrade the nulls considerably. If you lack stability, you
> will never find the null.
>
> The MFJs of the world are quick and dirty, but when they reach their
> limits you can only guess because they will as easily feed you a bogus
> reading when they are out to lunch. The GR 1606 has limits too, but
> they are obvious by dial indication and a top end of 60MHz usage (a
> more practical top end, however, is 30MHz).
>
> 73's
> Richard Clark, KB7QHC

Richard

As you know, I built that slotted line that works fairly well for load
impedance measurements at 2 meters, and can be used at 100 MHz for FM

antenna work. But, it is big and ugly. I do like the concept MFJ uses even though the results are surely less accurate than a good bridge. If I get an urge to include a HF antenna or other device whose impedance I want to determine, I might buy a MFJ. But, if a decent bridge ever becomes available at one of the HAM swap meets I'll sure pick up anything thats affordable.
I am impressed that computer programs seem to have made impedance *measurement* unnecessary to most HAMS. I sure wish I was enough smarter to be able to manipulate the computer so I could get confidant about computer program results. That really impresses me when I read about how accurately antenna impedance can be predicted for various changes in parameters.

When you guys arent argueing about stuff I cant understand, I sure learn alot from this Antenna Group.

Thanks
Jerry

4507. Re: Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 08:34:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1iok411rmdt2lo85nc6josegp7167ml00e@4ax.com>
Source record: 79901

On Wed, 30 Mar 2005 08:16:42 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

> As you know, I built that slotted line that works fairly well for load
>impedance measurements at 2 meters, and can be used at 100 MHz for FM
>antenna work. But, it is big and ugly.

Hi Jerry,

Imagine how ugly it would be for 20M. You could use yours there too,
but you would have to study how to do what is called "load shifting."
Conceptually it is quite simple, but as you have learned, the art of
construction is where the accuracy is.

> I do like the concept MFJ uses
>even though the results are surely less accurate than a good bridge.

There are so many ways to lose accuracy that you should look at the
point spread. MFJ (and the other manufacturers) will probably suit
90% of users' expectations.

> If I
>get an urge to include a HF antenna or other device whose impedance I want
>to determine, I might buy a MFJ. But, if a decent bridge ever becomes
>available at one of the HAM swap meets I'll sure pick up anything thats
>affordable.

Affordable generally runs in the neighborhood of $300. Myself, I
would invest in a swept frequency system that does vector analysis and
build heads that perform the SWR determination. This is
software/hardware at its best. Flexibility is the hallmark of an
instrument that will be kept being used.

73's
Richard Clark, KB7QHC

4508. 31 Mix Beads RFI Suppression (Ignition)?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 12:33:36 UTC
From: hasan schiers <schiers@netins.net>
Message-ID: <d2e6bi$p6h$1@news.netins.net>
Source record: 79903

I see 31 Mix snap-on beads listed by DXEngineering as effective in reducing ignition noise by placing them on ignition wires. (0.275 inches)

I have several questions about their application for ignition wires:

1. Where along the wire should they be placed (at the plug, at the distributor, middle of wire)?

2. Should they be stacked next to each other for better effect (series butted up against one another) and if so, how many, and again, where along the wire?

3. How many should be used and as above, how should they be "clustered"?

They come in packs of 10 and since I have a For Taurus ('95) 3.0 V6, I have 6 wires to deal with. 2 packs would yield 20 chokes, for example, and perhaps a silly way to look at it would be to put one at each end of each wire and one in the middle of each wire, using 3 per wire or 18 of the 20 available.

4. Are these likely to be significant help on either HF or VHF?

5. Can anyone recommend a really good set of ignition wires for best RFI suppression?

(and yes, I'm aware of the fuel pump noise problem...but I'm concentrating on ignition noise at the moment)

TIA

...hasan, N0AN

4509. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 12:43:34 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <424a9f55_1@newsfeed.slurp.net>
Source record: 79904

"Richard Clark" >
> 5 points to the one who can name the source to the ancient (nearly
> 40 year old) quote offered. 5 extra points if you can provide the
> context (fictional character) who employs it. And 10 points bonus if
> you can name (fictional character) who it is applied to.

Using scientific texts and methods rather than a thesaurus and fictional references to try to make your points here would serve you (and the rest of us) better.

Or you might wish to move to alt.english.usage, and see if those folks are impressed.

RF

4510. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 13:09:17 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <424aa4fd$0$3709$39cecf19@news.twtelecom.net>
Source record: 79905

Richard Clark wrote:

> If I were to deconstruct further, I would offer the query:
> "How current is semi?"

1 decade.

>
> If we reach back beyond the currency of semi (say 3 or more decades);
> then I would have offered Art:
> "Keep a tight ass hole."
> and it would have still come from the same culture.
>
> Now, at the risk of having to "explain" to a generation that demands
> facts and references, and then shows so little inclination to actually
> apply them (this does not mean you by the way as you have been
> adventurous enough to probably have made connections anyway); then my
> short answer would be:
> "You've guessed wrong." (which is a far more commonplace outcome
> by virtue of this preponderance of guessing, presuming, and supposing
> instead of testing, analyzing, and examining).
>
> 5 points to the one who can name the source to the ancient (nearly 40
> year old) quote offered. 5 extra points if you can provide the
> context (fictional character) who employs it. And 10 points bonus if
> you can name (fictional character) who it is applied to.
>
> 73's
> Richard Clark, KB7QHC
>

Hmm, I'd say about 61 years +-1 on the quote, and I couldn't guess who
used it 40 years ago.

And blunt is now a drug reference if you haven't kept up.

So who was it that recycled the combat advice?

tom
K0TAR

4511. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 13:25:57 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <424aa93d_5@newsfeed.slurp.net>
Source record: 79906

"Reg Edwards" wrote..
> Sorry Richard. I never refer to sources. Except perhaps Ohm.
> There's no way of guaranteeing reliability. I work things out for
> myself so you'll just have to take my word for it.
>
> I have a remarkably small book library. Although I did buy a
> second-hand copy of Terman in 1947 which I still occasionally browse
> through when I'm running short of ideas. He's most comprehensive.
> Which accounts for his continued popularity. But he's not God.

I suspect that your statement above that you never refer to sources doesn't mean that all of your considerable knowledge is the result of your original investigations. Even your countryman Stephen Hawking credits his sources when he writes of scientific topics.

Terman's (Brown's) statements about the elevation patterns of loaded verticals have been proven empirically by MW radiators for 70 years or more. There is nothing to argue about, and certainly no reason to take the word of anyone not willing to show conclusively how this concept is invalid. One's word is insufficient -- even if it comes from you and/or Richard Clark.

RF

4512. Re: 31 Mix Beads RFI Suppression (Ignition)?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 14:09:07 UTC
From: Anchor <anchorelectronics@sympatico.ca>
Message-ID: <pan.2005.03.30.14.09.04.428149@sympatico.ca>
Source record: 79907

On Wed, 30 Mar 2005 06:33:36 -0600, hasan schiers wrote:

> I see 31 Mix snap-on beads listed by DXEngineering as effective in reducing
> ignition noise by placing them on ignition wires. (0.275 inches)
>
> I have several questions about their application for ignition wires:
>
> 1. Where along the wire should they be placed (at the plug, at the
> distributor, middle of wire)?
>
> 2. Should they be stacked next to each other for better effect (series
> butted up against one another) and if so, how many, and again, where along
> the wire?
>
> 3. How many should be used and as above, how should they be "clustered"?
>
> They come in packs of 10 and since I have a For Taurus ('95) 3.0 V6, I have
> 6 wires to deal with. 2 packs would yield 20 chokes, for example, and
> perhaps a silly way to look at it would be to put one at each end of each
> wire and one in the middle of each wire, using 3 per wire or 18 of the 20
> available.
>
> 4. Are these likely to be significant help on either HF or VHF?
>
> 5. Can anyone recommend a really good set of ignition wires for best RFI
> suppression?
>
> (and yes, I'm aware of the fuel pump noise problem...but I'm concentrating
> on ignition noise at the moment)
>
> TIA
>
> ...hasan, N0AN

Buy a package. Try it. Report back to the news group what you observed.

4513. Re: Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 14:45:12 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <YXy2e.56980$hA3.3180@trnddc09>
Source record: 79908

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:1iok411rmdt2lo85nc6josegp7167ml00e@4ax.com...
> On Wed, 30 Mar 2005 08:16:42 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
>> As you know, I built that slotted line that works fairly well for load
>>impedance measurements at 2 meters, and can be used at 100 MHz for FM
>>antenna work. But, it is big and ugly.
>
> Hi Jerry,
>
> Imagine how ugly it would be for 20M. You could use yours there too,
> but you would have to study how to do what is called "load shifting."
> Conceptually it is quite simple, but as you have learned, the art of
> construction is where the accuracy is.
>
>> I do like the concept MFJ uses
>>even though the results are surely less accurate than a good bridge.
>
> There are so many ways to lose accuracy that you should look at the
> point spread. MFJ (and the other manufacturers) will probably suit
> 90% of users' expectations.
>
>> If I
>>get an urge to include a HF antenna or other device whose impedance I want
>>to determine, I might buy a MFJ. But, if a decent bridge ever becomes
>>available at one of the HAM swap meets I'll sure pick up anything thats
>>affordable.
>
> Affordable generally runs in the neighborhood of $300. Myself, I
> would invest in a swept frequency system that does vector analysis and
> build heads that perform the SWR determination. This is
> software/hardware at its best. Flexibility is the hallmark of an
> instrument that will be kept being used.
>
> 73's
> Richard Clark, KB7QHC

Richard

Your thoughts on sweep frequency for impedance measurement is very
interesting. If I could figure out a way to build the "sensors" I'd
probably build a sweep system for 2 meters. Although I could handle
building a sweep frequency generator, I wouldnt know how to convert the
"incident and reflected" to an impedance.

I suspect that, if sweep frequency impedance measurements was simple enough for Me to do, someone would already have done it and published in one of the HAM magazines.

Jerry

Jerry

4514. Re: The Greatest News Ever!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 14:58:56 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <424abf5b$1_2@127.0.0.1>
Source record: 79909

Randy wrote:
> Do not be drunk with wine, but be filled with the Holy Spirit.
> Paraphrase of Ephesians 5:18.

Note that this is an admonition against getting drunk,
not against drinking wine. I just saw something on the
history channel that implied that Jesus' motto may have
been, "Eat, drink, and make Mary." Information comes to
us from some ancient cave tablets that Jesus was married
to Mary Magdeline (sp?) and fathered a daughter named Sarah
who fled to Egypt and later married into European royalty.
It was the jealous apostles who later made Mary M. out
to be a lady of ill repute. The Holy Grail is supposed
to be Jesus' direct blood line.
--
73, Cecil http://www.qsl.net/w5dxp

----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4515. Re: Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 15:00:15 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <424abfaa$1_2@127.0.0.1>
Source record: 79910

Jerry Martes wrote:
> As you know, I built that slotted line that works fairly well for load
> impedance measurements at 2 meters, and can be used at 100 MHz for FM
> antenna work.

A pick-up loop will do the same thing for ladder-line.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4516. Re: Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 15:10:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <a5gl41dn60cjcvguv13n5b3db2b2tg0e77@4ax.com>
Source record: 79911

On Wed, 30 Mar 2005 14:45:12 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

> Your thoughts on sweep frequency for impedance measurement is very
>interesting. If I could figure out a way to build the "sensors" I'd
>probably build a sweep system for 2 meters.

Hi Jerry,

Quite simple. Radio Shack sells SWR meters for 2M so you can take a
lead for the sensors from there.

>Although I could handle
>building a sweep frequency generator, I wouldnt know how to convert the
>"incident and reflected" to an impedance.

Software would do that.

> I suspect that, if sweep frequency impedance measurements was simple
>enough for Me to do, someone would already have done it and published in one
>of the HAM magazines.

I'm sure that's already been done, at least in the ads in back. I am
NOT discussing what might be, but what has been done. There is a kit,
or kit design on the net, it's been mentioned here, I just haven't
rummaged up the link yet.

73's
Richard Clark, KB7QHC

4517. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 15:15:21 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <sdgl41p9gi6pielpi63mv7vcn9rcqb9520@4ax.com>
Source record: 79913

On Wed, 30 Mar 2005 06:43:34 -0600, "Richard Fry" <rfry@adams.net>
wrote:

>Or you might wish to move to alt.english.usage, and see if those folks are
>impressed.

Hi OM,

It's satisfying enough to see you're stunned. ;-)
That was the point of the sieve.

73's
Richard Clark, KB7QHC

4518. Re: Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 15:16:52 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <Epz2e.30091$uw6.26112@trnddc06>
Source record: 79912

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:424abfaa$1_2@127.0.0.1...
> Jerry Martes wrote:
>> As you know, I built that slotted line that works fairly well for load
>> impedance measurements at 2 meters, and can be used at 100 MHz for FM
>> antenna work.
>
> A pick-up loop will do the same thing for ladder-line.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>

Cecil

I've always ignored the use of twin lead for impedance measurement. But,
it makes sense. I may try building something like that, just for fun.

I certainly havent thought this "twin lead" line thru but it seems that
one could be easily built from a length of PVC pipe with wires attached to
its sides.
This seems too easy and relatively accurate for "home in the garage" use.
I'd bet I can find some info on the Internet for FM and TV frequency use.
Thanks for jogging my mind.

Jerry

4519. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 15:22:21 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <flgl419kfbbujd3qog3qh3uq9vqnjprps9@4ax.com>
Source record: 79914

On Wed, 30 Mar 2005 07:09:17 -0600, Tom Ring <news0002@taring.org>
wrote:

>Hmm, I'd say about 61 years +-1 on the quote, and I couldn't guess who
>used it 40 years ago.

R. Crumb

>And blunt is now a drug reference if you haven't kept up.

Whoosh, over your head.

>So who was it that recycled the combat advice?

Combat? I suppose you are fishing for the point award answers.
In Order:
Mr. Natural,
Flakey Foont.

As Mr. Natural would offer:
"If you have to ask,
you're not really with it."

To close out this round of Cultural Awareness, a question from Dr.
Naturlich:
"What does Do Wa Diddy mean?"

73's
Richard Clark, KB7QHC

4520. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 15:34:13 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <424ac6f5$0$3714$39cecf19@news.twtelecom.net>
Source record: 79915

Richard Clark wrote:

> On Wed, 30 Mar 2005 07:09:17 -0600, Tom Ring <news0002@taring.org>
> wrote:
>
>
>>Hmm, I'd say about 61 years +-1 on the quote, and I couldn't guess who
>>used it 40 years ago.
>
>
> R. Crumb
>
>
>>And blunt is now a drug reference if you haven't kept up.
>
>
> Whoosh, over your head.
>

Nope, I got that, just got more than that.

>
>>So who was it that recycled the combat advice?
>
>
> Combat? I suppose you are fishing for the point award answers.
> In Order:
> Mr. Natural,
> Flakey Foont.

Yes, combat - advice given to troops going to fight on the islands of
the Pacific. And I must have forgotten the re-use by Crumb; I used to
have all of them, way back when. I liked the Fabulous Furry Freak
Brothers better.

>
> As Mr. Natural would offer:
> "If you have to ask,
> you're not really with it."
>
> To close out this round of Cultural Awareness, a question from Dr.
> Naturlich:
> "What does Do Wa Diddy mean?"
>
> 73's
> Richard Clark, KB7QHC

4521. Different VLF antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 15:35:30 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <OHz2e.1051$477.712@fe11.lga>
Source record: 79916

I have one of the MFJ "atomic" clocks in my basement shack (in New York) It will not pick up the WWV signal in the basement, but does fine when upstairs and placed in a vertical position. There is no external antenna connector---that would make things too easy. Is there an accepted way to connect an external antenna? Any experience with external antennas on these things? (This should be a very common problem!)

I have not taken it apart yet -- sometimes such things are easier to take apart than to put back together. I am quite willing to take it apart if there is a good reason for doing so.

Bill
W2WO

4522. Tower Info (Still Looking)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 15:59:32 UTC
From: Win <w0lz@winlyn.us>
Message-ID: <b5jl41563fan9u1aa0jflqdop9beldf0gp@4ax.com>
Source record: 79917

I recently purchased an old crank-up motor driven 60 foot tower that I would hope someone could id for me. The motor belt drives a gearbox, which turns the cable pulley. It has a approximately 1 foot by 18 inch control box which has two high current relays and two glass contained relays. The glass-contained relays are in old 8 pin tube sockets.

The tower, itself, is in good shape. I would like to re-build the control circuits and out the tower in service. Any information anyone can give me on this tower will be greatly appreciated. See at www.winlyn.us/tower.jpg.

Win, w0lz
W0lz@winlyn.us

4523. Re: Insulated Wire Velocity Factor: How to . . ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 16:08:27 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <1112198907.744331.274740@g14g2000cwa.googlegroups.com>
Source record: 79918

Richard Clark wrote:
> On 28 Mar 2005 11:52:23 -0800, "Brian Kelly" <kelly@dvol.com> wrote:
>
> >So two questions in this regard: Is there a way to measure the Vf of
a
> >wire without having to resort to using 2" Heliax to feed a dipole
and
> >without a lab full of HP and GR test equipment? Second, assuming
the
> >Vf becomes known how does one handle it during the modeling process?
> >Model the antenna wire lengths at an upward-shifted frequency based
on
> >the Vf?
>
> Hi Brian,
>
> 1. Drive the design with power instead of low level excitation;

Sweep the dipole with a transmitter and an SWR bridge?

> 2. Remove half the transmission line muffling of results by using a
> field strength meter to find resonance (another reason for power);

Same as above but with a field strength indicator? Just might work if I
use a 4-digit DVM and a diode.

> 3. Find the Vf (as you put it) by derivation against a wire model
> (through the difference in lengths of bare wire model resonance to
> real wire resonance);

That would seem to work but I'd expect to still have the flat curves
because of the coax losses. I'm starting to think I should go to a
lower frequency band like 40 or 80M to reduce the problems with the
coax. And to reduce the errors in cutting-to-length.

> 4. Use the new EZNEC which allows you to employ insulation over wire
> and adjusting the thickness to conform with results found
> experimentally with real wire at actual length;

. . . all I gotta do is DO that! "The loop has been closed."

> 5. Assign these insulation properties to all future designs in the
> modeler.

I've been using Nec Win Plus which is OK but it doesn't have the the
ability to handle velocity factors like EZNEC 4.0 can.

I don't have a big problem with scaling antenna dimensions to adjust for the Vf because I physically model antennas with CAD first to get the locations of the wire end points in 3D space. Which I can quickly and easily load into NWP. The CAD program does all the tedious trig for me. When I have a bare-wire model which "works" in NWP I can rescale the physical model by 0.98 or 0.95 or whatever the Vf might be to get a "close enough" fully dimensioned antenna design. But I still need to find the Vf experimentally and we're back to square one. You fed me some thinking fodder, I'll try a few things per above and get there one way or another.

Tnx.

> 73's
> Richard Clark, KB7QHC

w3rv

4524. Re: Insulated Wire Velocity Factor: How to . . ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 16:16:01 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <1112199361.039771.93170@g14g2000cwa.googlegroups.com>
Source record: 79919

Hal Rosser wrote:
> If you have a MFJ-259, you can get the VF of the wire easily
> or
> 1. put up a 10-meter dipole using bare wire - note the resonant freq
> 2. duplicate exactly using 14 THHN Str - note the NEW resonant freq.
>
> divide the resonant freq from step 1 by the resonant freq from step
2. (or
> is it the other way around)

I wish. Finding the resoant frequecies is my fundamental problem.

> Anyway, I don't think you have to add your social security number.

Heh.

w3rv

4525. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 16:21:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1ojl41tkj3thsb9l0i23tnvb5o0fks258a@4ax.com>
Source record: 79920

On Wed, 30 Mar 2005 07:25:57 -0600, "Richard Fry" <rfry@adams.net>
wrote:

>One's
>word is insufficient -- even if it comes from you and/or Richard Clark.

Hi OM,

And I presume you being the arbiter of what is right, then render
authority to make this citation sufficient to be proof of your
statement? :-)

I don't suppose you could rummage up a concurring opinion from Terman
or Mendenhall (whoops, talk about one citation flushed down the
dumper)? Such hubris.

If you deigned to offer this privelage equally, there would be no
arguments, would there?

73's
Richard Clark, KB7QHC

4526. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 16:35:01 UTC
From: richardharrison@webtv.net
Message-ID: <8879-424AD535-59@storefull-3251.bay.webtv.net>
Source record: 79926

Reg, G4FGQ wrote:
"No it doesn`t! (Thus an antenna for which H=0.45 lambda can by suitable top loading be made to have a field distribution in the vertical plane of H=0.6 lambda.)"

Reg is right. Between two antennas there will always be differences. But, as Richard Clark might say, "Does it make a Db of difference?" One dB can easily be lost in measurement error.

Top loading has been around since at least 1909 when it was patented by Simon Eisenstein of Kiev. Russia. See Fig 9-24 on page 9-17 of ON4UN`s "Loe-Band DXing". Eisenstein shows current distribution on his patent application. He gets the base current up as it might be in a full height antenna.

I would believe what Terman wrote because I`ve never been able to disprove anything he wrote. Now I look for my error in logic when something of Terman`s seems wrong.

ON4UN says on page 9-29 of his 1994 edition of the Low-Band DXing book: "Over sea-water the 5/8 wave has lost 0.8 dB of its gain already, the 1/4-wave only 0.4 dB." (It`s less than one dB).

Even a disappearingly small radiator produces radiation less than 1/2 dB weaker than a 1/2-wave dipole, or a 1/4-wave vertical. In lossless antennas, the only difference in radiated signal between the full length antenna and a too-short antenna comes from the slight difference in their patterns.

Short antennas have efficiency problems because they have low radiation resistances. This low radiation reaistance goes not compare as well with a given loss resistance as does the higher radiation resistance of the full size antenna. However, great care can be taken with the too-short antenna to minimize its loss resistance and get good efficiency.

You have only to consult the "ARRL Antenna Book" and compare a short continusously loaded vertical`s performance with that of a full-size 1/4-wave vertical. In my 19th edition it`s on page 5-25:
"Fig 46-Helically wound ground-plane vertical. Performance from this type of antenna is comparable to that of many full-size 1/4 vertical antennas."

In 1949, I worked in a transmitting plant where two stations, KPRC, 950 KHz, and KXYZ, 1320 KHz, shared the same transmittinng tower. Both stations had identical RCA 5-C, 5 KW transmitters. Regional coverage was almost identical despite many more degrees in the tower at 1320 KHz than at 950 KHz.

One of the operators at the stations was a ham. He was J.L. Davis, W5LIT. J.L. had a new 1949 Ford with a cane pole bolted to the rear bumper. The pole was wound nearly end to end with enameled wire to serve as antenna for his mobile ham rig. He had no top hat at the tip of his antenna, so sometimes when he was talking a high voltsage corona discharge would plume from the top of his antenna. Very impressive though no help to his QSO..

Bill Orr writes on page 78 of "Vertical Antennas":
"A helix length of about .05 wavelength or more provides good results as a substitute for a full size quarter wavelength vertical antenna."

It worked for W5LIT.

Best regards, Richard Harrison, KB5WZI

4527. Re: Different VLF antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 16:35:12 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <4zA2e.72452$7z6.65415@lakeread04>
Source record: 79921

"Bill Ogden" <wogden@attglobal.net> wrote
> I have one of the MFJ "atomic" clocks in my basement shack (in New York)
It
> will not pick up the WWV signal in the basement, but does fine when
upstairs
> and placed in a vertical position. There is no external antenna
> connector---that would make things too easy. Is there an accepted way to
> connect an external antenna? Any experience with external antennas on
these
> things? (This should be a very common problem!)
>
> I have not taken it apart yet -- sometimes such things are easier to take
> apart than to put back together. I am quite willing to take it apart if
> there is a good reason for doing so.
>
> Bill
> W2WO
>

Hi Bill, if you do open the receiver, I would be very careful how much signal you apply, as the front end could be extremely sensitive and might easily be destroyed by applying an external antenna directly. You could try running an insulated antenna wire from some area that has reception, and strip the insulation to fasten to the back of the clock (without opening the back).

If that doesn't work, here's a new hi-tech digital clock that will:

http://www.lares.dti.ne.jp/~yugo/storage/monocrafts_ver3/03/index.html

Best regards ;-)

Jack Painter
Virginia Beach, Virginia

4528. Re: vlf antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 16:36:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <lkkl41lon3077m3tekmq8rg0eie3fgbj5t@4ax.com>
Source record: 79923

On Wed, 30 Mar 2005 08:31:08 -0500, Albert <> wrote:
>Last night, I looked at the signal using spectrum lab's vlf receiver
>program. When I zoomed in on the transmitters signal, I noticed that
>there were sidebands occurring every 15 hz. I will post another
>message with more details.

Hi Albert,

This could be an ID modulation to serve the receiver's logic. In
other words, correction is based upon both signal strength AND
modulation.

Thus the received signal strength has to fall to a certain level that
is still above noise level (not complete drop-off) to insure that
corrections are not applied due to power failure at the transmitter
(and to allow registration at power-up).

>VLF is used because the signal penetrates the ground better,

This was what I described as the subterranean communications channel
used in the trenches of WWI. I would still suggest a power boost over
building a ground dipole. The design of the amp is trivial, and kits
are available to do the job for less than $20.

73's
Richard Clark, KB7QHC

4529. Re: Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 16:36:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <114lld3969dm572@corp.supernews.com>
Source record: 79922

I still remember a demonstration of transmission line phenomena given by Dick Silberstein, W0YBF, at the Denver Radio Club more than 30 years ago. He had made a "slotted line" (more accurately a trough line) from a wire tightly suspended in the "V" of a piece of angle aluminum or steel. It worked very well. It was pretty large -- I believe the frequency he used was around 50 MHz. You could use a smaller piece of angle material or suspend it deeper in the valley for a higher frequency.

Roy Lewallen, W7EL

Jerry Martes wrote:
>
> Cecil
>
> I've always ignored the use of twin lead for impedance measurement. But,
> it makes sense. I may try building something like that, just for fun.
>
> I certainly havent thought this "twin lead" line thru but it seems that
> one could be easily built from a length of PVC pipe with wires attached to
> its sides.
> This seems too easy and relatively accurate for "home in the garage" use.
> I'd bet I can find some info on the Internet for FM and TV frequency use.
> Thanks for jogging my mind.
>
> Jerry
>
>

4530. Re: Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 16:42:14 UTC
From: RST Engineering <jim@rstengineering.com>
Message-ID: <114lln5m47lk8d4@corp.supernews.com>
Source record: 79924

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:a5gl41dn60cjcvguv13n5b3db2b2tg0e77@4ax.com...
> On Wed, 30 Mar 2005 14:45:12 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
>> Your thoughts on sweep frequency for impedance measurement is very
>>interesting. If I could figure out a way to build the "sensors" I'd
>>probably build a sweep system for 2 meters.

The ARRL handbooks of yore have several designs. Google "monimatch".

>>Although I could handle
>>building a sweep frequency generator, I wouldnt know how to convert the
>>"incident and reflected" to an impedance.
>
> Software would do that.

No it wouldn't, unless you could figure out some way to get vector magnitude
and phase from the two channels.

>
>> I suspect that, if sweep frequency impedance measurements was simple
>>enough for Me to do, someone would already have done it and published in
>>one
>>of the HAM magazines.

Perhaps not the ham magazines; I know I've written at least three articles
in Kitplanes magazine as to how to do it for aircraft antenna VSWR.

Jim

4531. Re: 31 Mix Beads RFI Suppression (Ignition)?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 16:46:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <aell41daerbgm0lt7n5fu07ue85u5toirg@4ax.com>
Source record: 79925

On Wed, 30 Mar 2005 06:33:36 -0600, "hasan schiers"
<schiers@netins.net> wrote:

Hi Hasan,

By the numbers:

>1. Where along the wire should they be placed (at the plug, at the
>distributor, middle of wire)?

Doesn't matter.

>2. Should they be stacked next to each other for better effect (series
>butted up against one another) and if so, how many, and again, where along
>the wire?

Doesn't matter.

>3. How many should be used and as above, how should they be "clustered"?

Until you achieve relief (you haven't described why you want to do
this).

>4. Are these likely to be significant help on either HF or VHF?

By the presumption of this indicating a receiver problem with HF or
VHF, I would offer that most (modern) cars do not display such
problems. You could be chasing the wrong solution. However, at the
bottom line, they could help.

>5. Can anyone recommend a really good set of ignition wires for best RFI
>suppression?

Standard resistive wires. It sounds like you substituted straight
wires for the factory set when they wore out. That is generally a
poor choice for two reasons. One (presumably) is due to ignition
interference with communications. The other is lowered fuel economy
and power.

The application of ferrites to straight wires is introducing resistive
loss into the ignition current path. This is normally the job of
resistive wire. Introducing such loss is actually a boon. The loss
retards spark extinction (means that the spark will burn longer with a
resistance in the path). Longer burn time means more complete
ignition. This also means that the longer burn time equates to fewer
HF spurious products. This is called win-win.

73's
Richard Clark, KB7QHC

4532. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 16:52:24 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <424ad9a4_3@newsfeed.slurp.net>
Source record: 79927

"Richard Clark" wrote>
> It's satisfying enough to see you're stunned. ;-)
> That was the point of the sieve.

Your perception of that is as inaccurate as the one you espouse about loaded verticals. Are you incapable of dealing with technical topics in a technical manner?

I suppose now you'll claim that your post above was another sieve, and congratulate yourself all over again.

RF

4533. Re: 31 Mix Beads RFI Suppression (Ignition)?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 17:07:08 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <424adcbd$0$3715$39cecf19@news.twtelecom.net>
Source record: 79928

Richard Clark wrote:

>>5. Can anyone recommend a really good set of ignition wires for best RFI
>>suppression?
>
>
> Standard resistive wires. It sounds like you substituted straight
> wires for the factory set when they wore out. That is generally a
> poor choice for two reasons. One (presumably) is due to ignition
> interference with communications. The other is lowered fuel economy
> and power.
>
> The application of ferrites to straight wires is introducing resistive
> loss into the ignition current path. This is normally the job of
> resistive wire. Introducing such loss is actually a boon. The loss
> retards spark extinction (means that the spark will burn longer with a
> resistance in the path). Longer burn time means more complete
> ignition. This also means that the longer burn time equates to fewer
> HF spurious products. This is called win-win.
>
> 73's
> Richard Clark, KB7QHC

Bosch, and at least one other company whose name I've forgotten, used to make a solid wire ignition cable that was coiled internally into a very long choke. I used them 15 years ago on one of my vehicles that had a noisy ignition system, and they were fairly effective, better than resistor wires were on that car. I am not sure if they are still made, but asking at your FLAPS should give you a quick answer.

tom
K0TAR

Oh, FLAPS is short for Friendly Local Auto Parts Store.

4534. Re: Insulated Wire Velocity Factor: How to . . ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 17:08:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <u9ml411g93p974aknoj9emu31s7t5s4es9@4ax.com>
Source record: 79929

On 30 Mar 2005 08:08:27 -0800, "Brian Kelly" <kelly@dvol.com> wrote:

>> 2. Remove half the transmission line muffling of results by using a
>> field strength meter to find resonance (another reason for power);
>
>Same as above but with a field strength indicator? Just might work if I
>use a 4-digit DVM and a diode.

Excellant choice (add a filter cap too with resistive load for
averaging).

>> 3. Find the Vf (as you put it) by derivation against a wire model
>> (through the difference in lengths of bare wire model resonance to
>> real wire resonance);
>
>That would seem to work but I'd expect to still have the flat curves
>because of the coax losses.

Hi Brian,

Actually, by using the FSM you entirely remove the transmission line
as disturbance to accurate response readings. Those come from the
external reading which interprets all power being applied AT the
antenna junction. However, it imposes upon you that you be scrupulous
about achieving the same drive levels at all the intermediate
frequencies across the swept band. If you do that, then the
transmission line characteristics for the drive going up to the
antenna junction fall out too.

Careful drive monitoring, and careful response monitoring render the
transmission line transparent to the measurement. Thus response/drive
is the antenna characteristic. Define one point's SWR, and you can
cast that into the suite of readings for a swept SWR curve. Take care
in that "one" SWR determination to anticipate the SWR lowering effect
of transmission line loss.

Then you do the same thing in software, and tailor the characteristic
insulation thickness to match your measurements. Having achieved
that, then you have your standard insulation. This does not give you
Vf until you then remove that virtual insulation and find the native,
bare wire resonance. This last step is satisfying (it answers your
question as to Vf), but the step before is more useful because you can
model other antennas from that standard.

73's
Richard Clark, KB7QHC

4535. Re: Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 17:19:40 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vpnl41hp6l4sn0bnj07cd0nelervgh9b0k@4ax.com>
Source record: 79930

On Wed, 30 Mar 2005 08:42:14 -0800, "RST Engineering"
<jim@rstengineering.com> wrote:

>>>Although I could handle
>>>building a sweep frequency generator, I wouldnt know how to convert the
>>>"incident and reflected" to an impedance.
>>
>> Software would do that.
>
>No it wouldn't, unless you could figure out some way to get vector magnitude
>and phase from the two channels.

Hi All,

I have since researched the archives to find my reference:
http://users.adelphia.net/~n2pk/

What can be done, what has been done, and what might be inferred is
revealed at this page.

73's
Richard Clark, KB7QHC

4536. Re: Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 17:29:31 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <%lB2e.28696$b_6.25391@trnddc01>
Source record: 79931

Roy

That trough configuration is probably more practical than the copper tube coax thing I made. I dont have any current interest in 50 MHz impedance measurement. But, I'll sure consider that "angle trough" method for any low cost tools for impedance measurements. I realize now that a slotted line even for 137 MHz is too large to have around in my garage. It requires too much room to set up the equipment. It is kinda interesting to consider something made from PVC so it is "disposable". I dont know how I'd handle the transitions to and from the coax. But, it seems like a guy could use a couple 4:1 baluns to get from 50 ohm coax to 200 ohm twin lead. I'm pretty sure I could find a couple long lengths of copper wire or tube that I could attach along the sides of some 1 inch PVC to make a 200 ohm line. That would be about 20 feet long for 6 meters. Wow, thats big.

Maybe I should just get back to learning EZNEC. You guys actually get good impedance predictions for almost any antenna.

Jerry

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:114lld3969dm572@corp.supernews.com...
>I still remember a demonstration of transmission line phenomena given by
>Dick Silberstein, W0YBF, at the Denver Radio Club more than 30 years ago.
>He had made a "slotted line" (more accurately a trough line) from a wire
>tightly suspended in the "V" of a piece of angle aluminum or steel. It
>worked very well. It was pretty large -- I believe the frequency he used
>was around 50 MHz. You could use a smaller piece of angle material or
>suspend it deeper in the valley for a higher frequency.
>
> Roy Lewallen, W7EL
>
> Jerry Martes wrote:
>>
>> Cecil
>>
>> I've always ignored the use of twin lead for impedance measurement.
>> But, it makes sense. I may try building something like that, just for
>> fun.
>>
>> I certainly havent thought this "twin lead" line thru but it seems that
>> one could be easily built from a length of PVC pipe with wires attached
>> to its sides.
>> This seems too easy and relatively accurate for "home in the garage"
>> use. I'd bet I can find some info on the Internet for FM and TV frequency

>> use. Thanks for jogging my mind.
>>
>> Jerry

4537. Re: Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 17:44:45 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <hAB2e.30112$uw6.28919@trnddc06>
Source record: 79932

Richard

I'm way behind on the learning curve. I had read about that Vector
Network Analyzer last year. it looked too complicated for me to build.
And, in my ignorance, I thought that system was what the MFJ used.

The Smith Chart plots from his VNA data really impresses me. I could
possible get interested in building something like that for VHF, if I
understood it.

Jerry

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:vpnl41hp6l4sn0bnj07cd0nelervgh9b0k@4ax.com...
> On Wed, 30 Mar 2005 08:42:14 -0800, "RST Engineering"
> <jim@rstengineering.com> wrote:
>
>>>>Although I could handle
>>>>building a sweep frequency generator, I wouldnt know how to convert the
>>>>"incident and reflected" to an impedance.
>>>
>>> Software would do that.
>>
>>No it wouldn't, unless you could figure out some way to get vector
>>magnitude
>>and phase from the two channels.
>
> Hi All,
>
> I have since researched the archives to find my reference:
> http://users.adelphia.net/~n2pk/
>
> What can be done, what has been done, and what might be inferred is
> revealed at this page.
>
> 73's
> Richard Clark, KB7QHC

4538. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 17:45:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cgol41p4u3h2tn8kers3ktokiqheqshc2g@4ax.com>
Source record: 79933

On Wed, 30 Mar 2005 10:52:24 -0600, "Richard Fry" <rfry@adams.net>
wrote:

>Are you incapable of dealing with technical topics in a
>technical manner?

Hi OM,

I respond to all correspondence of interest. I see you enjoy talk
about talking about technical topics, but I have seen no technical
discussion from you for quite some time. That is your sole
responsibility as no one can do your typing for you.

>I suppose now

Yes, but too often.

This is what I mean about choice and responsibility. You chose to
ramble on instead of offering technical discussion. I am equally
pleased to travel either path, and I suspect your protestation above
given the inclination obviously revealed below it.

So to match your diverging interests, can you answer
"What does Do Wa Diddy mean?"

If your heart of heart's desire for technical topics must be sated
first
What effect would surface phonon polaritons present to an
antenna's efficiency?

Either constitute another sieve. ;-)

73's
Richard Clark, KB7QHC

4539. A Cool Place To Hook Up!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 17:48:09 UTC
From: tina <ariel4578@yahoo.com>
Message-ID: <1112204889.312544.304360@g14g2000cwa.googlegroups.com>
Source record: 79934

Hi there! Looking For Real Singles! Meet someone on the largest online dating network - photos, chat, more! FREE TO JOIN! http://friendfinder.com/go/f34479 Thanks.

4540. Re: Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 17:51:16 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4mpl41tp53dm6kcul31eu16pcslju4v6ae@4ax.com>
Source record: 79935

On Wed, 30 Mar 2005 17:44:45 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

> The Smith Chart plots from his VNA data really impresses me. I could
>possible get interested in building something like that for VHF, if I
>understood it.

Hi Jerry,

Take the plunge, that is the best way to learn. You already exhibit
positive motivation and that's the hard part of learning.

73's
Richard Clark, KB7QHC

4541. Re: Tower Info (Still Looking)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 17:57:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <oMB2e.11$_O3.514197@news.sisna.com>
Source record: 79938

If the relays need replacing, you might consider replacing them with "solid state relays." A led optoisolator triggers a triac device to control power to the load, I have used them in the construction of 13.8V linears with excellent results, suspect they would work well for this application too. They are commonly available for ?-100 amps @ 220V, a search of the web should provide you with ample sources...

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion, haw aboot speel-checkin it fer me?

"Win" <w0lz@winlyn.us> wrote in message news:b5jl41563fan9u1aa0jflqdop9beldf0gp@4ax.com...
>I recently purchased an old crank-up motor driven 60 foot tower that I
> would hope someone could id for me. The motor belt drives a gearbox,
> which turns the cable pulley. It has a approximately 1 foot by 18
> inch control box which has two high current relays and two glass
> contained relays. The glass-contained relays are in old 8 pin tube
> sockets.
>
> The tower, itself, is in good shape. I would like to re-build the
> control circuits and out the tower in service. Any information anyone
> can give me on this tower will be greatly appreciated. See at
> www.winlyn.us/tower.jpg.
>
> Win, w0lz
> W0lz@winlyn.us
>

4542. Re: 28mhz ham radio read this what i think .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 18:06:08 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <JSB2e.8539$vL3.7193@bignews4.bellsouth.net>
Source record: 79936

<jcooper874@webtv.net> wrote in message
news:18728-42477C6F-83@storefull-3271.bay.webtv.net...
> so what is more inportant in life not your hobby most people put there
> radio hobby before,god and there family that is sad .they will drive all
> night to go to a hamfest but when it comes time for a family event o i
> cant make it heard it to many times on the radio waves.
> so i guess the ups or fedex truck did not bring you that new hf rig so
> next time you pick it up stop picking on truckers.

I, for one, am not picking on truckers. They have the SAME options the other licensed hams have: study for and EARN the privilege of using radio. They are, like every other citizen, are permitted by law, to operate a CB radio with 40 channels and 4 watts. On any given day, most of those channels will be reasonably quiet except for a very few. He may use any of those channels for both finding loads/drop offs, or as recreation. He may NOT encroach on other frequencies at will. If he does, he is liable for fines and even being fired by his company. If you don't believe it, just email rholling@fcc.gov and ASK! MANY trucking companies have been made aware of the 28 MHZ incursions and have been VERY cooperative with FCC in stopping their drivers from using "extree" channels--even going so far as to FIRE one or more for it.

As for Amateur Radio, the bottom line reason for its existence IS emergency communications. It is the number 1 backup to existing communications services, and most
state and local EOC (Emergency Operations Coordinators) would not be caught DEAD without an Amateur Radio presence in their planning. It even receives Homeland Security funding for equipment and training. It also provides a measure of innovation in communications technology and continues to evolve in this manner. THAT , not "hobby" communications, is the reason for its continuing existence. The "hobby" aspect is what leads to experimentation, invention, and communications innovation.

Your assertions as to the basis and purpose for Amateur Radio show complete ignorance of the applications of communications technology and come from an obvious "CB Radio" mentality. Perhaps, it would be best if you stuck to truck driving since your knowledge of communications is most surely contained within the circumference of your steering wheel.
Like.....
not MUCH! :(

J
>

4543. Re: Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 18:15:41 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <0eol41d0kaq6imnk52u53fql3j69lpna29@4ax.com>
Source record: 79937

On Wed, 30 Mar 2005 09:19:40 -0800, Richard Clark <kb7qhc@comcast.net>
wrote:

[snip]
>
>Hi All,
>
>I have since researched the archives to find my reference:
>http://users.adelphia.net/~n2pk/
>
>What can be done, what has been done, and what might be inferred is
>revealed at this page.

This is the greatest thing since sliced bread.

I've built one for ~$250.00. Here's a photo taken during construction
and checkout:

http://www.qsl.net/n7ws/ANA_1.jpg (350K)

Currently it's limited to 60 MHz although variants are in the works to
increase this. Another minor limitation is that the software is
DOS-based although Windows software is under development by other
users. Xp users, like me, have a couple of hoops to jump through to
access the parallel port but it's no big deal.

The accuracy, however, is lab quality and is comparable to commercial
network analyzers costing tens to hundreds of $K like I used to use,
although it's achieved at the expense of measurement speed.

Also see:

http://groups.yahoo.com/group/N2PK-VNA/

A higher cost alternative with much reduced dynamic range is here:

http://radio.tentec.com/Amateur/vna

4544. Re: 28mhz ham radio best keep secret.not any more .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 18:19:44 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <s3C2e.8544$vL3.6499@bignews4.bellsouth.net>
Source record: 79939

"H J" <ts440@webtv.net> wrote in message
news:18504-42478084-118@storefull-3275.bay.webtv.net...
> by the way if you wanna be a free trucker go with the best volvo lol i
> will by a kw.or pete. next time i see you radio police cops
> trying to get my tag number i may have to go to jail but i will make dam
> shure that wil be your last number you get. just think 80.000lbs runing
> you off the road

That's just it.....you will never know it Uh, until you get the
registered letter from Gettysburg, PA. "Dear sir, Evidence before the
Commission that you have been transmitting on 28.xxx MHZ. Please be advised
that such operation requires an FCC license. Penalties may be asessed of up
to $10,000 per occurance, or a year in jail.
You are requested to call me,....., at 717-338-XXXX to discuss
this matter".

Then go ahead and ignore the letter.

(they don't HAVE to have your tag #)

J

>

4545. Re: Different VLF antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 18:20:26 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <K5C2e.25757$wL6.22807@trnddc03>
Source record: 79940

"Jack Painter" <223bthp@cox.net> wrote in message
news:4zA2e.72452$7z6.65415@lakeread04...
> "Bill Ogden" <wogden@attglobal.net> wrote
>> I have one of the MFJ "atomic" clocks in my basement shack (in New York)
> It
>> will not pick up the WWV signal in the basement, but does fine when
> upstairs
>> and placed in a vertical position. There is no external antenna
>> connector---that would make things too easy. Is there an accepted way to
>> connect an external antenna? Any experience with external antennas on
> these
>> things? (This should be a very common problem!)
>>
>> I have not taken it apart yet -- sometimes such things are easier to take
>> apart than to put back together. I am quite willing to take it apart if
>> there is a good reason for doing so.
>>
>> Bill
>> W2WO
>>
>
> Hi Bill, if you do open the receiver, I would be very careful how much
> signal you apply, as the front end could be extremely sensitive and might
> easily be destroyed by applying an external antenna directly. You could
> try
> running an insulated antenna wire from some area that has reception, and
> strip the insulation to fasten to the back of the clock (without opening
> the
> back).
>
> If that doesn't work, here's a new hi-tech digital clock that will:
>
> http://www.lares.dti.ne.jp/~yugo/storage/monocrafts_ver3/03/index.html
>
> Best regards ;-)
>
> Jack Painter
> Virginia Beach, Virginia
>

Thanks Jack, thats a great clock.. All my buddies will be getting one of
their own soon. I already have mine.

I was thinking that Bill might be able to get his other clock to pick up
WWV by the same method you suggested. But, I was wondering if he could

tolerate having a few turns of the wire from outside wrapped around the clock on the way to a ground connection in the room.

Jerry
>

4546. Re: 28mhz ham radio best keep secret.not any more .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 18:26:28 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <M9C2e.8549$vL3.5451@bignews4.bellsouth.net>
Source record: 79941

"John Smith" <assemblywizard@gmail.com> wrote in message
news:d29q7vqmk1@domitilla.aioe.org...
>I answer to a much higher power first, then to my fellow citizens who ARE
> the gov't--I answer to no one else... I am your best friend when you are
> in
> trouble and seek someone to help you assure your unalienable rights--I
> attempt to become your worst enemy if you are on the side of evil..
>
> Regards

OH! So "evil" is what YOU say it is, right? Ergo, disobeying established
law--namely Title 47 US Code--is not "evil" according to YOU, right.

That US Code is crafted to protect ALL persons, including those who are
ignorant and untrained about radio, from massive interference. So "evil" is
the legal, licensed, well-established laws governing radio and the
unlicensed, trashing, and non-essential over-powered, over-modulated,
over-tweek and peaked chicken band radios are "good", right?

Yeah, Shurrrrrrrrrrr' it is. Shurrrrr' it is!

J

>
> --
> Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw
> aboot speel-checkin it fer me?
>
>
> "Clarence_A" <no@No.com> wrote in message
> news:xWY1e.2518$FN4.1249@newssvr21.news.prodigy.com...
>>
>> "John Smith" <assemblywizard@gmail.com> wrote in message
>> news:2eY1e.9$lO6.2608169@news.sisna.com...
>>> While I don't support people who threaten harm to others,
>> neither do I
>>> respect the "I am going to tell the teacher" types.
>>
>> It is the duty of every citizen to report crime when it is
>> witnessed!
>> There is no teacher here, just the American Justice system!
>>
>>
>>
>
>

4547. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 18:29:39 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <McC2e.8550$vL3.4853@bignews4.bellsouth.net>
Source record: 79942

"John Smith" <assemblywizard@gmail.com> wrote in message
news:d2acn1$4u2$1@domitilla.aioe.org...
> May the truck which is carrying you toilet paper fail to arrive!!!! <grin>
>
> Regards

Maybe they'll put in on steam trains! LOL!

J

>
> --
> Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw
> aboot speel-checkin it fer me?
>
>
> "Russ" <carlzomer@hotmail.com> wrote in message
> news:si9h41p1cn76gu657r9652iq1jab37iaqk@4ax.com...
>> On Sun, 27 Mar 2005 19:48:52 -0800, Just�n K�se
>> <chupacabra@operamail.com> wrote:
>>
>>>In Message-ID:<e8ue41dvsmb5pu6mroglbq3q49pu1c5a55@4ax.com> posted on
>>>Mon, 28 Mar 2005 03:30:37 GMT, Russ wrote:
>>>
>>>>Of course, as a ham, I also despise freebanders and hope they get
>>>>caught and fined - big time.
>>>
>>>You'd rather them bootlegging in the ham bands?
>>>Like a public toilet in the park, sure it's nasty, but better than
>>>shitting everywhere, and some folk are gonna communicate no matter where
>>>the end up doing it.
>>
>> I've seen some non-sequitors in my time but this one is in the top
>> ten.
>>
>> I'd rather they kept to the CB and 4 watts. I'd rather they didn't
>> use amps. I hope they get caught and fined out of business. I pray
>> that we as a nation can throw off the chains of corruption that have
>> us enslaved and I hope that the motor freight industry finally faces
>> traffic enforcement like all of the rest of us. The motor freight
>> industry is a waste of fuel and a hazard to other users of the public
>> roads.
>>
>> Does that clarify my position?

>>
>> Russ
>
>

4548. Re: Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 18:42:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <glsl41huc893d637u8ac4856k4o7dnm62n@4ax.com>
Source record: 79943

On Wed, 30 Mar 2005 11:15:41 -0700, Wes Stewart <n7ws_@*yahoo.com>
wrote:

>This is the greatest thing since sliced bread.

Hi Wes,

I can think of no greater commendation from an authority. Thanx for
the insights offered.

73's
Richard Clark, KB7QHC

4549. Re: Circular Parasitic

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 19:10:56 UTC
From: zzzpk_pkearn_class_a@multi_band_cb_is_here.eircom.es.it.net
Message-ID: <424af8c2.521542@news.iol.ie>
Source record: 79944

"Asimov" <Asimov@-removethis-bbs.juxtaposition.dynip.com> wrote:

: Hi,
:
: Just wondering what adding horizontal parasitics to a UHF loop does?
:

i suggest you look for the experiments
of the "OHF-GROUP MUNICH" or DJ9HO

There is a variation of the Quad where a mesh is placed behind a
circular driven element and optional horizontal elements are placed
in front.

There is a book published showing their builds
and the results measured n dB's comparing each variation.
i dont know the name of the book though.
It was published in English as well.

4550. Re: 28mhz ham radio read this what i think .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 19:13:21 UTC
From: dplatt@radagast.org
Message-ID: <114luihf6sro33e@corp.supernews.com>
Source record: 79945

In article <JSB2e.8539$vL3.7193@bignews4.bellsouth.net>,
Jerry <joxendi@bellsouth.net> wrote:

>As for Amateur Radio, the bottom line reason for its existence IS emergency
>communications.

That's the first of the five "fundamental purposes" of amateur radio,
as cited in the FCC regulations (which enact the stated will of
Congress, at least in principal).

> The "hobby" aspect is what leads to experimentation,
>invention, and communications innovation.

That's cited as the second fundamental purpose. Expanding the number
of "trained operators, technicians, and electronics experts", and
promoting international goodwill are also cited as justifications.

Congress and the FCC acknowledge that amateur radio provides a value
to society, independent of any direct delivery of cash revenue to the
Government.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

4551. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 19:48:11 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <424b02d4_5@newsfeed.slurp.net>
Source record: 79946

"Richard Harrison" wrote
> ON4UN says on page 9-29 of his 1994 edition of the Low-Band DXing
> book: "Over sea-water the 5/8 wave has lost 0.8 dB of its gain already,
> the 1/4-wave only 0.4 dB." (It`s less than one dB).

I think you should question that conclusion. Sea water (or any path of fixed parameters) attenuates every groundwave by the same decibel amount for the same path, conditions, and frequency. For example, using the FCC curves for groundwave propagation from a radiator with 1 kW of power and 120 1/4-wave radials, over a seawater (only) path at 1MHz...

- a 1/4-wave vertical produces a field of 190 mV/m at 1 mile,
and 85 mV/m at 2 miles.
- a 5/8-wave vertical produces a field of 274 mV/m at 1 mile,
and 137 mV/m at 2 miles.

This is as expected. Doubling the distance reduces field strength by 6 dB in each case. The absolute value of the groundwave signal has no bearing on the percentage of it that is lost as it propagates.

> Even a disappearingly small radiator produces radiation less than 1/2 dB
> weaker than a 1/2-wave dipole, or a 1/4-wave vertical. In lossless
> antennas, the only difference in radiated signal between the full length
> antenna and a too-short antenna comes from the slight difference in
> their patterns.

The difference in peak gain between an isotropic radiator and a reference dipole in free space is 2.15 dB. Practical antennas in real-world applications can show greater than 0.5 dB losses for shortened radiators. In my example above, the 1/4-wave radiator would need about 2 kW of input power to produce the same field as the 5/8-wave radiator with 1 kW, over the same path -- which is a 3 dB ratio.

> In 1949, I worked in a transmitting plant where two stations, KPRC, 950
> KHz, and KXYZ, 1320 KHz, shared the same transmittinng tower. Both
> stations had identical RCA 5-C, 5 KW transmitters. Regional coverage was
> almost identical despite many more degrees in the tower at 1320 KHz than
> at 950 KHz.

If the tower was 90 degrees at 950 kHz it would have been 125 degrees at 1320 kHz. The FCC efficiency for 90 degree towers is 190 mV/m at 1 mile for 1 kW, and about 210 mV/m for 125 degree radiators. So the 1320 kHz signal was launched with a greater groundwave, but that advantage would be lost as the signal propagated over whatever the ground conditions are for the path (higher freqs have greater losses). Using the FCC curves and a conductivity of 8 mS/m, the 5 mV/m contour should be about 35.5 miles away for the 5kW

950 kHz station, and about 27.5 miles away for the 5kW 1320 kHz station.
But close in probably few would know the difference.

> Bill Orr writes on page 78 of "Vertical Antennas":
> "A helix length of about .05 wavelength or more provides good results
> as a substitute for a full size quarter wavelength vertical antenna."

Was 0.05 lambda the pitch of the helix? If so, how many turns? How were
the two installed? How were the antennas oriented, and In which direction
from the antennas was he comparing them?

+ + +

And thanks for some serious comments on this subject.

RF

4552. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 19:55:09 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <424b0476_4@newsfeed.slurp.net>
Source record: 79947

"Richard Clark" wrote:
>> One's word is insufficient -- even if it comes from you
>> and/or Richard Clark.

> And I presume you being the arbiter of what is right, then render
> authority to make this citation sufficient to be proof of your
> statement? :-)

Yes, you do presume. Your primary education should have provided you with the concept of proving and supporting your work; I merely referred to it.

Experience here shows that you will claim whatever you want, and supply no technical justification for it. That's up to you, but as you see by responses here, it isn't earning you very much respect from others.

RF

4553. Re: 28mhz ham radio read this what i think .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 20:04:20 UTC
From: Michael Coslo <mjc5@enoughalready.psu.edu>
Message-ID: <d2f0o4$r6o$1@f04n12.cac.psu.edu>
Source record: 79948

Tom Ring wrote:

> Mike Coslo wrote:
>
>> jcooper874@webtv.net wrote:
>>
>>> so what is more inportant in life not your hobby most people put there
>>> radio hobby before,god and there family that is sad .they will drive all
>>> night to go to a hamfest but when it comes time for a family event o i
>>> cant make it heard it to many times on the radio waves.
>>> so i guess the ups or fedex truck did not bring you that new hf rig so
>>> next time you pick it up stop picking on truckers.
>>
>>
>>
>> Truckers should be allowed to do anything they darn well please.
>
>
> Well, let's hope that the idiots they are continue to drive above the
> speed limit, ignore safety laws, cook the books, and kill lots of
> innocent citizens. They seem to like that life, and we, as normal
> humans should not deny them it.

Hey! That trucker might be delivering our coffins! 8^)

4554. Re: Putting up a small mast, need the basics

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 20:17:34 UTC
From: richardharrison@webtv.net
Message-ID: <1033-424B095E-76@storefull-3253.bay.webtv.net>
Source record: 79949

Leonard Martin wrote:
"But how do I create a base for this thing?"

Best source of information is usually the supplier of the "thing". He has incentive as it helps sales to show you, the customer, how to use the product to your satisfaction. Telescoping fiberglass masts especially need detailed instructions due to novelty and complexity.Contact the manufacturer if the seller won`t help. He may respond to an e-mail. They should show you how to make and place good concrete.

Rohn Towers, for example, has published books on how to choose and use their products.

The all-purpose source of antenna information, "The ARRL Antenna Book" has in my 19th edition, tower bases on page 22-12. Unfortunately they don`t tell you how to make good concrete. You need a mix rich in cement (a 6-sack mix) and nearly as dry as you can mix it and be sure that it`s just damp enough for all the cement to react sooner or later. You place concrete, rather than pour it. It`s worth reading the book anyway.

Best regards, Richard Harrison, KB5WZI

4555. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 20:23:57 UTC
From: clvrmnky <clvrmnky-uunet@coldmail.com.invalid>
Message-ID: <xVD2e.96081$vO1.591867@nnrp1.uunet.ca>
Source record: 79952

On 30/03/2005 10:34 AM, Tom Ring wrote:
> Richard Clark wrote:
>
>> On Wed, 30 Mar 2005 07:09:17 -0600, Tom Ring <news0002@taring.org>
>> wrote:
[...]
>> Combat? I suppose you are fishing for the point award answers.
>> In Order:
>> Mr. Natural,
>> Flakey Foont.
>
> Yes, combat - advice given to troops going to fight on the islands of
> the Pacific. And I must have forgotten the re-use by Crumb; I used to
> have all of them, way back when. I liked the Fabulous Furry Freak
> Brothers better.
>
I simply cannot resist:

"Antennas will get you through times of no propagation better than
propagation will get you through times of no antennas."

I'll admit that I've lost the plot to this thread. Although, I've
picked up some interesting pointers on antenna design with respect to
electrical length. I really need to pick up a copy of the Terman book,
if only to read up on some of the references I've seen here.

At least it will give me a reason to use my erstwhile maths skills for
good, instead of for evil.

4556. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 20:28:44 UTC
From: Tom Ring <news0002@taring.org>
Message-ID: <424b0bfc$0$3703$39cecf19@news.twtelecom.net>
Source record: 79951

clvrmnky wrote:

>> Yes, combat - advice given to troops going to fight on the islands of
>> the Pacific. And I must have forgotten the re-use by Crumb; I used to
>> have all of them, way back when. I liked the Fabulous Furry Freak
>> Brothers better.
>>
> I simply cannot resist:
>
> "Antennas will get you through times of no propagation better than
> propagation will get you through times of no antennas."
>

I was going to use the original of that one, but decided I shouldn't. I
like your version a lot.

tom
K0TAR

4557. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 20:28:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <am1m419m1e0ea3524vpbuhqmjp5sh4qsnr@4ax.com>
Source record: 79950

On Wed, 30 Mar 2005 13:55:09 -0600, "Richard Fry" <rfry@adams.net>
wrote:

>That's up to you, but as you see by
>responses here, it isn't earning you very much respect from others.

Hi OM,

I will concede the post of Beauty Queen to your overwhelming lead.
Tears will stain my pillow tonight. :-(

However much you may pine away for technical discussion, you balance
that with the relish to gust on with personalities. Clearly your
contest but no points for content nor style. Careful, there are
others eyeing that crown you seek.

I posed a question about pop music and antennas, both, given you have
abandoned the topic long ago. This in itself merely underlines how
inconsequential its outcome was. The vacuum of discussion along any
of those lines portends more banal gossip. I shouldn't await any
surprising development in your writing skills; but I'm an optimist and
look forward to that slight glimmer of talent that goes beyond the
swim suit competition.

73's
Richard Clark, KB7QHC

4558. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 20:34:58 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <424b0dca_5@newsfeed.slurp.net>
Source record: 79954

"Richard Clark" wrote >
> I will concede...

Let us all hope so.

RF

4559. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 20:35:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <t13m41tkh0379di5ajnlenb3nu32f04v1k@4ax.com>
Source record: 79953

On Wed, 30 Mar 2005 14:08:33 -0600, "Richard Fry" <rfry@adams.net>
wrote:

>"Richard Clark" wrote:
>
>Drivel not worth serious consideration.

Hi OM,

The sieve succeeded. We can eliminate popular music as serious
consideration from your vast repertoire of experience. It appears you
are somewhat constrained on the topic of Polaritons (Plasmons to some)
too. In the future I will try to dumb down the technical and elevate
the popular. By some accounts we would end up discussing Shakespeare
again!

73's
Richard Clark, KB7QHC

4560. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 20:45:22 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <424b103b_3@newsfeed.slurp.net>
Source record: 79955

"Richard Clark" wrote>
> In the future I will try to dumb down the technical and elevate
> the popular.

You can't dumb down your technical content much more than you already have. It's essentially zero now. And don't bother us with your "popular" rhetoric. It's only popular with you, I'm afraid.

RF

4561. Re: 28mhz ham radio read this what i think .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 21:35:23 UTC
From: cl <clfurentN@Syahoo.com>
Message-ID: <UYE2e.58674$NC6.10844@newsread1.mlpsca01.us.to.verio.net>
Source record: 79957

"Michael Coslo" <mjc5@enoughalready.psu.edu> wrote in message
news:d2f0o4$r6o$1@f04n12.cac.psu.edu...
> Tom Ring wrote:
>
>> Mike Coslo wrote:
>>
>>> jcooper874@webtv.net wrote:
>>>
>>>> so what is more inportant in life not your hobby most people put there
>>>> radio hobby before,god and there family that is sad .they will drive
>>>> all
>>>> night to go to a hamfest but when it comes time for a family event o i
>>>> cant make it heard it to many times on the radio waves.
>>>> so i guess the ups or fedex truck did not bring you that new hf rig so
>>>> next time you pick it up stop picking on truckers.
>>>
>>>
>>>
>>> Truckers should be allowed to do anything they darn well please.
>>
>>
>> Well, let's hope that the idiots they are continue to drive above the
>> speed limit, ignore safety laws, cook the books, and kill lots of
>> innocent citizens. They seem to like that life, and we, as normal humans
>> should not deny them it.
>
>
> Hey! That trucker might be delivering our coffins! 8^)
>
>

If he obeys the rules of the road as he seems to suggest he does of the FCC or shall we say a considerable lack thereof, then he won't be making deliveries long. His road will soon come to an end via his own severe injuries to cause loss of job or perhaps death if not the loss of license - beforehand. I'd still like to know how the one reply to "my" post - plonking him, suggested he was only trying to help..... Again I ask, help? WHO? Of course, that "supporter" - was also plonked. I'm not picking on anyone or group, but his logic WAS flawed. He feels because truckers do such service, they deserve to have their way. OK... what about the "bad" cops? They do a good job - usually, til they bend the rules! We wouldn't like them either. Same with politicians and so on. Bad ones don't do anyone any justice in the end, no matter how much good they've done in the start. One doesn't displace the other. Your "good deeds" do not or SHOULD NOT give you leverage to do

evil even if in your eyes, disobeying those darned FCC Rules. IF we ALL disobeyed the laws, then this country will be back to the prehistoric ages, everyone killing everyone to do their own bidding. Everyone will have to tote guns to protect themselves from everyone. Radio and TV would be total chaos... No more could you listen to or watch a favorite program, as the pirates would be bombarding them with illegal signals or splatter from such. Without rules/laws for radio, even CB/Ham, it will be useless for all, even those who intend to try to destroy it for their own good. But, they're too short sighted to see that.

cl

4562. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 21:36:44 UTC
From: Michael Coslo <mjc5@enoughalready.psu.edu>
Message-ID: <d2f65c$p68$1@f04n12.cac.psu.edu>
Source record: 79956

Richard Fry wrote:

> "Richard Clark" wrote>
>
>> In the future I will try to dumb down the technical and elevate
>> the popular.
>
> ____________
>
> You can't dumb down your technical content much more than you already
> have. It's essentially zero now. And don't bother us with your
> "popular" rhetoric. It's only popular with you, I'm afraid.

So this is what antenna expert discourase is like?

- Mike KB3EIA -

4563. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 22:17:37 UTC
From: richardharrison@webtv.net
Message-ID: <8879-424B2581-115@storefull-3251.bay.webtv.net>
Source record: 79960

Richard Fry wrote:
"Was the 0.05 lambda the pitch of the helix? If so, how many turns?"

I`ll quote Bill Orr for accuracy:
"Resonance can be established at a given frequency by the use of a short, helically-wound element (Fig. 14). Treated bamboo poles (J L`s choice), PVC plastic tubing, or fiberglass quad antenna spreaders can be used as a form on which to wind the helix. Diameter for the helix must be small in relation to length and a practical design makes use of a one inch (25,4 mm) winding form. A helix length of about .05 wavelength or more provides good results as a substitute for a full-size quarter wavelength vertical antenna.

The amount of wire required for the winding depends upon helix length and pitch (turns per inch). In general, a half-wavelength of no. 14 Formvar-coated wire is spirally wrapped on the form, with spacing approximately equal to the wire diameter. This amount of wire approximates a auarter-wave resonance"

There are helical antennas of two types. The "axial mode" invented by John D. Kraus which radiates in the direction of the coil axis and the "normal mode" helical antenna which radiates in directions perpendicular to the coil axis, as does a short straight wire. Carried to extremes, the pitch could go to zero,in which case the coil becomes a loop, or the coil is stretched out to a straight wire. The helical antenna referred to by Orr, is the normal-node helical antenna.

While the axial-mode helix is a broad-band antenna, the normal-mode helix is a high-Q antenna and has restricted bandwidth. Orr has something to say about the high-Q normal-mode helix:
"In order to prevent any high voltage discharge, a 12-ibch (30 cm) diameter wire top hat is attached to the helix. Antenna resonance can be adjusted by varying the size of the hat, or by adding a small extra inductance at the base of the antenna."

There was also a question about directive gain which often brings a surprised response. Terman is my source for directive gain. On page 871 of his 1955 edition of "Electronic and Radio Engineering" he gives the directive gain, not in decibles, of 1.5 for the directive gain of the elementary doublet. It is not isotropic. It is however infinitesimally short. In the same Table 23-1, Terman gives the gain of the full half-wave dipole as 1.64. There is precious little difference in directivity or gain, which are two sides of the same coin, more or less. Maybe Art can make a high-gain antenna of very short elements if he can just get them to take a lot of current and not waste much to loss

Best regards, Richard Harrison, KB5WZI

4564. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 22:24:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bb9m419crq1sac887jaq6rm2q4b34jibi9@4ax.com>
Source record: 79961

On Wed, 30 Mar 2005 16:36:44 -0500, Michael Coslo
<mjc5@enoughalready.psu.edu> wrote:
> So this is what antenna expert discourase is like?

Hi Mike,

No, that was abandoned long ago and an attempt to draw it back with a
novel topic of surface phonon polariton efficiency hits on antennas
was similarly abandoned as too easy (? who can tell what will lead to
a 600 entry thread?). However, the question:
"What does Do Wa Diddy mean?"
predictably blew a fuse.

73's
Richard Clark, KB7QHC

4565. Re: Insulated Wire Velocity Factor: How to . . ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 23:16:04 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <unG2e.4023$vK6.1683@bignews3.bellsouth.net>
Source record: 79959

"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:btdh41pgdsgfs3s0fcnlk919tia740e86n@4ax.com...
> On Mon, 28 Mar 2005 20:23:34 -0500, "Hal Rosser"
> <hmrosser@bellsouth.net> wrote:
>
> >or just use .95 as the VF and adjust as needed
>
> Or buy a copy of Eznec v4
> >
>
or just use .95 as the VF and adjust as needed

4566. Re: Helical wound slim jim?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 23:21:56 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <424b34f0_3@newsfeed.slurp.net>
Source record: 79958

"Richard Harrison" wrote
> Richard Fry wrote:
> "Was the 0.05 lambda the pitch of the helix? If so, how many turns?"
>
> I`ll quote Bill Orr for accuracy:
> etc

Thanks. Maybe I'll model that in NEC and see what it shows. Or did you do that already?

> While the axial-mode helix is a broad-band antenna, the normal-mode
> helix is a high-Q antenna and has restricted bandwidth.

The VSWR bandwidth of a normal-mode helix depends on its design. Below is a link to one that, with branch feed, has a bandwidth of 12 MHz in the FM broadcast band (see the text at the bottom of the first column of p 1).

http://www.dielectric.com/broadcast/brochures/DCR-M.pdf

>Terman is my source for directive gain. On page 871
> of his 1955 edition of "Electronic and Radio Engineering" he gives the
> directive gain, not in decibles, of 1.5 for the directive gain of the
> elementary doublet. It is not isotropic. It is however infinitesimally
> short. In the same Table 23-1, Terman gives the gain of the full
> half-wave dipole as 1.64.

The 1.5 and 1.64 are multipliers. Multiplying power by 1.64X is a gain of 2.15dBi, that is, 10*log(1.64).

RF

4567. Re: 28mhz ham radio best keep secret.not any more .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 23:24:55 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ezG2e.34$4w7.1297507@news.sisna.com>
Source record: 79963

Evil is easy to define, some guidelines would be:
--an evil person would lie for their own personal gain.
--an evil person would deprive another of their property.
--an evil person would deprive another of their means to earn a living.
--an evil peson would deprive another of their pursuit of happiness.
--an evil person would enjoy bodily harming another.
--an evil person would deprive another of his life.
--an evil person is generally sociopathic, and generally has no consideration for others, other than if it is in their best interests to do so.
...get the picture?

Evil leanings can be overcome with the practice of a simple ideal--do onto others as you would have them do onto you...

In other words, evil people generally have a disregard to others lives, hopes, plans, needs, wants, etc., indeed, a general disregard to another life in general, other than there own and, possibly immediate family (at best.)

However, generally people are in danger of being evil if they even hint that it is difficult to define evil--if you don't know it when you see it--there is probably a good reason why! It has been my experience that evil people are the least likely to recognize they are evil; a read of any good book on serial killers or child molesters will confirm this to you.

Regards
--
Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion, haw aboot speel-checkin it fer me?

"Jerry" <joxendi@bellsouth.net> wrote in message news:M9C2e.8549$vL3.5451@bignews4.bellsouth.net...
>
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:d29q7vqmk1@domitilla.aioe.org...
>>I answer to a much higher power first, then to my fellow citizens who ARE
>> the gov't--I answer to no one else... I am your best friend when you are
>> in
>> trouble and seek someone to help you assure your unalienable rights--I
>> attempt to become your worst enemy if you are on the side of evil..
>>
>> Regards
>
>
> OH! So "evil" is what YOU say it is, right? Ergo, disobeying established

> law--namely Title 47 US Code--is not "evil" according to YOU, right.
>
> That US Code is crafted to protect ALL persons, including those who are
> ignorant and untrained about radio, from massive interference. So "evil"
> is the legal, licensed, well-established laws governing radio and the
> unlicensed, trashing, and non-essential over-powered, over-modulated,
> over-tweek and peaked chicken band radios are "good", right?
>
> Yeah, Shurrrrrrrrrrr' it is. Shurrrrr' it is!
>
>
> J
>
>>
>> --
>> Hay, if'n ya'll cun't konstructivly partecipete in this disscusion, haw
>> aboot speel-checkin it fer me?
>>
>>
>> "Clarence_A" <no@No.com> wrote in message
>> news:xWY1e.2518$FN4.1249@newssvr21.news.prodigy.com...
>>>
>>> "John Smith" <assemblywizard@gmail.com> wrote in message
>>> news:2eY1e.9$lO6.2608169@news.sisna.com...
>>>> While I don't support people who threaten harm to others,
>>> neither do I
>>>> respect the "I am going to tell the teacher" types.
>>>
>>> It is the duty of every citizen to report crime when it is
>>> witnessed!
>>> There is no teacher here, just the American Justice system!
>>>
>>>
>>>
>>
>>
>
>

4568. Re: vlf antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 23:29:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <m8dm419gpqldpmeo9588hkulefdcosn93d@4ax.com>
Source record: 79962

On Wed, 30 Mar 2005 18:09:13 -0500, Albert <> wrote:
>>This could be an ID modulation to serve the receiver's logic. In
>>other words, correction is based upon both signal strength AND
>>modulation.
>
>I think it's even simpler than that... It could be based on the signal
>strength alone.

Hi Albert,

Given the features you've imputed to the design, transmitter drop out
(loss of AC power) would be indistinguishable from puppy border
crossings.

Or, yes, it could be signal strength alone (still argues for a simple
Amp any 'splanation considered).

Part Deux of the mysteries of the VLF is looked forward to.

73's
Richard Clark, KB7QHC

4569. Re: Insulated Wire Velocity Factor: How to . . ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-30 23:47:23 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <7fem41l54i0vfhmgi4equ8b21tvdekf5vn@4ax.com>
Source record: 79964

On Wed, 30 Mar 2005 18:16:04 -0500, "Hal Rosser"
<hmrosser@bellsouth.net> wrote:

>
>"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
>news:btdh41pgdsgfs3s0fcnlk919tia740e86n@4ax.com...
>> On Mon, 28 Mar 2005 20:23:34 -0500, "Hal Rosser"
>> <hmrosser@bellsouth.net> wrote:
>>
>> >or just use .95 as the VF and adjust as needed
>>
>> Or buy a copy of Eznec v4
>> >
>>
>or just use .95 as the VF and adjust as needed

Or use .1 and adjust as needed.

4570. Re: The Greatest News Ever!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 00:39:13 UTC
From: Randy <theplanters95@aol.com>
Message-ID: <1112229553.690345.258830@o13g2000cwo.googlegroups.com>
Source record: 79965

That is the topic of the Davinci Code - Total fiction.

4571. Re: The Greatest News Ever!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 01:19:51 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2fj7o$45a$1@domitilla.aioe.org>
Source record: 79966

Well, it is constructed of aluminum screen over a lightweight fiberglass
frame-- but a strong wind does worry me...

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion, haw
aboot speel-checkin it fer me?

"Randy" <theplanters95@aol.com> wrote in message
news:1112169200.595261.282360@l41g2000cwc.googlegroups.com...
> Do not be drunk with wine, but be filled with the Holy Spirit.
> Paraphrase of Ephesians 5:18.
>
> The size of the Ark of the Covenenant is Exodus 37:1 (NLT) Next
> Bezalel made the Ark out of acacia wood. It was 3 3/4 feet long, 2 1/4
> feet wide, and 2 1/4 feet high.
>
> Just goes to show how big your head is! :-)
>

4572. Re: 28mhz ham radio read this what i think .

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 01:21:37 UTC
From: Mike Coslo <mremovethiscoslo@adelphia.net>
Message-ID: <ENadneyQYfs8zdbfRVn-ig@adelphia.com>
Source record: 79967

cl wrote:

> "Michael Coslo" <mjc5@enoughalready.psu.edu> wrote in message
> news:d2f0o4$r6o$1@f04n12.cac.psu.edu...
>
>>Tom Ring wrote:
>>
>>
>>>Mike Coslo wrote:
>>>
>>>
>>>>jcooper874@webtv.net wrote:
>>>>
>>>>
>>>>so what is more inportant in life not your hobby most people put there
>>>>radio hobby before,god and there family that is sad .they will drive
>>>>all
>>>>night to go to a hamfest but when it comes time for a family event o i
>>>>cant make it heard it to many times on the radio waves.
>>>>so i guess the ups or fedex truck did not bring you that new hf rig so
>>>>next time you pick it up stop picking on truckers.
>>>>
>>>>
>>>>
>>>> Truckers should be allowed to do anything they darn well please.
>>>
>>>
>>>Well, let's hope that the idiots they are continue to drive above the
>>>speed limit, ignore safety laws, cook the books, and kill lots of
>>>innocent citizens. They seem to like that life, and we, as normal humans
>>>should not deny them it.
>>
>>
>>Hey! That trucker might be delivering our coffins! 8^)
>>
>>
>
>
> If he obeys the rules of the road as he seems to suggest he does of the FCC
> or shall we say a considerable lack thereof, then he won't be making
> deliveries long. His road will soon come to an end via his own severe
> injuries to cause loss of job or perhaps death if not the loss of license -
> beforehand. I'd still like to know how the one reply to "my" post - plonking
> him, suggested he was only trying to help..... Again I ask, help? WHO? Of

> course, that "supporter" - was also plonked. I'm not picking on anyone or
> group, but his logic WAS flawed. He feels because truckers do such service,
> they deserve to have their way.

Too many DO think that way. Once on I-80, I saw an event -I hesitate to call it an accident, because there was no real damage - where a truck slid sideways and blocked the road during a bad snowstorm. The truck blocked the road, so we were all stuck. Listening to the CB, I heard the story morph from what actually happened into some "4 wheeler" passed the truck and cut him off, causing him to lose control. After 10 minutes, *that* became the "official" story. Too bad that isn't what actually happened.

Always blameless, never wrong.

- Mike -

4573. Good antenna read/reference?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 01:32:18 UTC
From: Mike Coslo <mremovethiscoslo@adelphia.net>
Message-ID: <yL6dnZAsuZa8ztbfRVn-1w@adelphia.com>
Source record: 79968

I'm looking for some good antenna reference books.

What would be your sugessions?

I'm a somewhat intelligent person, and looking for something good. I'm not afraid of equations, but would prefer to start with something absorbable to start with. Does such literature exist?

- Mike KB3EIA -

4574. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 01:45:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2fn9v$6ap$1@domitilla.aioe.org>
Source record: 79970

Ok, back to reality people!
For the "Mad Max'ers" out there, let's say the big one has hit, power and phone lines are down....
Guess what, the truckers are still communicating...
Guess what, they can link the nation together because there are tons of them everywhere (not to mention the CB non-truckers/mobile/base stations out there!)
Guess what, there radios use the 11 meter band, line of sight, ground wave and skip are all a phenomenon of this frequency!!!
Guess what? There are MILLIONS of CB radios out there!!!
Guess what? Antennas for this frequency are a snap to construct!
Guess what, some genius sets up a plan to use this "hidden" web to get things going! He is deemed a genius by the government-they wonder why they didn't think of this before!

Now, look over at the hams--there are a handful...

The price of living in a fantasy world, oblivious to the real world, is that others tend to mock and laugh at you...

Regards
--
Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion, haw aboot speel-checkin it fer me?

"H J" <ts440@webtv.net> wrote in message
news:5557-4246894E-4@storefull-3277.bay.webtv.net...
> the band we truckers,took over we dont need big hf radios like keenwood
> etc.we use low cost radios with big power.also the high power black
> radio people are makeing there way up 28hz.the new super bowl .we
> black,white folks are meeting togeter.untiy day is here on 28mhz
>

4575. Re: Good antenna read/reference?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 01:57:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <chlm415k1s16h5he774r629fp25lbi03ve@4ax.com>
Source record: 79969

On Wed, 30 Mar 2005 20:32:18 -0500, Mike Coslo
<mremovethiscoslo@adelphia.net> wrote:

>I'm looking for some good antenna reference books.
>
> What would be your sugessions?

Hi Mike,

At least three of us have access to Bailey's "TV and other Receiving
Antennas." It is exceptionally readable and covers propagation beyond
the usual glazed-eyes-in-the-headlights attention to TOA.

3 copies available at:
http://www.alibris.com/
but flabbergasts me that the burden runs from $30 to $187 for this
volume printed in 1950. Or try:
http://www.bookfinder.com/search/?author=&title=TV+and+other+Receiving+Antennas&submit=Beg
in+Search&new_used=*&currency=USD&mode=basic&st=sr&ac=qr

Amazon is usually quite useless for these older titles.

73's
Richard Clark, KB7QHC

4576. Anyone have Ham Radio Mags with K2BT articles?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 03:01:57 UTC
From: DOUGLAS SNOWDEN <SNOWDEN@peoplepc.com>
Message-ID: <FKJ2e.9224$z.1288@newsread2.news.atl.earthlink.net>
Source record: 79971

Looking for magazines from the late seventies (I think)
that have K2BT articles on phasing verticles, measurements, etc. I would pay
for the mags or copies
of the articles.

TNX Doug N4IJ

.

4577. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 03:08:52 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <xPJ2e.9056$vL3.2715@bignews4.bellsouth.net>
Source record: 79972

"John Smith" <assemblywizard@gmail.com> wrote in message
news:d2fn9v$6ap$1@domitilla.aioe.org...
> Ok, back to reality people!
> For the "Mad Max'ers" out there, let's say the big one has hit, power and
> phone lines are down....
> Guess what, the truckers are still communicating...
> Guess what, they can link the nation together because there are tons of
> them
> everywhere (not to mention the CB non-truckers/mobile/base stations out
> there!)
> Guess what, there radios use the 11 meter band, line of sight, ground wave
> and skip are all a phenomenon of this frequency!!!
> Guess what? There are MILLIONS of CB radios out there!!!
> Guess what? Antennas for this frequency are a snap to construct!
> Guess what, some genius sets up a plan to use this "hidden" web to get
> things going! He is deemed a genius by the government-they wonder why
> they
> didn't think of this before!
>
> Now, look over at the hams--there are a handful...
>
> The price of living in a fantasy world, oblivious to the real world, is
> that
> others tend to mock and laugh at you...
>

And while your trucker friends are screaming "HOW "BOUCHA THAR, YUH GOTTA AN
OLE COPY THAR, WE TRYIN' THAR, MERCY SAKES THAR"
And if the 27 Megs band is dead? Silence..except for the mishmash of
truckers jamming each other with their "leenyars".

While those hams just move down to 24, 21, 18, 10, 7,
5, 3.8 MHZ and pass the traffic for EOC and FEMA or MARS.

CB radio is a hodgepodge of mishmash thrown together, peeked and tweeked,
squeaked and beeped ,splattering trash that couldn't effectively move radio
traffic if it smacked them in the face! They wouldn't know what to do with
it if they tried. Ha! They'd just get into a king of the hill battle trying
to key over one another!

Traffic handling in a national emergency is not just a matter of having
'them thar reddios with lotsa 'swang and far in th' war (fire in the wire),
but a matter of training and discipline. Without experience in precedence,
cataloging,
knowing what messages must be handled first, That, sir, those hams have in

abundance. It is why there are training programs within ARRL and local ham clubs. It is why Amateur Radio was awarded funds for that purpose from Homeland Security Dept. I don't see none of them thar "expert" chicken band reddio types gittin' any of that money! HAHA! Want laughter? Talk to the Emergency M

anagement folks or Homeland Security or FEMA and tell them how "valuable them chicken banders" and their reddios and leenyars are to them. See how hard they laugh at YOU! You haven't SEEN contempt until you try that.

"HOW 'BOUCHA THAR, THIS H'YAR MOONRAKER IN CENTRAL NAWTH C'LINA, WE TRYIN'! WE'S IS REDDY TO PASS SOME OF THAT EE-MER-GEN-CEE TRAFFIC THAR"

Yeah, right. Your wonderful chicken band radio is full of shit when it comes to real communications. You are dreaming, and your steering wheel and the knowledge contained within its circumference is getting smaller and smaller. Quit while you're ahead.

J

> --
> Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion,
> haw
> aboot speel-checkin it fer me?
>
>
> "H J" <ts440@webtv.net> wrote in message
> news:5557-4246894E-4@storefull-3277.bay.webtv.net...
>> the band we truckers,took over we dont need big hf radios like keenwood
>> etc.we use low cost radios with big power.also the high power black
>> radio people are makeing there way up 28hz.the new super bowl .we
>> black,white folks are meeting togeter.untiy day is here on 28mhz
>>
>
>

4578. Re: Insulated Wire Velocity Factor: How to . . ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 03:16:44 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <1112239004.157680.156500@g14g2000cwa.googlegroups.com>
Source record: 79973

Richard Clark wrote:
> On 30 Mar 2005 08:08:27 -0800, "Brian Kelly" <kelly@dvol.com> wrote:
>
> >> 2. Remove half the transmission line muffling of results by using
a
> >> field strength meter to find resonance (another reason for power);
> >
> >Same as above but with a field strength indicator? Just might work
if I
> >use a 4-digit DVM and a diode.
>
> Excellant choice (add a filter cap too with resistive load for
> averaging).

Yup.

>> 3. Find the Vf (as you put it) by derivation against a wire model
> >> (through the difference in lengths of bare wire model resonance to
> >> real wire resonance);
> >
> >That would seem to work but I'd expect to still have the flat curves
> >because of the coax losses.
>
> Hi Brian,
>
> Actually, by using the FSM you entirely remove the transmission line
> as disturbance to accurate response readings. Those come from the
> external reading which interprets all power being applied AT the
> antenna junction. However, it imposes upon you that you be
scrupulous
> about achieving the same drive levels at all the intermediate
> frequencies across the swept band. If you do that, then the
> transmission line characteristics for the drive going up to the
> antenna junction fall out too.

"Eureka". You're right. This is the way to go. Or at least to try.

> Careful drive monitoring, and careful response monitoring render the
> transmission line transparent to the measurement. Thus
response/drive
> is the antenna characteristic. Define one point's SWR, and you can
> cast that into the suite of readings for a swept SWR curve. Take
care
> in that "one" SWR determination to anticipate the SWR lowering effect
> of transmission line loss.

Since coax losses don't vary much if at all over any of the individual HF ham bands a decent inline wattmeter with maybe a 4 inch scale should allow me to maintain a constant power output over the sweep.

> Then you do the same thing in software, and tailor the characteristic
> insulation thickness to match your measurements. Having achieved
> that, then you have your standard insulation. This does not give you
> Vf until you then remove that virtual insulation and find the native,
> bare wire resonance.

Agreed.

> This last step is satisfying (it answers your
> question as to Vf), but the step before is more useful because you
can
> model other antennas from that standard.

That's what I need. It'll make a worthwhile weekend project which, if successful, should result in less futzing around with the cutters and the soldering iron up the tower. I'll also compare the experimental results of the bare wire sweeps to the predictions given by the modeler and "calibrate" the modeler in this respect too. Might lead me to my own real world ground condx vs. the generic "real ground" in the modeler which is another big source of modeling non-truths.

> 73's
> Richard Clark, KB7QHC

w3rv

4579. Re: The Greatest News Ever!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 03:41:55 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <424b7233$1_1@127.0.0.1>
Source record: 79974

Randy wrote:
> That is the topic of the Davinci Code - Total fiction.

Is "The Gospel of Mary" total fiction?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4580. Re: Good antenna read/reference?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 03:49:31 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <424b73fa$1_2@127.0.0.1>
Source record: 79825

Mike Coslo wrote:

> I'm looking for some good antenna reference books.
>
> What would be your sugessions?
>
> I'm a somewhat intelligent person, and looking for something good.
> I'm not afraid of equations, but would prefer to start with something
> absorbable to start with. Does such literature exist?
>
> - Mike KB3EIA -

I'm sure you have heard of the ARRL Antenna Book also available on
CD. I personally am quite fond of "Antennas For All Applications",
3rd edition, by Kraus and Marhefka. "Antenna Theory" by Balanis is
a very good reference and also my AZ State antennas course textbook
taught by Dr. Balanis himself.
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4581. Re: The Greatest News Ever!

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 03:55:50 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <424b7575$1_1@127.0.0.1>
Source record: 79826

Cecil Moore wrote:

> Randy wrote:
>> That is the topic of the Davinci Code - Total fiction.
>
> Is "The Gospel of Mary" total fiction?

Or how about, "Holy Blood, Holy Grail"? Is that fiction?
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4582. Me and my Harley Road King

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 04:40:46 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <424b7fff$1_1@127.0.0.1>
Source record: 79827

http://www.qsl.net/w5dxp

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

4583. Re: Different VLF antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 04:41:17 UTC
From: Crazy George <munsch@atglobal.net>
Message-ID: <424b83c4_1@news1.prserv.net>
Source record: 79829

Bill:

Find some way to listen to 60 kHz. I'll bet your problem is not lack of signal, but excess of noise. Computers, any
device with a switching regulator or power supply can wipe out LF.

--
Crazy George
The attglobal.net address is a SPAM trap. Please change that part to: att<dot>biz properly formatted.
"Bill Ogden" <wogden@attglobal.net> wrote in message news:OHz2e.1051$477.712@fe11.lga...
> I have one of the MFJ "atomic" clocks in my basement shack (in New York) It
> will not pick up the WWV signal in the basement, but does fine when upstairs
> and placed in a vertical position. There is no external antenna
> connector---that would make things too easy. Is there an accepted way to
> connect an external antenna? Any experience with external antennas on these
> things? (This should be a very common problem!)
>
> I have not taken it apart yet -- sometimes such things are easier to take
> apart than to put back together. I am quite willing to take it apart if
> there is a good reason for doing so.
>
> Bill
> W2WO
>
>

4584. Re: Insulated Wire Velocity Factor: How to . . ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 04:46:03 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <eeL2e.6827$wo1.475@bignews6.bellsouth.net>
Source record: 79828

```
"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
news:7fem41l54i0vfhmgi4equ8b21tvdekf5vn@4ax.com...
> On Wed, 30 Mar 2005 18:16:04 -0500, "Hal Rosser"
> <hmrosser@bellsouth.net> wrote:
>
> >
> >"Wes Stewart" <n7ws_@*yahoo.com> wrote in message
> >news:btdh41pgdsgfs3s0fcnlk919tia740e86n@4ax.com...
> >> On Mon, 28 Mar 2005 20:23:34 -0500, "Hal Rosser"
> >> <hmrosser@bellsouth.net> wrote:
> >>
> >> >or just use .95 as the VF and adjust as needed
> >>
> >> Or buy a copy of Eznec v4
> >> >
> >>
> >or just use .95 as the VF and adjust as needed
>
> Or use .1 and adjust as needed.
>

NOW ur talkin' :-)
```

4585. Re: Good antenna read/reference?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 04:53:47 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <1112244827.819697.68900@z14g2000cwz.googlegroups.com>
Source record: 79830

Mike Coslo wrote:
> I'm looking for some good antenna reference books.
>
> What would be your sugessions?
>
> I'm a somewhat intelligent person, and looking for something good.
I'm
> not afraid of equations, but would prefer to start with something
> absorbable to start with. Does such literature exist?
>
> - Mike KB3EIA -

There is no simple response to your question Mike because the ham radio book market is flooded with antenna tomes and we all have different needs, experiences, expectations and preferances when it comes to books on technical topics.

While it's dry and a bit of a trudge take a look at the chapters on antennas in your ARRL handbook for openers. From there the Antenna Book gets into more detail. For my own purposes ON4UN's masterpiece on low-band antennas is a gotta-have. Which you might not give a hoot about. And so forth. If you haven't already done so surf:

http://www.arrl.org/catalog/?category=Antennas%2C+Transmission+Lines+%26+Propagation&words
=

and take yer pick.

w3rv

4586. Re: Good antenna read/reference?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 05:09:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2g0m1$b3k$1@domitilla.aioe.org>
Source record: 79831

When in doubt, try your local library... should at least get you started...

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion, haw
aboot speel-checkin it fer me?

"Mike Coslo" <mremovethiscoslo@adelphia.net> wrote in message
news:yL6dnZAsuZa8ztbfRVn-1w@adelphia.com...
> I'm looking for some good antenna reference books.
>
> What would be your sugessions?
>
> I'm a somewhat intelligent person, and looking for something good. I'm not
> afraid of equations, but would prefer to start with something absorbable
> to start with. Does such literature exist?
>
> - Mike KB3EIA -

4587. Re: Good antenna read/reference?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 06:02:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <114n4kd9s3epb48@corp.supernews.com>
Source record: 79832

Probably the most widely used antenna reference, for good reason, is Kraus' _Antennas_, now in its third edition. If I were limited to a single book, that would be it. You can find used first and second editions at reasonable prices, and they contain solid basic information.

A very complete reference, with deeper discussion of a wide variety of antenna types as well as a moderate amount of basic theory, is Lo and Lee's _Antenna Handbook_ (four volumes). This, however, is likely to be more than you'd want or need as a starter -- and it's relatively expensive.

And no amateur bookshelf should be without the _ARRL Antenna Book_.

Roy Lewallen, W7EL

Mike Coslo wrote:
> I'm looking for some good antenna reference books.
>
> What would be your sugessions?
>
> I'm a somewhat intelligent person, and looking for something good.
> I'm not afraid of equations, but would prefer to start with something
> absorbable to start with. Does such literature exist?
>
> - Mike KB3EIA -

4588. Re: Me and my Harley Road King

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 07:26:14 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <ft8n419e4li3esh4okph00rf17mautbo8v@4ax.com>
Source record: 79833

On Wed, 30 Mar 2005 22:40:46 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

>http://www.qsl.net/w5dxp

Hey were you in Milwaukee in 2003 for the Harley 100th party?

We couldn't get close so stayed 100 miles away until the day after
when we "camped" at the fair grounds. That's where I took this photo
of my neighbor's ride.

www.qsl.net/n7ws/Boss_Hog.jpg

I thought a big guy like you would ride something like this instead of
that wimpy Harley.

4589. Re: Insulated Wire Velocity Factor: How to . . ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 08:08:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b6bn41h25sri7ibttuutbtn09u1m4br8r5@4ax.com>
Source record: 79834

On 30 Mar 2005 19:16:44 -0800, "Brian Kelly" <kelly@dvol.com> wrote:

>Since coax losses don't vary much if at all over any of the individual
>HF ham bands a decent inline wattmeter with maybe a 4 inch scale should
>allow me to maintain a constant power output over the sweep.

Hi Brian,

I left that unsaid, expecting someone, if not you, would also come to that conclusion. It does not work across all bands, but within a band it will suffice. Also, even given the impression of accuracy that most impart to their power meters, this method demands only "relative accuracy" which can be exceptional when care is shown (try to maintain a full scale indication or at least greater than 2/3rds at some cardinal point on the scale).

At this point, one should reflect that if there is a mismatch, then power at the feed point will vary somewhat. In other words, the presumption of constant power (to subtract out the effects of the transmission line) is violated. However, as a first pass estimation, the method is still quite productive, and tightening up the method and the numbers is an exercise left to the experimenter.

73's
Richard Clark, KB7QHC

4590. Re: Insulated Wire Velocity Factor: How to . . ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 08:12:17 UTC
From: 4nec2@gmx.net
Message-ID: <ee90361b.0503310012.452d5278@posting.google.com>
Source record: 79835

"Brian Kelly" <kelly@dvol.com> wrote in message
news:<1112198907.744331.274740@g14g2000cwa.googlegroups.com>...

> I've been using Nec Win Plus which is OK but it doesn't have the the
> ability to handle velocity factors like EZNEC 4.0 can.

You could also try 4nec2 in which a provision was added (as described
by L.B. Cebik) to model insulated wires.

> The CAD program does all the tedious trig for
> me. When I have a bare-wire model which "works" in NWP I can rescale
> the physical model by 0.98 or 0.95 or whatever the Vf might be to get a
> "close enough" fully dimensioned antenna design. But I still need to
> find the Vf experimentally and we're back to square one. You fed me
> some thinking fodder, I'll try a few things per above and get there one
> way or another.

It also includes a drawing (drag and drop) style geometry editor and
you can rescale part of or the whole structure.

Arie.

4591. Re: Good antenna read/reference?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 08:14:07 UTC
From: richardharrison@webtv.net
Message-ID: <4292-424BB14F-185@storefull-3254.bay.webtv.net>
Source record: 79836

Mike Coslo wrote:
"I`m looking for some good antenna reference books."

For a radio amateur, the ARRL Antenna book is unbeatable. You already have great recommendations. I like them all.

If I had only one book on antennas it would be Terman`s "Electponic and Radio Engineering" which covers not only antennas but whioh covers radio and electronics like a rug. It`s tops for keeping it simple, but not too simple, concise and accurate.

Also, I would be bereft without "Transmission Lines, Antennas, and Wave Guides" by King, Mimno, and Wing. This was a hurry-up WW-2 production to train US Armed Forces Officiers who were assumed to be a little short on prerequisites, so the authors kept it as simple as they could with no sacrifice in accuracuy. It is a gem.

Lotsa of luck in your quest for a good library. My list is by no means complete. Bibliographies in some of the listed ooks have more suggestios.

Best regards, Richard Harrison, KB5WZI

4592. Re: Good antenna read/reference?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 08:49:40 UTC
From: richardharrison@webtv.net
Message-ID: <4292-424BB9A4-187@storefull-3254.bay.webtv.net>
Source record: 79837

Mike Coslo wrote:
"I`m looking for some good antenna reference textbooks."

I was deprived of Ed Laport`s "Radio Antenna Engineering" for several decades. I was much happier when I finally got a replacement copy.
It is a marvelous combination of theory and practical applications found nowhere else.

Best regards, Richard Harrison, KB5WZI

4593. HELICAL3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 10:31:40 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <d2gjib$5rk$1@titan.btinternet.com>
Source record: 79838

For design of short, vertical, antennas, with helical loading coils of
many turns, download program

HELICAL3

from website below.

Such antennas are suitable for mobile operation on the 160 and 80
meter bands. At higher frequencies an ordinary short loading coil
suffices.

Input/output data - height of helix, diameter of helix, number of
turns, length and diameter of loading rod or whip. Radiating
efficiency, etc.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

4594. Re: Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 12:28:46 UTC
From: Jaggy Taggy <outhouse@midcoast.com>
Message-ID: <BE715779.7A83%outhouse@midcoast.com>
Source record: 79839

On 3/30/05 2:52 AM, in article eelk4150v9ej6npoi17uvqsu971b3fef5c@4ax.com,
"Richard Clark" <kb7qhc@comcast.net> wrote:

>
> You will need a stable source capable of 1 to 10mW power. You will
> need a well shielded communications receiver to act as a detector.
> You will also need a steady hand to balance the bridge (which may be
> part of your problem with the noise bridge). Nulls are often more
> than 100 dB deep. If you lack sufficient shielding for the detector,
> this will degrade the nulls considerably. If you lack stability, you
> will never find the null.

Richard, what do you mean by "If you lack sufficient shielding for the
detector, this will degrade the nulls considerably."

The source is the built in noise generator in the bridge. My detector is my
Icom communications receiver, connected via coax to the bridge.
What additional shielding would be needed??

UWE

4595. Re: 31 Mix Beads RFI Suppression (Ignition)?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 13:05:54 UTC
From: hasan schiers <schiers@netins.net>
Message-ID: <d2gsk2$d41$1@news.netins.net>
Source record: 79840

Hi Richard,

(BTW, I was looking to reduce ignition noise to my D700 in the car, specifically in the VHF region). I have replaced the plugs, cap and rotor. I haven't replaced the ignition wires. I was thinking "chokes" on the wires might do it, but after thinking about it more, and relocating the articles on RFI/EMI suppression wires, it was apparent that no snap-on chokes would work as well as the wires noted below by magnecor.

I now remember (from 10 years ago) what the ignition wires were that were claimed by hams as the best for reducing ignition noise generation. "Magnecor"...as in magnecor.com.

That is what I put in, and they are getting pretty old , 10 years and 198K miles on the car/wires.

Instead of using the 31 mix chokes, I think my money would be better spent getting another set of wires.

In the end, perhaps the only thing that would have helped would have been to buy enough of the snap-on chokes to cover the wires completely, which makes no economic sense.

To the "gentleman" who suggested (without offering any information or responses to my questions) that I buy the chokes, put them on and report back...sorry, I'm not providing information, I'm soliciting it. Your response didn't provide any info, didn't bother to respond to ANY of the questions, and just contained a rather pointless recommendation....if you didn't understand that I wanted someone who "knew" or had thought about the problem to offer an opinion as to the efficacy of 31 mix chokes in this application BEFORE I bothered to buy them, you missed a rather obvious point....duh! This "gentleman" also provides no real name, and no amateur callsign. The typical smart-ass troll.

Thanks to the others (on-list and private), including Richard, who responded. One of the responses led me back to the source of my ten year old wires and how to replace them...I had no idea if the company was still in business or not, nor could I remember their name. They are still there, and I'm going to order a wire-set this morning.

73,

p.s., I might add for learning sake, several of your answers, Richard, beg a "why not". (As in, why doesn't it matter which end, distributor or plug would be more effective, Stacking chokes vs. spacing them out along the wires doesn't matter? Why not?)

Your observation that most modern cars don't have ignition noise is
borderlline laughable for two reasons:

1. It's not true...most in fact do create quite a bit of RFI to HF radios
and some are quite problematic even at two meters.

2. I spend my spare money on radios/antennas and computers, not new
cars...which my '95 Ford Taurus with 198K miles on it testifies to. It is
very well maintained, but old. (and NOISY from an RFI/Ignition point of
view).

Thanks for taking the time to respond. (to all) 73

...hasan, N0AN

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:aell41daerbgm0lt7n5fu07ue85u5toirg@4ax.com...
> On Wed, 30 Mar 2005 06:33:36 -0600, "hasan schiers"
> <schiers@netins.net> wrote:
>
> Hi Hasan,
>
> By the numbers:
>
>>1. Where along the wire should they be placed (at the plug, at the
>>distributor, middle of wire)?
>
> Doesn't matter.
>
>>2. Should they be stacked next to each other for better effect (series
>>butted up against one another) and if so, how many, and again, where along
>>the wire?
>
> Doesn't matter.
>
>>3. How many should be used and as above, how should they be "clustered"?
>
> Until you achieve relief (you haven't described why you want to do
> this).
>
>>4. Are these likely to be significant help on either HF or VHF?
>
> By the presumption of this indicating a receiver problem with HF or
> VHF, I would offer that most (modern) cars do not display such
> problems. You could be chasing the wrong solution. However, at the
> bottom line, they could help.
>
>>5. Can anyone recommend a really good set of ignition wires for best RFI
>>suppression?
>
> Standard resistive wires. It sounds like you substituted straight
> wires for the factory set when they wore out. That is generally a
> poor choice for two reasons. One (presumably) is due to ignition

> interference with communications. The other is lowered fuel economy
> and power.
>
> The application of ferrites to straight wires is introducing resistive
> loss into the ignition current path. This is normally the job of
> resistive wire. Introducing such loss is actually a boon. The loss
> retards spark extinction (means that the spark will burn longer with a
> resistance in the path). Longer burn time means more complete
> ignition. This also means that the longer burn time equates to fewer
> HF spurious products. This is called win-win.
>
> 73's
> Richard Clark, KB7QHC

4596. Re: Me and my Harley Road King

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 13:57:08 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <424c0261$1_1@127.0.0.1>
Source record: 79841

Wes Stewart wrote:
> Hey were you in Milwaukee in 2003 for the Harley 100th party?

Nope, but I bought the 100th anniversary Road King.

> I thought a big guy like you would ride something like this instead of
> that wimpy Harley.

I considered a V-Rod but that wimpy Harley keeps
me out of trouble. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4597. Re: Me and my Harley Road King

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 14:56:09 UTC
From: Wes Stewart <n7ws_@*yahoo.com>
Message-ID: <ok3o41p2tno2mc0mlbkurapd9tqijj43o0@4ax.com>
Source record: 79842

On Thu, 31 Mar 2005 07:57:08 -0600, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Wes Stewart wrote:
>> Hey were you in Milwaukee in 2003 for the Harley 100th party?
>
>Nope, but I bought the 100th anniversary Road King.
>
>> I thought a big guy like you would ride something like this instead of
>> that wimpy Harley.
>
>I considered a V-Rod but that wimpy Harley keeps
>me out of trouble. :-)

The closest I've come to owning a murdercycle was when I owned some HD
stock. Unfortunately, I sold it way too soon.

When I was riding my former bro-in-law's big Yamaha and a car pulled
out in front of me and I laid the bike down, I decided I had all the
cycling thrills I needed for a lifetime.

I also lost two ham buddies in the same accident when they were on
their way to Sturgis one year.

Be careful.

4598. Re: Tower Info (Still Looking)

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 15:03:43 UTC
From: K7MEM <k7mem@my_nospam_realbox.com>
Message-ID: <d2h3gf$ghg7@cui1.lmms.lmco.com>
Source record: 79843

Win wrote:
> I recently purchased an old crank-up motor driven 60 foot tower that I
> would hope someone could id for me. The motor belt drives a gearbox,
> which turns the cable pulley. It has a approximately 1 foot by 18
> inch control box which has two high current relays and two glass
> contained relays. The glass-contained relays are in old 8 pin tube
> sockets.
>
> The tower, itself, is in good shape. I would like to re-build the
> control circuits and out the tower in service. Any information anyone
> can give me on this tower will be greatly appreciated. See at
> www.winlyn.us/tower.jpg.
>
> Win, w0lz
> W0lz@winlyn.us
>

It's a little difficult to tell for sure from the photo, but that
tower looks exactly like mine. The whole structure appears to be
exactly the same. It even looks like you have the same tri-bander,
stuck in the middle of the tower.

I don't have the motor on mine, but I secured a large nut on mine so
I can crank it up manually or with a socket in my portable drill.
Anyway, I don't have the data on the tower immediately available, but
I will look it up in the next few days, if you are interested. I
seem to remember that there was some information on the motor drive
unit. Not much, but there may be a manufacturer's name that would help.

This will give me a chance to try out my new scanner.

--
Martin E. Meserve - K7MEM
http://www.k7mem.com
(remove _nospam_ from my email to reply)

4599. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 15:37:54 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2h5gnaoe1@domitilla.aioe.org>
Source record: 79844

You seem to skip the "real world" and construct one from the images of your mind, with your text.
Since many "traditional jobs" have and are disappearing, you are NOT unlikely to find a notable number with BS and MS degrees driving a truck!
I have first hand knowledge of this, while I completed my masters thesis in the late 1970's I personally found it a way to add to my income (actually, it may be why I didn't starve to death!) and, an enjoyable one (well, I was smart enough to get my butt OUT of that truck!)
You may have been surprised at the intellects I was able to carry on discourse with who worked in that field.
Yanno, I even able to pick up a southern drawl and blend it with my colleagues in that field--at least verbally, "10-4 good buddy?" You might have heard me back then? (ok, I still sneak on 11 meters and talk like a damn "okie") Perhaps I was/am one of the idiots with poor verbal and written communication skills you are referring to?
In the "major event", many truckers (and yes, everyone in general) will be the true heroes. Like 911 where the common hero went wanting for recognition--the media will devote all of its coverage to such as police, firefighters and authorities--but the unsung heroes will have contributed greatly--you can bet on that.
I imagine some "glory hog(s)" who has been awaiting his chance at his 15 minutes of fame will step forward and some media correspondent will craft a story making him a superman.
But, you know that just the sheer numbers of readily available radios out there will somehow come to use.
Live in your fantasy world, too quick to dismiss the obvious but, always hope these things never come to pass...

Regards
--
Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion, haw aboot speel-checkin it fer me?

"Jerry" <joxendi@bellsouth.net> wrote in message
news:xPJ2e.9056$vL3.2715@bignews4.bellsouth.net...
>
> "John Smith" <assemblywizard@gmail.com> wrote in message
> news:d2fn9v$6ap$1@domitilla.aioe.org...
>> Ok, back to reality people!
>> For the "Mad Max'ers" out there, let's say the big one has hit, power and
>> phone lines are down....
>> Guess what, the truckers are still communicating...
>> Guess what, they can link the nation together because there are tons of
>> them
>> everywhere (not to mention the CB non-truckers/mobile/base stations out

>> there!)
>> Guess what, there radios use the 11 meter band, line of sight, ground
>> wave
>> and skip are all a phenomenon of this frequency!!!
>> Guess what? There are MILLIONS of CB radios out there!!!
>> Guess what? Antennas for this frequency are a snap to construct!
>> Guess what, some genius sets up a plan to use this "hidden" web to get
>> things going! He is deemed a genius by the government-they wonder why
>> they
>> didn't think of this before!
>>
>> Now, look over at the hams--there are a handful...
>>
>> The price of living in a fantasy world, oblivious to the real world, is
>> that
>> others tend to mock and laugh at you...
>>
>
> And while your trucker friends are screaming "HOW "BOUCHA THAR, YUH GOTTA
> AN OLE COPY THAR, WE TRYIN' THAR, MERCY SAKES THAR"
> And if the 27 Megs band is dead? Silence..except for the mishmash of
> truckers jamming each other with their "leenyars".
>
> While those hams just move down to 24, 21, 18, 10, 7,
> 5, 3.8 MHZ and pass the traffic for EOC and FEMA or MARS.
>
> CB radio is a hodgepodge of mishmash thrown together, peeked and tweeked,
> squeaked and beeped ,splattering trash that couldn't effectively move
> radio traffic if it smacked them in the face! They wouldn't know what to
> do with it if they tried. Ha! They'd just get into a king of the hill
> battle trying to key over one another!
>
> Traffic handling in a national emergency is not just a matter of having
> 'them thar reddios with lotsa 'swang and far in th' war (fire in the
> wire), but a matter of training and discipline. Without experience in
> precedence, cataloging,
> knowing what messages must be handled first, That, sir, those hams have
> in abundance. It is why there are training programs within ARRL and local
> ham clubs. It is why Amateur Radio was awarded funds for that purpose from
> Homeland Security Dept. I don't see none of them thar "expert" chicken
> band reddio types gittin' any of that money! HAHA! Want laughter? Talk
> to the Emergency M
>
> anagement folks or Homeland Security or FEMA and tell them how "valuable
> them chicken banders" and their reddios and leenyars are to them. See how
> hard they laugh at YOU! You haven't SEEN contempt until you try that.
>
> "HOW 'BOUCHA THAR, THIS H'YAR MOONRAKER IN CENTRAL NAWTH C'LINA, WE
> TRYIN'! WE'S IS REDDY TO PASS SOME OF THAT EE-MER-GEN-CEE TRAFFIC THAR"
>

> Yeah, right. Your wonderful chicken band radio is full of shit when it
> comes to real communications. You are dreaming, and your steering wheel
> and the knowledge contained within its circumference is getting smaller
> and smaller. Quit while you're ahead.
>
> J
>
>
>
>> --
>> Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion,
>> haw
>> aboot speel-checkin it fer me?
>>
>>
>> "H J" <ts440@webtv.net> wrote in message
>> news:5557-4246894E-4@storefull-3277.bay.webtv.net...
>>> the band we truckers,took over we dont need big hf radios like keenwood
>>> etc.we use low cost radios with big power.also the high power black
>>> radio people are makeing there way up 28hz.the new super bowl .we
>>> black,white folks are meeting togeter.untiy day is here on 28mhz
>>>
>>
>>
>
>

4600. Re: HELICAL3

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 15:45:03 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2h5u5$b46$1@domitilla.aioe.org>
Source record: 79845

Actually, I did investigate that application. However, a quick glance at
its' documentation led me to believe it dealt with one-quarter electrical
length antennas only.

Did I misunderstand?

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion, haw
aboot speel-checkin it fer me?

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:d2gjib$5rk$1@titan.btinternet.com...
> For design of short, vertical, antennas, with helical loading coils of
> many turns, download program
>
> HELICAL3
>
> from website below.
>
> Such antennas are suitable for mobile operation on the 160 and 80
> meter bands. At higher frequencies an ordinary short loading coil
> suffices.
>
> Input/output data - height of helix, diameter of helix, number of
> turns, length and diameter of loading rod or whip. Radiating
> efficiency, etc.
> ----
> ....
> Regards from Reg, G4FGQ
> For Free Radio Design Software go to
> http://www.btinternet.com/~g4fgq.regp
> ....
>
>

4601. Re: Me and my Harley Road King

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 16:09:19 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <424c2160$1_2@127.0.0.1>
Source record: 79846

Wes Stewart wrote:
> Be careful.

But Mom, that's no fun and so far I am immortal.
I was broad sided by a Porche in CA in the early
80's while riding my Kawasaki Z1B. I wasn't wearing
a helmet and landed on my head on the pavement.
Moral: Being hard-headed has its advantages. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= East/West-Coast Server Farms - Total Privacy via Encryption =---

4602. Re: Palomar noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 16:23:18 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cq7o419qio9us9vfhro9jglp1d7nbe42vc@4ax.com>
Source record: 79847

On Thu, 31 Mar 2005 12:28:46 GMT, Jaggy Taggy <outhouse@midcoast.com>
wrote:
>Richard, what do you mean by "If you lack sufficient shielding for the
>detector, this will degrade the nulls considerably."
>
>The source is the built in noise generator in the bridge. My detector is my
>Icom communications receiver, connected via coax to the bridge.
>What additional shielding would be needed??

Hi Uwe,

This is entirely revealed by practice. Simply answer how wide is the null? If you don't know how wide it should be, then chances are you don't know how well your system is connected. As I pointed out elsewhere, I can obtain nulls that are 100dB deep. This is one simple measure of width; although not in terms of width, it is very distinctive and correlates with the same consideration. Far more frequently my nulls are 120+dB deep (down into the receiver noise from a signal level of 1mW).

The problem with a noise bridge is power. To observe that same depth of null requires a noise source of several Watts (not sure of the actual figure now, but retail sources don't come close). If you balance your bridge and you run out of signal before you run out of balance, then your settings are at the wrong Z. What appeared to be a balanced null was actually the lack of source power to indicate you were off-set. For a noise bridge, you have to keep adjusting even when the noise seems to have been nulled. You keep going until you find the noise signal climbing again, and then split the difference between the two edges of the silent span of readings. If that is too wide, you could have quite a time of this.

Now, consider if your shielding is not tight and you could hear your source along a path that was not through the bridge = you never hear a null, or you get a very very broad null that still contains noise/signal. A receiver's shielding that is good to -100 to -120dB is exceptional. In our hobby it is not exactly commonplace, but it is found in good equipment. However, how good your equipment is can only be determined through actual testing as shielding is also a function of grounding, and there everyone is an expert but few are well grounded.

73's
Richard Clark, KB7QHC

4603. Re: 31 Mix Beads RFI Suppression (Ignition)?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 16:49:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pc9o41p9ue5sdv3lqq9upr2qa7hq8sje20@4ax.com>
Source record: 79848

On Thu, 31 Mar 2005 07:05:54 -0600, "hasan schiers"
<schiers@netins.net> wrote:

>p.s., I might add for learning sake, several of your answers, Richard, beg a
>"why not". (As in, why doesn't it matter which end, distributor or plug
>would be more effective, Stacking chokes vs. spacing them out along the
>wires doesn't matter? Why not?)

Hi Hasan,

Because the placement is along a very short (in terms of wavelength)
current path. A current path snubbed anywhere is snubbed everywhere.

>Your observation that most modern cars don't have ignition noise is
>borderlline laughable for two reasons:

Those reasons are what we call anecdotal evidence. Anecdotal evidence
may be true to the sufferer, but that does not make it universal.
More the problem, the anecdotal evidence is likely another problem
being described and the evidence misapplied.

The most common source of noise is not the engine electronics
(although this is literally the source); it is in the failure of
grounding and orientation of lead paths. When you look at a car, you
see one huge metal can and think it must be uniformly conducting. The
sad fact is that it is not. Doors and hood and trunk lid are very
common coupling points to the interior as they present very large
capacitive links to the electronics inside. Some manufacturers insure
they are bonded to the frame, others do not. This is all commonplace
"taken for granted" grounding that does not exist and we get
occasional reports of extremely frustrated experimenters who struggle
to only find the hood (the last thing tested) was the culprit.

What keeps automotive electronics (much less their computers and their
own radios) going in the face of this haphazard grounding is that they
have long figured out how to reference all their equipment to the same
potential. This is your problem and you have not found that spot.

That spot appears to be elevated with respect to where you chose to
ground your equipment (or you chose several points and you suffer
ground loops). The noise is being injected by conduction and it is
very hard to snub currents traveling along frame and sheet metal.

If this problem emerged over time, and is found to be ignition wire
specific, then you have also described the same issue. Those wires
were coupling into a path between your ground and the system common.
A simple test:

Does your car's AM/FM radio reveal the same noise on your gear?

Manufacturers make sure this never happens long before they engineer another tenth gallon per mile savings into your car. The difference in the sensitivity between your gear and the car's FM is not very large (if at all).

73's
Richard Clark, KB7QHC

4604. M2 2M SSB 9element / 15ft boom installed - Photos

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 18:01:57 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <114oep6jiin6920@news.supernews.com>
Source record: 79849
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment

This antenna went together in about an hour (I took my time) and it plays beautifully at 35ft with a 1.2:1 swr. I also have an M2 Horizontal Loop at 40ft and of course the beam out performs the omni loop but the loop is my main listening antenna for 2M SSB. Also have a Ringo Ranger II up at about 30ft for repeaters and fm mobiles. Pics of all 3 and tech data links at

1. http://www.ad5th.com/VHF.html One of my first contacts was EM52>Em41 about 160 miles....during a tornado watch!

73 / DX

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

4605. Re: M2 2M SSB 9element / 15ft boom installed - Photos

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 18:23:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6tfo419vlqb88u07l6ljdre1avi3kigup8@4ax.com>
Source record: 79850
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Thu, 31 Mar 2005 12:01:57 -0600, "Charlie" <charlie@earthlink.com>
wrote:

>1. http://www.ad5th.com/VHF.html One of my first contacts was EM52>Em41
>about 160 miles....during a tornado watch!

Hi Charlie,

Good set of pictures. You used the night sky and the day's clouds to
good advantage to give contrast. The moon shot was a nice touch too.

I especially like using the last 4 inches of transmission line used as
mast.

73's
Richard Clark, KB7QHC

4606. Sharing one antenna among two transceivers?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 18:44:17 UTC
From: "Chuck W." <cwyatt@w3minds.com>
Message-ID: <1112294657.832204.321420@l41g2000cwc.googlegroups.com>
Source record: 79851

I'm wondering what is the best practice for connecting two transceivers to a single transmission line/antenna, or even if it is advisable to do?

What would be great is if there was a switch that would share the line between the 2 transceivers when no outgoing RF is present, and switch everything to one rig when RF is sensed. However, I haven't seen a product that does this!

thanks for any thoughts,

73,

Chuck
KB5GC

4607. local citgo store.selling export cb.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 19:46:11 UTC
From: astron345@webtv.net
Message-ID: <25427-424C5383-6@storefull-3276.bay.webtv.net>
Source record: 79852

i live in a small town in al..they still have two mini magnum 10 meter am radio mobile for sale 100$ its said on the box 15 watts.of power i need your help to sare this guy caue lol he is the mayor of the town .i will not give the number to the store in the newsgroup only threw email

4608. Re: Sharing one antenna among two transceivers?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 19:59:57 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <te1uh2-86t.ln1@p400bob.lse.com.au>
Source record: 79853

Hi Chuck

In the commercial world usually a circulator is used. It is in fact quite common as the cost of setting up another tower sited antenna is very high.

The big problem with sensing RF is that you are reacting to its presence. Be better to run it from the PTT cct of the TX. I have seen some build it yourself articles for high power PIN diode switches out there. I dont have any URLs but the one I remember was on the LINRAD site - or just do a google on "high power PIN".

Cheers Bob VK2YQA

Chuck W. wrote:
> I'm wondering what is the best practice for connecting two transceivers
> to a single transmission line/antenna, or even if it is advisable to
> do?

4609. Re: Sharing one antenna among two transceivers?

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 20:22:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mqmo41dltdnvk451ta86caevbor27lv26s@4ax.com>
Source record: 79854

On Fri, 01 Apr 2005 05:59:57 +1000, Bob Bob <bcnntp@optusnet.com.au>
wrote:

>In the commercial world usually a circulator is used.

Hi Bob,

This would separate the two Transceivers, but they would both be deaf.

Circulators are used in frequency split repeaters where the transmit
path and receive path and frequency are different (and further loaded
with cavity filters).

73's
Richard Clark, KB7QHC

4610. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 20:26:23 UTC
From: TJ <tjtrucker@hotmail.com>
Message-ID: <P1Z2e.864278$8l.567848@pd7tw1no>
Source record: 79855

It's amazing how just one comment by a single person got this group into an uproar. I really think that the public in general has a romance with the life of the trucker brought on by the movie and media hype. Truckers are just ordinary people who do an thankless job of moving just about everything there is in North America to and from wholesalers to retailers. Over the years the average trucker's education level has gone from grade school drop outs to men and women holding degrees of various ranges of education. Over the years I've come to know a rather large group of people from a very large slice of various levels of education, similar to that of most truckers. I hold two degrees and a commercial Radio Telephone license, but for some reason I ended up returning to "trucking" all the time. And all the trucks I've driven, over 1 million miles, I've always had my amateur radio(s) and a CB. Each had it's own nicessity and each one had it's own language. On one radio I as a respected amateur radio operator who drove truck, on the other I was just another trucker looking for a traffic report.
Oh, for those who are of the illusion that truckers are the cause of all the terrible accident on the highways, well the only person your fooling is yourself. To get the facts do a little research and you will find that four wheeled vehicles cause more accidents than any other vehicle. Trucks seem to fall into the same catigory as motorcycles do in the public's perseption of the cause of accidents. After you have done your research you will find that both trucks and motorcycles end of up being a very low percentage of the cause of accidents. The only thing the public sees is that when a truck gets into a bad accident it is very bad and devestating distruction. But statistics show there are fewer truck accidents than four wheeled vehicles and there are also far fewer accidents that are caused by trucks entirely. But, this is just this over educated truckers opinion.

73 de ve7agw, Al

4611. Re: local citgo store.selling export cb.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 20:50:17 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2hnqcsot1@domitilla.aioe.org>
Source record: 79856

Perhaps it is 15 watts which the radio consumes, with mic booster to the max, echo-reverb full tilt, and roger beep on a one-second timer? <grin>

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion, haw aboot speel-checkin it fer me?

"Free Band" <astron345@webtv.net> wrote in message news:25427-424C5383-6@storefull-3276.bay.webtv.net...
>i live in a small town in al..they still have two mini magnum 10 meter
> am radio mobile for sale 100$ its said on the box 15 watts.of power i
> need your help to sare this guy caue lol he is the mayor of the town .i
> will not give the number to the store in the newsgroup only threw email
>

4612. Re: M2 2M SSB 9element / 15ft boom installed - Photos

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 21:08:22 UTC
From: Charlie <charlie@earthlink.com>
Message-ID: <114opmmeonjgb24@news.supernews.com>
Source record: 79857
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment

Hi Richard,
That last 4 inches of line for a mast is history now. I had purchased a mast mounting kit from M2 but when I installed it I was unable to tune the loop down below about 2:1..so I put the mount away but the swr was erratic during weather and wind. So..I got the bracket back out and looked it over and "voila" I realized I had been mounting the antenna on it incorrectly. Now the bracket works like a charm and all is well.

--

Charlie
Ham Radio - AD5TH
www.ad5th.com
Live Blues Music
www.492acousticblues.com

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:6tfo419vlqb88u07l6ljdre1avi3kigup8@4ax.com...
> On Thu, 31 Mar 2005 12:01:57 -0600, "Charlie" <charlie@earthlink.com>
> wrote:
>
>>>1. http://www.ad5th.com/VHF.html One of my first contacts was EM52>Em41
>>about 160 miles....during a tornado watch!
>
> Hi Charlie,
>
> Good set of pictures. You used the night sky and the day's clouds to
> good advantage to give contrast. The moon shot was a nice touch too.
>
> I especially like using the last 4 inches of transmission line used as
> mast.
>
> 73's
> Richard Clark, KB7QHC

4613. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 21:33:04 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2hqak$v64$1@domitilla.aioe.org>
Source record: 79858

"Free Energy" is indeed hard to find...
However, consider an antenna made of a superconducting material--it would at
least be impossible to lose any (at least due to resistance and heating!)

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion, haw
aboot speel-checkin it fer me?

"Jim Kelley" <jwkelley@nospam.edu> wrote in message
news:d2cq32$4m1$1@news.service.uci.edu...
>
>
> Cecil Moore wrote:
>
>> Jim Kelley wrote:
>>
>>>
>>> Cecil Moore wrote:
>>>
>>>> Anyone want to
>>>> predict the effect of non-locality on Maxwell's equations?
>>>
>>>
>>> How better to explain interference phenomena at, "Alpha Centauri" for
>>> example? :-)
>>
>>
>> How better indeed? As I remember, it was Dr. Best's assertion
>> that the source always provided the extra energy during construc-
>> tive interference (no matter how far away the source might be).
>> I, OTOH, tend to believe "Optics", by Hecht where he asserts
>> that there must always be an energy balance between constructive
>> interference and destructive interference (as demonstrated by
>> the radiation pattern of an antenna).
>
> It's certainly correct in almost any instance to say that the source of
> energy provides the energy. Not necessarily so of other points in space.
> And only rarely do we find any "extra" energy in physical systems. ;-)
>
> ac6xg
>

4614. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 21:37:55 UTC
From: cl <clfurentN@Syahoo.com>
Message-ID: <k5_2e.58922$NC6.14221@newsread1.mlpsca01.us.to.verio.net>
Source record: 79859

"TJ" <tjtrucker@hotmail.com> wrote in message
news:P1Z2e.864278$8l.567848@pd7tw1no...
> It's amazing how just one comment by a single person got this group into
> an uproar. I really think that the public in general has a romance with
> the life of the trucker brought on by the movie and media hype. Truckers
> are just ordinary people who do an thankless job of moving just about
> everything there is in North America to and from wholesalers to retailers.
> Over the years the average trucker's education level has gone from grade
> school drop outs to men and women holding degrees of various ranges of
> education. Over the years I've come to know a rather large group of
> people from a very large slice of various levels of education, similar to
> that of most truckers. I hold two degrees and a commercial Radio Telephone
> license, but for some reason I ended up returning to "trucking" all the
> time. And all the trucks I've driven, over 1 million miles, I've always
> had my amateur radio(s) and a CB. Each had it's own nicessity and each
> one had it's own language. On one radio I as a respected amateur radio
> operator who drove truck, on the other I was just another trucker looking
> for a traffic report.
> Oh, for those who are of the illusion that truckers are the cause of all
> the terrible accident on the highways, well the only person your fooling
> is yourself. To get the facts do a little research and you will find that
> four wheeled vehicles cause more accidents than any other vehicle. Trucks
> seem to fall into the same catigory as motorcycles do in the public's
> perseption of the cause of accidents. After you have done your research
> you will find that both trucks and motorcycles end of up being a very low
> percentage of the cause of accidents. The only thing the public sees is
> that when a truck gets into a bad accident it is very bad and devestating
> distruction. But statistics show there are fewer truck accidents than four
> wheeled vehicles and there are also far fewer accidents that are caused by
> trucks entirely.
> But, this is just this over educated truckers opinion.
>
> 73 de ve7agw, Al
>

Eh, I agree with you for the most part - BUT - you "seem" to have missed the
point. "That" "trucker" seemed to be suggesting that the service they
provide sort of entitles them to break the laws. It does NOT. "My" comment
was (not word for word) that if he broke the rules of the road much as he is
suggesting he does of the FCC, then it wouldn't be long or take much to end
the line for him. RULES ARE RULES. LAWS ARE LAWS. Be you a truck driver,
cop, lawyer, politician, doctor, we ALL have laws to live with, if we're to
survive with any sense of common ground. ANY ONE who breaks those rules/laws
is only adding to the problem. "I" know some truckers, I know the job they

do..... I know the sacrifices they make - time away from home and family. "I" am not disputing that. What I was disputing was that person's "holier than thou" approach "since he is a trucker". THAT is what I dismiss..... NOT THE JOB. I was just telling him to come off his high horse, there may come a day when his services are no longer required, then what? HE won't be so high and mighty then. It is guys like that who are the bad apple, and give the rest of you a black eye. Just like a bad cop gives the rest a black eye, a quack doctor does to his/her profession, a politician who takes bribes/steals. ALL give their profession a bad name. Like it or not, every group has them, truckers included. That one stuck his head out to be noticed. He brought attention to himself. Why can't he mutually respect hams and what they have, as he expects the hams to respect him for what he does? It IS a two way street.

There is NO reason he or any of the rest can't do a small bit of studying when laying over at a truck stop or waiting to be loaded, go take an exam, pass it, get a license, then talk with the rest of us who would welcome them. IF they don't want to take an exam, then WHY violate the laws and pick fights with the hams, because they're too damned lazy to do the right thing? It isn't the hams fault. The hams wanted their license, so they did what it took to get it.....

If you intend to defend his approach, then I can't agree with you. As to the rest of what you said, perhaps you're an example they can follow. Maybe "you" can convince them, being one of the bunch. As for "accidents", "I am not a statistician, so I can't say for sure. I could get into the argument regarding bikes, since I ride one as well, but again, without facts to back me up, I'm not going to.

cl

4615. Re: physical 1/4, electrical 1/2 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 21:53:33 UTC
From: Jim Kelley <jwkelley@nospam.edu>
Message-ID: <d2hrhb$kr3$1@news.service.uci.edu>
Source record: 79860

John Smith wrote:

> "Free Energy" is indeed hard to find...
> However, consider an antenna made of a superconducting material--it would at
> least be impossible to lose any (at least due to resistance and heating!)
>
> Regards

Yea, but it's a real pain having to haul the liquid helium dewar up the
tower in the middle of a dx opening.

ac6xg

4616. Re: Me and my Harley Road King

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 22:15:01 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <9hto41dm8t6g6hpc0jvhhvp90cfrl788pl@4ax.com>
Source record: 79861

On Wed, 30 Mar 2005 22:40:46 -0600, Cecil Moore <w5dxp@hotmail.com> wrote:

>http://www.qsl.net/w5dxp
>
>-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
>http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
>----= East and West-Coast Server Farms - Total Privacy via Encryption =----
That's a beautiful machine, Cecil, but why did it take five minutes to download?

Walt

4617. Re: 28mhz ham radio best keep secret.not any more.

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 22:15:50 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <d2hsqp$2an$1@domitilla.aioe.org>
Source record: 79862

Yes, it does seem that way on the surface, I am sure--an "uproar."
However, I think it more of an effort to finally take those to task, the ones a person usually, and quite willingly, ignores.
It has always been a pet peeve of mine, when someone draws an illusion and encourages me to partake in the enjoyment of it with them; in my past posts, I have responded to them.
I responded to them with a purpose, with patience, with tolerance, and with hope.
They convinced me that they had spouted such verbal babble, perhaps drafted such writings, to the point of where they were/are in grave danger of believing it themselves (it is quite understandable if they seek one gullible enough to believe their tripe), for real. Since few bother to reduce themselves to the levels required to respond with logic or even to devote the time--to insanity--I took pity and did.
The simple/short answer is, "NO ONE IS THAT SPECIAL! Not even you... (well, just possibly me though!)" Just when you begin to think so, a real one shows up--a "certified special" person, and deflates your ego... <frown>
What I see in much of this exchange is a very common phenomena. It is, what seems, a "natural tendency" in human nature, a tendency to think ones-self/themselves "special", above, removed from, of a greater intellect, gifted, endowed by GOD, of possessing a superior reasoning power, more deserving of, an interesting author of, etc, etc, etc...
If we are all silent, what do you think--they will think?

I know, I know, you now will ask, "Who cares?"--and I grant you this point...

Regards

--
Hay, if'n ya'll cun't konstructivly partecipete in this har disscusion, haw aboot speel-checkin it fer me?

"TJ" <tjtrucker@hotmail.com> wrote in message
news:P1Z2e.864278$8l.567848@pd7tw1no...
> It's amazing how just one comment by a single person got this group into
> an uproar. I really think that the public in general has a romance with
> the life of the trucker brought on by the movie and media hype. Truckers
> are just ordinary people who do an thankless job of moving just about
> everything there is in North America to and from wholesalers to retailers.
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> people from a very large slice of various levels of education, similar to
> that of most truckers. I hold two degrees and a commercial Radio Telephone

> license, but for some reason I ended up returning to "trucking" all the
> time. And all the trucks I've driven, over 1 million miles, I've always
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> operator who drove truck, on the other I was just another trucker looking
> for a traffic report.
> Oh, for those who are of the illusion that truckers are the cause of all
> the terrible accident on the highways, well the only person your fooling
> is yourself. To get the facts do a little research and you will find that
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> that when a truck gets into a bad accident it is very bad and devestating
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> But, this is just this over educated truckers opinion.
>
> 73 de ve7agw, Al
>

4618. Re: Me and my Harley Road King

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 22:29:32 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <8buo41lak3e0duc4ftd305leslnv1cmnn1@4ax.com>
Source record: 79863

On Thu, 31 Mar 2005 22:15:01 GMT, Walter Maxwell <w2du@iag.net> wrote:

>On Wed, 30 Mar 2005 22:40:46 -0600, Cecil Moore <w5dxp@hotmail.com> wrote:
>
>>http://www.qsl.net/w5dxp
>>
>>-----== Posted via Newsfeeds.Com - Unlimited-Uncensored-Secure Usenet News==----
>>http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
>>----= East and West-Coast Server Farms - Total Privacy via Encryption =----
>That's a beautiful machine, Cecil, but why did it take five minutes to download?
>
>Walt

Funny, I go to the web page and it's just antenna stuff, no Harley.
Maybe my ISP is over-protecting me or something...

bob
k5qwg

4619. Re: Insulated Wire Velocity Factor: How to . . ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 23:04:32 UTC
From: Mark <makolber@yahoo.com>
Message-ID: <1112310272.011829.22740@g14g2000cwa.googlegroups.com>
Source record: 79864

build a scale model with insulation at 900 MHz and test it on a network analyzer in the lab

remove insulation and retest?

Mark

4620. Re: Insulated Wire Velocity Factor: How to . . ??

Newsgroup: rec.radio.amateur.antenna
Date: 2005-03-31 23:44:24 UTC
From: K7ITM <k7itm@aol.com>
Message-ID: <1112312664.451922.114870@l41g2000cwc.googlegroups.com>
Source record: 79865

The question that comes first to my mind is, "Why do you care?"
Certainly an antenna does not need to be resonant to work well. I can
imagine you'd like a reasonably low indicated SWR, just so your
transmitter has a reasonable load to drive.

If you really want to know what's going on at the antenna feedpoint,
you'll need to back the effects of the feedline out of your antenna
analyzer readings, or use an analyzer that does it for you. If you
have a reasonable estimate of the feedline loss and know its electrical
length (easy to find if you put a short at the end of the line and look
at the resulting impedances read on the analyzer), then you should be
able to translate your analyzer readings to actual feedpoint impedance.
Do you have the feedline properly decoupled from the antenna so it's
not a significant part of the radiating system? If not, there seems
little reason to bother making the measurements.

I'd expect half-wave dipole resonance to result in lowest SWR on a
50-ohm feedline, but it won't be a very sharp minimum. So is it worth
worrying about?

Another 'speriment to try: build a fairly wide-spaced two wire
transmission line from your wire. Short it at one end, open at the
other, and look for quarter-wave resonance; or short both ends and look
for half-wave resonance. Measure the resonant frequency, which will be
a pretty sharp resonance (much sharper than the dipole). Remove the
insulation and see how much the resonance changes. Try for various
spacings to see what effect the spacing has. (Expect that close
spacings will show more effect than wide.)

Cheers,
Tom